inSing.com

Event Search API Specification

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Version History

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1.01	Thuan Nguyen	21 Dec 2011	Add EventsSearch: findFreeEvents Add SortFields into findEvents of Event Search Update SOAP Examples Update WSDL Update XSD
1.02	Thuan Nguyen	09 Mar 2012	Add Media Service
1.03	Thuan Nguyen	14 Mar 2012	Add getEventDetails Add thumbnail to getFreeEvents response
1.04	Alan Swan	22 Mar 2012	Add SortField (DISTANCE) into findEvents of Event Search* Add Lat/Long fields as required fields if sorting by DISTANCE* Add EventsSearch: findCurrentEvents* Add event name, venue name and tags to the fields keyword search would search in* * To be implemented
1.05	Deepak Goel	29 Mar 2012	Added logic to limit the search by distance.
1.06	Emerson Sanchez	08 May 2012	Added EventsSearch: getTopPicks Added EventsSearch: getUpcomingEvents Updated eventDetailType. Added thumbnailBig (240 x 180) Updated SOAP Examples Updated EventsSearch WSDL Updated EventDetails and EventsSearchSchema XSD
1.07	Alan Swan	18 May 2012	Update sections 4.1.1 and 4.1.2.9 with proper usage of location based search for events

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Overview and Objective

This document outlines the APIs provided by Singtel Digital Media Pte Ltd. These APIs allow third parties access to data used within the inSing.com website. Clients will need to obtain a username and password from Singtel Digital Media Pte Ltd in order to use this service.

Glossary

WSDL	Web Service Description Language
XML	Extensible Markup Language
XSD	XML Schema Documentation
API	Application Programming Interface
SOAP	Simple Object Access Protocol
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
IMEI	International Mobile Equipment Identity
Facet	A common value across multiple search results which can be used to refine a search
Sector Code	The first two digits of a six digit Singapore postcode. Postcode 340213 has sector code 34 Postcode 40213 has sector code 04

1 INTRODUCTION

The inSing API specification enables third parties access to data from inSing.com. The API is a collection of web services using the SOAP protocol over HTTP and HTTPS protocols.

1.1 Security

Access to inSing.com data is restricted to authorized clients. Clients must use a clientId and password issued inSing.com order to access these services. The client Id and password must not be disclosed to any third party without the written permission of Singtel Digital Media Pte Ltd. Your credentials can be authorized to access one or more of the services described below. You will not be able to access the services you have not been authorized to by Singtel Digital Media Pte Ltd.

1.2 Usage

1.2.1 Access

Requests for a client Id and password should be directed to the Product Team at Singtel Digital Media Pte Ltd.

1.2.2 Content

Clients should not use this API to scrape inSing data. It should only be used by authorized clients to perform specific requests.

1.2.3 Load Forecasts

The estimated maximum volume of requests per minute must be provided along with any request for an inSing.com client Id. Any requests over the forecast maximum may be discarded.

1.2.4 Lifecycle

All inSing.com APIs are versioned. As new APIs are released, existing APIs may be deprecated. No new development will be supported for deprecated APIs.

1.3 Testing

Clients will be able to verify their implementation of the inSing.com API specification by connecting to the inSing.com test environment. It will be necessary for inSing.com to make firewall and routing changes in order to allow access to the test environment. Clients should allow 5 working days to implement the necessary changes.

Access to the test environment will be scheduled according to availability.

NOTE**:** Clients will be given Production environment access only when they are able to use the test environment satisfactorily.

For testing the API, clients can access the web services exposed at the test domain “services.test.insing.com”.

1.4 Support

Development, Test and Production support arrangements will be agreed with clients when requesting a client Id.

2 AUTHENTICATION SERVICE

The Authentication service is used to verify client credentials in order to allow access to other APIs.

The login interface must be used over a secure HTTP session in order to avoid exchanging the clientid and password in clear text.

The URL for accessing the login service is:

https://services.insing.com/api/1.0/authenticate

The URL for WSDL is:

https://services.insing.com/api/1.0/authenticate?wsdl

2.1 Login Method

Client applications must not continuously login just because the session may have timed out. Clients may only login when they start for the first time or when they receive a "session expired" response when trying to use any other API.

Once authenticated the session token has an inactivity timeout of 30 minutes. Any attempt to use the session token beyond the 30 minute timeout will return a "Session Expired" result code.

2.1.1 Login Request

The login request message allows the inSing.com server to uniquely identify and authenticate the client. The clientid and password are issued by inSing.com and must not be disclosed to any third party.

FieldName	Data Type	Description
Device Identifier	DeviceIdentifierType	Uniquely Identifies the end users device
ClientId	String	The client identifier issued by Singtel Digital Media Pte Ltd
Password	String	The password issued by Singtel Digital Media Pte Ltd

2.1.1.1 Device Identifier Type

The device identifier must uniquely identify the end user's device. Even when the request is proxied through a third party gateway the identifier must still refer to the end user.

FieldName	Data Type	Description
Type	String	The type of identifier, "IMEI", "UniqueCookie", etc
Identifier	String	The actual identifier, for example a mobile device

For example a mobile device with IMEI 49015420323751 would use the following device identifier

```
<deviceIdentifier>
    <type>IEMI</type>
    <identifier>49015420323751</identifier>
</deviceIdentifier>
```

2.1.2 Login Response

The login response contains the outcome of the login attempt. If the client was successfully authenticated a session token will be issued by the inSing.com server along with a successful result code and message. If the login failed there will be no session token present and the result code and message will indicate why the login failed.

Appendix A: .....

FieldName	Data Type	Description
Session Token	String	An opaque identifier which can be used by subsequent calls to inSing.com APIs
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code

3 MEDIA SERVICE

The media service api should be used to get the media formats and media resource as held in insing.com.Clients must use a valid session token obtained with a previous call to the login API.

The URL used to access the Movies Search interface is:

http://services.insing.com/api/1.0/media

The URL to access the WSDL is:

http://services.insing.com/api/1.0/media?wsdl

3.1 getTranscodeFormats Method

This method should be used to get the list of media transcode formats as held by insing.com. This method must contain a valid session token.

3.1.1 getTranscodeFormatsRequest

FieldName	Data Type	Description
SessionToken	String	The session token obtained with a previous call to the Login API. Mandatory.

3.1.2 getTranscodeFormatsResponse

FieldName	Data Type	Description
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code
Results	List of transcodeFormat	List of transcodeFormats (0 to n)

3.1.2.1 transcodeFormat

FieldName	Data Type	Description
transcode Name	String	Transcode name
fileType	String	File extension
width	Integer	Width of the file
height	Integer	Height of the file
audioCodec	String	Name of the audio codec
videoCodec	String	Name of the vide codec

3.2 getMediaUrls Method

This method should be used to get the list of media urls for the given resource ids and transcode name as held by insing.com. This method must contain a valid session token.

3.2.1 getMediaUrlsRequest

FieldName	Data Type	Description
sessionToken	String	The session token obtained with a previous call to the Login API. Mandatory.
transcodeName	String	Name of the transcode
fileType	String	
resourceIds	List of Integers	

3.2.2 getMediaUrlsResponse

FieldName	Data Type	Description
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code
Results	List of transcodemedia	List of media urls

3.2.2.1 transcodeMedia

FieldName	Data Type	Description
Id	Integer	Media resource id
url	String	The comeple url of the media

4 EVENTS SEARCH

The events search interface enables clients to perform searches on events data held by inSing.com. Clients must use a valid session token obtained with a previous call to the login API.

The URL used to access the Events Search interface is:

http://services.insing.com/api/1.0/search/events

The URL to access the WSDL is:

http://services.insing.com/api/1.0/search/events?wsdl

4.1 findEvents Method

4.1.1 Search Request

The search request may contain a term, a category and a date range to search the event on. It must contain a valid SessionToken.

FieldName	Data Type	Description
SessionToken	String	The session token obtained with a previous call to the Login API
PageNumber	nonNegativeInteger	The result page to return (defaults to page 1)
PageSize	nonNegativeInteger	The number of results displayed on each page. (Defaults to 20)
searchTerm	String	Free text term to match against an event description, name, venue name and tags.
eventCategory	String	The event category on which to filter the results.
startDate	Date	Start date range in yyyy-mm-dd format. If this is missing, the system takes the start date to be today's date.
endDate	Date	End date range in yyyy-mm-dd format. If this is missing, the system takes the end date to be today's date + 7 days.
location	locationType	Identifies the centroid of a location based search (Required for sort by DISTANCE only. See 4.1.2.11 sortFieldType.)
sortFields	sortFieldsType	An object contains a list of sortField.
distanceLimit	Double	Limit the search by given distance in KM.

4.1.2 Search Response

FieldName	Data Type	Description
Results	searchResultsType	List of events matching the search criteria.
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code

4.1.2.1 Search Results Type

The events search results contain a paginated list of events results and a collection of facets which can be used to narrow a search.

FieldName	Data Type	Description
maxResults	integer	The size of the total result set
Result	eventDetailType	Event details corresponding to the specified search criteria.
Facets	searchFacetsType	Set of Faceted result counts for this search

4.1.2.2 Events Details Type

The Event details type contains the data relating to an individual event.

FieldName	Data Type	Description
id	Non Negative Integer	InSing id of the event
name	String	Name of the event
startDate	Date	Start date of the event
endDate	Date	End date of the event.
eventType	eventType	The type information of this event. It includes the channel, category and subcategory this event belongs to.
venue	String	Venue of the event.
hours	String	Hours of the event.
description	String	Description of the event.
imageUrl	URL	Image URL of the event.
eventUrl	URL	Insing URL of the event.
venueAddress	String	Address of the venue
venuePostalCode	String	Postal code of the venue
Distance	Double	Distance from the given location

4.1.2.3 EventType

FieldName	Data Type	Description
channels	ChannelsType List	List of channels this Event belongs to.

4.1.2.4 ChannelsType

FieldName	Data Type	Description
name	String	The name of the Channel.
categories	CategoriesType List	The categories that this event belongs to.

4.1.2.5 CategoriesType

FieldName	Data Type	Description
name	String	The name of the category.
subCategory	String List	List of all the subcategories for this event.

4.1.2.6 Search Facet Type

Search Facet is a container for any facets for the events search. It contains a category facet.

FieldName	Data Type	Description
categoryFacetList	categoryFacetListType	Category Facet List

4.1.2.7 Category Facet List Type

FieldName	Data Type	Description
categoryFacet	categoryFacetType	A category facet item.

4.1.2.8 Category Facet Type

FieldName	Data Type	Description
name	String	The name of the category.
count	Integer	The number of results in the category.

4.1.2.9 Location Type

The location type identifies the centroid of a location based search. This can be either a geocode (Latitude, Longitude) or a free text location.

If a free text location is used inSing.com will attempt to match that location against an address in Singapore. This does not need to be an exact match, the search engine will select the closest match, either a building, a street, a neighbourhood or a region.

FieldName	Data Type	Description
Location	String	Location string to match against a building, street, neighbourhood or region.
Geocode	geocodeType	A latitude, longitude
includeSurroundings	Boolean	Attempt to find matching results radiating out from outside the given location before attempting to find less relevant results within the location.

4.1.2.10 sortFieldsType

FieldName	Data Type	Description
sortField	List of sortFieldType	List of Sort Fields.

4.1.2.11 sortFieldType

FieldName	Data Type	Description
fieldName	String	Name of the field need to be sorted. Currently, we supported 2/3 fields: START_DATE, VENUE_NAME, DISTANCE.
Reverse	Boolean	Ascending or descending.

4.2 getEventsCategories Method

This method should be used to get all the event categories supported by insing.com. Please note that the category list returned by this method is subject to change without any prior notice. Clients must not be written with any of the returned values hard coded.

4.2.1 getEventsCategoriesRequest

It must contain a valid SessionToken.

FieldName	Data Type	Description
SessionToken	String	The session token obtained with a previous call to the Login API

4.2.2 getEventCategoriesResponse

FieldName	Data Type	Description
Category	String[]	List of all event categories.
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code

4.3 findFreeEvents Method

4.3.1 findFreeEventsRequest

FieldName	Data Type	Description
SessionToken	String	The session token obtained with a previous call to the Login API
PageNumber	Integer	The result page to return (defaults to page 1)
PageSize	Integer	The number of results displayed on each page. (Defaults to 20)

4.3.2 findFreeEventsResponse

FieldName	Data Type	Description
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code
Results	freeEventSearchResultsTyp e	An object contains a list of all free events

4.3.2.1 freeEventSearchResultsType

FieldName	Data Type	Description
Events	freeEventDetailType	List of all free events

4.3.2.2 freeEventDetailType

FieldName	Data Type	Description
Id	Integer	Identification of an event
Name	String	Name of an event
Start Date	String	Start date of an event
End Date	String	End date of an event
Event Type	eventType	Event type of an event (See 5.1.2.3)
Venue	String	Venue of an event
Hours	String	Hours of an event
Description	String	Description of an event
Image URL	String	Image URL of an event
Event URL	String	Event URL of an event
Venue Address	String	Venue address of an event
Venue Postal Code	String	Venue postal code of an event
Pricing	String	Pricing of an event
Ticket URL	String	Ticket URL of an event
Thumbnail	String	Thumbnail of event

4.4 getEventDetails Method

4.4.1 getEventDetailsRequest

FieldName	Data Type	Description
SessionToken	String	The session token obtained with a previous call to the Login API
Event Id	Long	The Id of the event

4.4.2 getEventDetailsResponse

FieldName	Data Type	Description
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code
Event Details	EventDetailType	Details of the event

4.4.2.1 EventDetailType

FieldName	Data Type	Description
Id	NonNegativeInteger	The Id of the event
Name	String	The name of the event
Start Date	Date	Start date of the event
End Date	Date	End date of the event

Event Type	Event Type	Event Type of the event
Venue	String	Venue name of the event
Hours	String	Hours of the event
Description	String	Description of the event
Short Description	String	The short description which was truncated from the description of the event
Image Url	String	Image url of the event
Thumbnail	String	Thumbnail of the event
Thumbnail Big	String	Bigger thumbnail of the event
Event Url	String	Event url of the event
Venue Address	String	Venue address of the event
Venue Postal Code	String	Venue postal code of the event
Pricing	String	Price of the event
Ticket Url	String	Ticket url of the event
Likes	Long	Number of likes of the event
Distance	Double	Distance of the event

4.5 findCurrentEvents Method* (To be implemented)

4.5.1 findCurrentEventsRequest

FieldName	**Data Type**	**Description**
SessionToken	String	The session token obtained with a previous call to the Login API
CurrentTime	DateTime	Date and time to short-list and determine if event is currently in session, or will be in session soon.
DistanceOptions	currentEventDistanceOptionsType	Optional
PageNumber	Integer	The result page to return (defaults to page 1)
PageSize	Integer	The number of results displayed on each page. (Defaults to 20)

4.5.1.1 currentEventDistanceOptionsType

FieldName	Data Type	Description
Latitude	Double	Latitude to measure/limit distance from.
Longitude	Double	Longitude to measure/limit distance from.
DistanceFilter	Integer	Distance (in km) to filter the results on. Optional
DistanceSort	Boolean	Ascending or descending. Optional

4.5.2 findCurrentEventsResponse

FieldName	Data Type	Description
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code
Results	currentEventSearchResults Type	An object contains a list of all free events

4.5.2.1 currentEventSearchResultsType

FieldName	Data Type	Description
Events	eventDetailType	List of all current events

4.6 getTopPicks

4.6.1 topPicksRequest

FieldName	Data Type	Description
SessionToken	String	The session token obtained with a previous call to the Login API

4.6.2 topPicksResponse

FieldName	Data Type	Description
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code
Results	topPicksResultsType	An object contains a list of all top pick events

4.6.2.1 topPicksResultsType

FieldName	Data Type	Description
Result	eventDetailType	List of all top pick events

4.7 getUpcomingEvents

4.7.1 upcomingEventRequest

FieldName	Data Type	Description
SessionToken	String	The session token obtained with a previous call to the Login API

4.7.2 upcomingEventResponse

FieldName	Data Type	Description
Result Code	Integer	See Appendix A
Result Message	String	Explanation of the result code
Results	upcomingResultsType	An object contains a list of all upcoming events

4.7.2.1 upcomingResultsType

FieldName	Data Type	Description
Result	eventDetailType	List of all upcoming events

5 SOAP EXAMPLES

5.1 Login

This example illustrates a client “sampleClient” logging in from a mobile device with IMEI of `123456786543210123456`.

5.1.1 Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:aut="http://services.insing.com/api/authentication">
   <soapenv:Header/>
   <soapenv:Body>
      <aut:loginRequest>
         <deviceIdentifier>
            <type>IMEI</type>
            <identifier>123456786543210123456</identifier>
         </deviceIdentifier>
         <clientId>sampleClient</clientId>
         <password>samplePassword</password>
      </aut:loginRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

5.1.2 Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:loginResponse xmlns:ns2="http://services.insing.com/api/authentication">
         <sessionToken>Asdf90dSKJF9734mfkps</sessionToken>
         <resultCode>200</resultCode>
         <resultMessage>Success.</resultMessage>
      </ns2:loginResponse>
   </soap:Body>
</soap:Envelope>
```

5.2 Search event categories.

5.2.1 Request.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:even="http://services.insing.com/api/search/events">
   <soapenv:Header/>
   <soapenv:Body>
      <even:getEventsCategoriesRequest>
         <sessionToken>Lv3jlEDdQfU1yHCOc1SsYcSyHH91A3gT</sessionToken>
      </even:getEventsCategoriesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

5.2.2 Response.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:getEventsCategoriesResponse xmlns:ns2="http://services.insing.com/api/search/events">
         <resultCode>200</resultCode>
         <resultMessage>Success.</resultMessage>
         <category>Art &amp; Performing Arts</category>
         <category>Fairs &amp; Festivals</category>
         <category>Kids &amp; Family</category>
         <category>Leisure &amp; Sport</category>
         <category>Music</category>
         <category>Night Out</category>
         <category>Events Calendar</category>
         <category>Singapore GP</category>
         <category>Series</category>
      </ns2:getEventsCategoriesResponse>
   </soap:Body>
</soap:Envelope>
```

5.3 Search for events.

5.3.1 Request.

```
<soapenv:Envelope xmlns:soapenv=”http://schemas.xmlsoap.org/soap/envelope/”
xmlns:even="http://services.insing.com/api/search/events">
```

```
        <soapenv:Header/>
           <soapenv:Body>
              <even:searchRequest>
                  <sessionToken>wcMFagouNCfgG2G0b780lKcaDhFVsUXB</sessionToken>
                  <startDate>2010-09-01</startDate>
                   <endDate>2010-09-30+10:00</endDate>
                   <searchTerm>club</searchTerm>
                   <eventCategory>Leisure &amp; Sport</eventCategory>
                   <pageNumber>1</pageNumber>
                   <pageSize>20</pageSize>
            </even:searchRequest>
        </soapenv:Body>
</soapenv:Envelope>
```


5.3.2 Response.


```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:searchResponse xmlns:ns2="http://services.insing.com/api/search/events">
         <resultCode>200</resultCode>
         <resultMessage>Success.</resultMessage>
         <results>
            <maxResults>2</maxResults>
            <result>
               <id>15483</id>
               <name>Singapore Bay Run</name>
               <startDate>2010-09-12</startDate>
               <endDate>2010-09-12</endDate>
               <eventType>
                  <channels>
                     <name>Things To Do</name>
                     <categories>
                        <name>Leisure &amp; Sport</name>
                        <subcategory>Sport</subcategory>
                     </categories>
                     <categories>
                        <name>Kids &amp; Family</name>
                        <subcategory>Activities</subcategory>
                     </categories>
                  </channels>
               </eventType>
               <venue>Padang</venue>
               <hours>5.15am to 11am</hours>
               <description>You can register via the following channels:

-Online at http://www.safra.sg/sbr
Any of the SAFRA Clubs (except Game Haven):
- SAFRA Mount Faber Club, 2 Telok Blangah Way. Tel: +65 6278 6011
SAFRA Tampines Club, 1/A Tampines St 92. Tel: +65 6785 8800
SAFRA Yishun Country Club, 60 Yishun Ave 4. Tel: +65 6852 8200
SAFRA Jurong Club, No. 333 Boon Lay Way. Tel: +65 6686 4333</description>
               <imageUrl>http://static.dev.insing.com/images/01/96/0d/00/stb_150x150.jpg</imageUrl>
               <eventUrl>http://events.dev.insing.com/event/singapore-bay-run/id-7b3c0000</eventUrl>
               <venueAddress>Connaught Drive</venueAddress>
               <pricing><![CDATA[5km Fun Run: $15(P), $10(M)
<br>
<p>10km (Men & Women's): $35(P), $30(M)</p></br>
<br>
<p>21km (Men & Women's): $50(P), $45(M)</p></br>
<br>
<p>M: SAFRA Member</p>
<p>P: Public</p></br>]]></pricing>
            </result>
            <result>
               <id>12349</id>
               <name>Open Roads: Reading Singapore Theatre</name>
               <startDate>2010-07-10</startDate>
               <endDate>2010-11-27</endDate>
               <eventType>
                  <channels>
                     <name>Things To Do</name>
                     <categories>
                        <name>Leisure &amp; Sport</name>
                        <subcategory>Classes</subcategory>
                     </categories>
```

```
                  </channels>
               </eventType>
               <venue>The Substation</venue>
               <hours>2pm to 4pm</hours>
               <description>Do you want to unearth the rich heritage of Singapore theatre with a
group of like-minded enthusiasts? The Substation and The Flying Inkpot Theatre and Dance bring you a
fortnightly series of “book club” meetings where, instead of novels, the group will come together to
discuss scripts by local playwrights. Facilitated by Matthew Lyon and Kenneth Kwok, editors of online
arts journal The Flying Inkpot, this will be a safe, friendly space for anyone to come and share
their views about a particular work, whether they are a regular theatre-goer or new to the theatre
scene. Participants can also expect special guests, additional reading materials and screenings of
video clips to deepen the conversations.

Sessions

Session 1 (10 July): Emily of Emerald Hill by Stella Kon
Session 2 (24 July): Off-Centre by Haresh Sharma
Session 3 (7 Aug): The Coffin is too Big for the Hole and No Parking on Odd Days by Kuo Pao Kun
Texts for subsequent sessions will be decided by the group.</description>
               <imageUrl>http://static.dev.insing.com/images/28/ed/0b/00/stb_150x150.jpg</imageUrl>
               <eventUrl>http://events.dev.insing.com/event/open-roads-reading-singapore-theatre/id-
3d300000</eventUrl>
               <venueAddress>45 Armenian Street</venueAddress>
               <venuePostalCode>179936</venuePostalCode>
               <pricing><![CDATA[<p>$40 for 10 sessions (Walk-ins: $5 each session)</p>
<br/>
<p>For block registration, please email chris@substation.org or call 6337 7800 (Chris)
Last Day of Registration for Block Registration: 7 July, by 8pm</p>
<br/>
<p>For single session registration, please email admin@inkpotreviews.com (payment by cash at the
door)
Participants are to bring their own copy of the texts to be read at each session </p>]]></pricing>
            </result>
            <facets>
               <categoryFacetList>
                  <categoryFacet count="2" name="Leisure &amp; Sport"/>
                  <categoryFacet count="1" name="Kids &amp; Family"/>
                  <categoryFacet count="0" name="Art &amp; Performing Arts"/>
                  <categoryFacet count="0" name="Travel"/>
                  <categoryFacet count="0" name="Night Out"/>
                  <categoryFacet count="0" name="Movies"/>
                  <categoryFacet count="0" name="Music &amp; Nightlife"/>
                  <categoryFacet count="0" name="Dining News"/>
                  <categoryFacet count="0" name="Hot Events"/>
                  <categoryFacet count="0" name="-"/>
                  <categoryFacet count="0" name="Fairs &amp; Festivals"/>
               </categoryFacetList>
            </facets>
         </results>
      </ns2:searchResponse>
   </soap:Body>
</soap:Envelope>
```


5.4 findFreeEvents.

5.4.1 Request.

```
<soapenv:Envelope                          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:even="http://services.insing.com/api/search/events">
   <soapenv:Header/>
   <soapenv:Body>
      <even:findFreeEventsRequest>
         <sessionToken>Eu12WQo79WV8TIvaSCA7dy4xrADQYuHx</sessionToken>
         <!--Optional:-->
         <pageNumber>1</pageNumber>
         <!--Optional:-->
         <pageSize>3</pageSize>
      </even:findFreeEventsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

5.4.2 Response.


```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:findFreeEventsResponse xmlns:ns2="http://services.insing.com/api/search/events">
         <resultCode>200</resultCode>
         <resultMessage>Success.</resultMessage>
         <results>
            <events>
               <id>11870</id>
               <name>From Books to Bytes: The Story of the National Library - Exhibiton</name>
```

```
                <startDate>2011-08-24</startDate>
                <endDate>2011-12-31</endDate>
                <eventType>
                   <channels>
                      <name>Things To Do</name>
                      <categories>
                         <name>Art &amp; Performing Arts</name>
                         <subcategory>Exhibitions</subcategory>
                      </categories>
                   </channels>
                </eventType>
                <venue>Promenade, National Library Building</venue>
                <hours>10am - 9pm</hours>
                <description>“From Books to Bytes: The Story of the National Library” tells the story
of the National Library of Singapore. Throughout history, the library has been an integral part of
Singapore’s cultural and social fabric as well as its residents. The exhibition traces the founding,
development and growth of the National Library of Singapore from 1823 till present. Learn interesting
snippets of the library’s rich history and how its function has evolved with the learning needs of
the nation.</description>
                <imageUrl>http://staticc03.insing.com/images/9b/fa/0e/00/pc_189x272.jpg</imageUrl>
                <eventUrl>http://events.insing.com/event/from-books-to-bytes-the-story-of-the-
national-library-exhibiton/id-5e2e0000</eventUrl>
                <venueAddress>100 Victoria Street</venueAddress>
                <venuePostalCode>188064</venuePostalCode>
                <pricing>Free admission</pricing>
             </events>
             <events>
                <id>18622</id>
                <name>Wonder Full @ The Marina Bay Waterfront</name>
                <startDate>2011-02-17</startDate>
                <endDate>2011-12-31</endDate>
                <eventType>
                   <channels>
                      <name>Things To Do</name>
                      <categories>
                         <name>Night Out</name>
                         <subcategory>Night Out</subcategory>
                      </categories>
                   </channels>
                </eventType>
                <venue>Marina Bay Waterfront</venue>
                <hours>Friday &amp; Saturday: 8pm, 9.30pm &amp; 11pm
&lt;br>
Sunday: 8pm &amp; 9.30pm</hours>
                <description>&lt;p>Immerse yourself in Wonder Full - an amazing convergence of light,
music and sound. Set to a breathtaking orchestral soundtrack, Wonder Full uses electric light and
laser effects to tell the universal tale of the journey of life.&lt;/p></description>
                <imageUrl>http://staticc03.insing.com/images/2e/27/0f/00/pc_189x272.jpg</imageUrl>
                <eventUrl>http://events.insing.com/event/wonder-full-the-marina-bay-waterfront/id-
be480000</eventUrl>
                <venueAddress>Marina Bay Waterfront</venueAddress>
                <venuePostalCode>018956</venuePostalCode>
                <pricing>Free admission</pricing>
             </events>
             <events>
                <id>18651</id>
                <name>Ladies Night: Dirty Beat @ Soul</name>
                <startDate>2011-02-23</startDate>
                <endDate>2012-02-23</endDate>
                <eventType>
                   <channels>
                      <name>Things To Do</name>
                      <categories>
                         <name>Night Out</name>
                         <subcategory>Night Out</subcategory>
                      </categories>
                      <categories>
                         <name>Music &amp; Nightlife</name>
                         <subcategory>Gigs &amp; Concerts</subcategory>
                      </categories>
                   </channels>
                </eventType>
                <venue>Soul (Singapore), Odeon Towers</venue>
                <hours>10.30pm</hours>
                <description>Ladies, come party free every Wed and Thurs at Soul, the best clubbing
scene in town.</description>
                <imageUrl>http://staticc02.insing.com/images/09/4b/0e/00/pc_189x272.jpg</imageUrl>
                <eventUrl>http://events.insing.com/event/ladies-night-dirty-beat-soul/id-
db480000</eventUrl>
                <venueAddress>331 North Bridge Road, #02-01</venueAddress>
                <venuePostalCode>188720</venuePostalCode>
                <pricing>Free entry and free flow (11pm - 1am) for ladies.
&lt;p>$25 for guys.&lt;/p></pricing>
```

```
            </events>
         </results>
      </ns2:findFreeEventsResponse>
   </soap:Body>
</soap:Envelope>
```


5.5 findFreeEvents.

5.5.1 Request.


```
<soapenv:Envelope                          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:even="http://services.insing.com/api/search/events">
   <soapenv:Header/>
   <soapenv:Body>
      <even:getEventDetailsRequest>
         <sessionToken>fQDyWD2Qy0OyguEfUiiTz4PhPxeOwd2l</sessionToken>
         <eventId>18622</eventId>
      </even:getEventDetailsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```


5.5.2 Response.


```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:getEventDetailsResponse xmlns:ns2="http://services.insing.com/api/search/events">
         <resultCode>200</resultCode>
         <resultMessage>Success.</resultMessage>
         <eventDetails>
            <id>18622</id>
            <name>Wonder Full</name>
            <startDate>2012-01-01</startDate>
            <endDate>2012-12-31</endDate>
            <eventType>
               <channels>
                  <name>Things To Do</name>
                  <categories>
                     <name>Night Out</name>
                     <subcategory>Night Out</subcategory>
                  </categories>
                  <categories>
                     <name>Kids &amp; Family</name>
                     <subcategory>Activities</subcategory>
                  </categories>
               </channels>
            </eventType>
            <venue>Event Plaza at the Promenade, Marina Bay Sands Singapore</venue>
            <hours>Sunday to Thursday: 8pm &amp; 9.30pm
&lt;br>
Friday &amp; Saturday: 8pm, 9.30pm &amp; 11pm</hours>
            <description>Immerse yourself in Wonder Full  an amazing convergence of light,  music and
sound. Set to a breathtaking orchestral soundtrack, Wonder  Full uses electric light and laser
effects to tell the universal tale of  the journey of life. Sit back, relax and enjoy. And lose
yourself in a  stunning showpiece of visual effects of interweaving lasers,  searchlights, LEDs,
video projectors and giant streaming water screens.  For 13 electric minutes, Singapore's city
skyline will feel like your  own private viewing backdrop. Bring the whole family, and come early to
secure your spot. You won't want to miss out on this exciting, free  event.</description>
            <shortDescription>Immerse     yourself     in     Wonder     Full     &amp;ndash;     an
amazing...</shortDescription>
            <imageUrl>http://static.dev.insing.com/images/2e/27/0f/00/stb_150x150.jpg</imageUrl>
            <thumbnail>http://static.dev.insing.com/images/2e/27/0f/00/pc_90x68.jpg</thumbnail>
            <eventUrl>http://events.dev.insing.com/event/wonder-full/id-be480000</eventUrl>
            <venueAddress>10 Bayfront Avenue Marina Bay Sands Singapore</venueAddress>
            <venuePostalCode>018956</venuePostalCode>
            <pricing>Free admission</pricing>
         </eventDetails>
      </ns2:getEventDetailsResponse>
   </soap:Body>
</soap:Envelope>
```


5.6 getMediaUrls

5.6.1 Request


```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:med="http://services.insing.com/api/media">
   <soapenv:Header/>
   <soapenv:Body>
      <med:mediaUrlsRequest>
         <sessionToken>vkL9JJCsA5wRfaSuVt2KBtEySgMs8Gu5</sessionToken>
```

```
         <transcodeName>pc_100x100</transcodeName>
         <fileType>jpg</fileType>
         <resourceIds>960943</resourceIds>
      </med:mediaUrlsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

5.6.2 Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:mediaUrlsResponse xmlns:ns2="http://services.insing.com/api/media">
         <resultCode>200</resultCode>
         <resultMessage>OK</resultMessage>
         <media>
            <id>960943</id>
            <url>http://staticc03.dev.insing.com/images/af/a9/0e/00/pc_100x100.jpg</url>
         </media>
      </ns2:mediaUrlsResponse>
   </soap:Body>
</soap:Envelope>
```

5.7 getTranscodeFormats

5.7.1 Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:med="http://services.insing.com/api/media">
   <soapenv:Header/>
   <soapenv:Body>
      <med:transcodeFormatsRequest>
         <sessionToken>vkL9JJCsA5wRfaSuVt2KBtEySgMs8Gu5</sessionToken>
      </med:transcodeFormatsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

5.8 getTopPicks.

5.8.1 Request.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:even="http://services.insing.com/api/search/events">
<soapenv:Header/>
   <soapenv:Body>
      <even:topPicksRequest>
         <sessionToken>QLJzW4aQ2UebqSKLqZ9GCCzSTpnQoMEn</sessionToken>
      </even:topPicksRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

5.8.2 Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:topPicksResponse xmlns:ns2="http://services.insing.com/api/search/events">
         <resultCode>200</resultCode>
         <resultMessage>Success.</resultMessage>
         <results>
            <result>
               <id>3540031</id>
               <name>Umizaru 3: The Test of Courage</name>
               <eventType/>
               <description>A dependable remake of a manga clssic</description>
               <shortDescription>A dependable remake of a manga clssic</shortDescription>
               <imageUrl>http://static.dev.insing.com/images/0b/91/0e/00/stb_150x150.jpg</imageUrl>
               <thumbnail>http://static.dev.insing.com/images/0b/91/0e/00/pc_90x68.jpg</thumbnail>
<thumbnailBig>http://static.dev.insing.com/images/0b/91/0e/00/pc_240x180.jpg</thumbnailBig>
               <eventUrl>http://events.dev.insing.com/feature/umizaru-3-the-test-of-courage/id-
3f043600</eventUrl>
            </result>
            <result>
               <id>3256770</id>
               <name>The Great Scrub-Down</name>
               <eventType/>
               <description>We put five of the new generation of non-abrasive facial scrubs to the
test.</description>
               <shortDescription>We put five of the new generation of non-abrasive
facial...</shortDescription>
               <imageUrl>http://static.dev.insing.com/images/23/5b/0e/00/stb_150x150.jpg</imageUrl>
               <thumbnail>http://static.dev.insing.com/images/23/5b/0e/00/pc_90x68.jpg</thumbnail>
<thumbnailBig>http://static.dev.insing.com/images/23/5b/0e/00/pc_240x180.jpg</thumbnailBig>
               <eventUrl>http://events.dev.insing.com/feature/the-great-scrub-down/id-
```

c2b13100</eventUrl>
            </result>
            <result>
               <id>24673</id>
               <name>Nhan Test for events_calendar v1</name>
               <startDate>2012-02-01</startDate>
               <endDate>2012-02-29</endDate>
               <eventType/>
               <eventUrl>http://events.dev.insing.com/event/nhan-test-for-events-calendar-v1/id-61600000</eventUrl>
            </result>
         </results>
      </ns2:topPicksResponse>
   </soap:Body>
</soap:Envelope>

5.9 getUpcomingEvents.

5.9.1 Request.


```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:even="http://services.insing.com/api/search/events">
   <soapenv:Header/>
   <soapenv:Body>
      <even:upcomingEventRequest>
         <sessionToken>QLJzW4aQ2UebqSKLqZ9GCCzSTpnQoMEn</sessionToken>
      </even:upcomingEventRequest>
   </soapenv:Body>
</soapenv:Envelope>
```


5.9.2 Response


```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body>
      <ns2:upcomingEventResponse xmlns:ns2="http://services.insing.com/api/search/events">
         <resultCode>200</resultCode>
         <resultMessage>Success.</resultMessage>
         <results>
            <result>
               <id>24686</id>
               <name>test</name>
               <startDate>2012-02-15</startDate>
               <endDate>2012-02-29</endDate>
               <eventType/>
               <eventUrl>http://events.dev.insing.com/event/test/id-6e600000</eventUrl>
            </result>
            <result>
               <id>23026</id>
               <name>Elephants At Work &amp; Play @ Singapore Zoo</name>
               <startDate>2012-01-01</startDate>
               <endDate>2012-12-31</endDate>
               <eventType/>
               <venue>Elephants of Asia Exhibit, Singapore Zoo</venue>
               <hours>11.30am &amp; 3.30pm</hours>
               <description>Set at our picturesque Elephants of Asia exhibit, this show transports
you to a Burmese elephant logging camp and reveals the incredible bond between the mahouts and their
working elephants.  Get an insight into the daily happenings in a typical elephant logging camp and
how these intelligent giants work together with their human partners to extract and move logs from
the interior of the forest and through rugged terrain; whilst at the same with minimal damage to the
surrounding forest.  A token feeding session follows, so be sure to stick around for some trunk-
touching fun!</description>
               <shortDescription>Set at our picturesque Elephants of Asia exhibit, this
show...</shortDescription>
               <imageUrl>http://static.dev.insing.com/images/0f/25/0f/00/stb_150x150.jpg</imageUrl>
               <thumbnail>http://static.dev.insing.com/images/0f/25/0f/00/pc_90x68.jpg</thumbnail>

<thumbnailBig>http://static.dev.insing.com/images/0f/25/0f/00/pc_240x180.jpg</thumbnailBig>
               <eventUrl>http://events.dev.insing.com/event/elephants-at-work-play-singapore-zoo/id-
f2590000</eventUrl>
               <venueAddress>80 Mandai Lake Road</venueAddress>
               <pricing>Regular admission rates apply &lt;br>

Adult: $20 &lt;br>

Child: $13</pricing>
            </result>
            <result>
               <id>24632</id>
               <name>LOADED - Models Beach Party</name>
               <startDate>2012-01-08</startDate>
```

```
                <endDate>2012-12-30</endDate>
                <eventType/>
                <venue>Azzura Beach Club</venue>
                <hours>6pm till late</hours>
                <description>LOADED is a party created by Azzura to exhibit our own series of DJs
line-ups to keep your adrenalin pumping throughout the evening. You could jumpstart the day with the
Hydrosports activities or simply enjoy our exquisite food and drinks on the beach cabanas and lounge
beds on the sand during the day while you soak up the island sun..
Featuring: DJ Haan DJ Amara DJ Gaijin</description>
                <shortDescription>LOADED is a party created by Azzura to exhibit our
own...</shortDescription>
                <imageUrl>http://static.dev.insing.com/images/fa/6a/0f/00/stb_150x150.jpg</imageUrl>
                <thumbnail>http://static.dev.insing.com/images/fa/6a/0f/00/pc_90x68.jpg</thumbnail>

<thumbnailBig>http://static.dev.insing.com/images/fa/6a/0f/00/pc_240x180.jpg</thumbnailBig>
                <eventUrl>http://events.dev.insing.com/event/loaded-models-beach-party/id-
38600000</eventUrl>
                <venueAddress>46 Siloso Beach Walk</venueAddress>
            </result>
        </results>
      </ns2:upcomingEventResponse>
   </soap:Body>
</soap:Envelope>
```


Appendix A. RESULT CODES

A standardized set of result codes

Code	Description
200	Login Successful.
201	The search query returned no results.
400	Invalid Session Token.
401	The login credentials are invalid.
402	Invalid Request.
403	Invalid request, session token missing.
404	Invalid Request. Date must be in yyyy-mm-dd format.
405	You are not authorized to perform this operation.
500	Unknown Server Error.
501	Service is temporarily unavailable.

Appendix B. AUTHENTICATION.WSDL

This document is located at:
Production: https://services.insing.com/api/1.0/authenticate?wsdl
Test: https://services.test.insing.com/api/1.0/authenticate?wsdl

```
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions name="Login_v1_0"
        xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
        xmlns:tns="http://services.insing.com/api/authentication"
        xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema"
        targetNamespace="http://services.insing.com/api/authentication">
        <wsdl:types>
                <xsd:schema targetNamespace="http://services.insing.com/api/authentication"
                        xmlns:lt="http://services.insing.com/api/authentication/types" elementFormDefault="unqualified">
                        <xsd:import namespace="http://services.insing.com/api/authentication/types" schemaLocation="AuthenticationSchema.xsd" />

                <xsd:element name="loginRequest">
                <xsd:complexType>
                        <xsd:sequence>
                                <xsd:element name="deviceIdentifier" type="lt:deviceIdentifierType" minOccurs="1" maxOccurs="1"/>
                                <xsd:element name="clientId" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                                <xsd:element name="password" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                        </xsd:sequence>
                </xsd:complexType>
            </xsd:element>

            <xsd:element name="loginResponse">
                 <xsd:complexType>
                        <xsd:sequence>
                                <xsd:element name="sessionToken" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                                <xsd:element name="resultCode" type="xsd:int" minOccurs="1" maxOccurs="1"/>
                                <xsd:element name="resultMessage" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                        </xsd:sequence>
                </xsd:complexType>
            </xsd:element>

        </xsd:schema>
        </wsdl:types>

    <wsdl:message name="LoginRequest">
        <wsdl:part name="loginRequest" element="tns:loginRequest"/>
    </wsdl:message>

    <wsdl:message name="LoginResponse">
        <wsdl:part name="loginResponse" element="tns:loginResponse"/>
    </wsdl:message>

        <wsdl:portType name="IAuthentication">
```

```
            <wsdl:operation name="login">
               <wsdl:input message="tns:LoginRequest"/>
               <wsdl:output message="tns:LoginResponse"/>
            </wsdl:operation>
        </wsdl:portType>

        <wsdl:binding name="AuthenticationBinding" type="tns:IAuthentication">
            <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http" />
            <wsdl:operation name="login">
                <soap:operation soapAction="" />
                <wsdl:input>
                    <soap:body use="literal" />
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal" />
                </wsdl:output>
            </wsdl:operation>
        </wsdl:binding>

        <wsdl:service name="Authentication">
            <wsdl:port binding="tns:AuthenticationBinding" name="AuthenticationPort">
                <soap:address location="http://services.insing.com/api/authentication/"/>
            </wsdl:port>
        </wsdl:service>

</wsdl:definitions>
```

Appendix C. AUTHENTICATIONSCHEMA.XSD

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                      targetNamespace="http://services.insing.com/api/authentication/types"
                      xmlns:tns="http://services.insing.com/api/authentication/types"
                      elementFormDefault="unqualified">

        <xsd:complexType name="deviceIdentifierType">
               <xsd:sequence>
                   <xsd:element name="type" type="xsd:string" minOccurs="1" maxOccurs="1" />
                   <xsd:element name="identifier" type="xsd:string" minOccurs="1" maxOccurs="1"/>
               </xsd:sequence>
        </xsd:complexType>
</xsd:schema>
```

Appendix D. EVENTSSEARCH.WSDL

This document is located at:
Production: http://services.insing.com/api/1.0/search/events?wsdl
Test: http://services.test.insing.com/api/1.0/search/events?wsdl

```
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions   name="Login_v1_0"
                              xmlns="http://services.insing.com/api/search/events"
                              xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
                              xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
                              xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                              targetNamespace="http://services.insing.com/api/search/events">
      <wsdl:types>
            <xsd:schema targetNamespace="http://services.insing.com/api/search/events"
                              xmlns:es="http://services.insing.com/api/search/events/types"
                              elementFormDefault="unqualified">

                  <xsd:import namespace="http://services.insing.com/api/search/events/types" schemaLocation="EventsSearchSchema.xsd" />

            <xsd:element name="searchRequest">
            <xsd:complexType>
                        <xsd:sequence>
                              <xsd:element name="sessionToken" type="xsd:string"  minOccurs="1" maxOccurs="1" />
                              <xsd:element name="startDate" type="xsd:date" minOccurs="0" maxOccurs="1" />
                              <xsd:element name="endDate" type="xsd:date" minOccurs="0" maxOccurs="1" />
                              <xsd:element name="searchTerm"   type="xsd:string" minOccurs="0" maxOccurs="1" />
                              <xsd:element name="eventCategory" type="xsd:string" minOccurs="0" maxOccurs="1" />
                              <xsd:element name="pageNumber" type="xsd:nonNegativeInteger" minOccurs="0" maxOccurs="1"    default="1"/>
                              <xsd:element name="pageSize" type="xsd:nonNegativeInteger" minOccurs="0" maxOccurs="1"
      default="20"/>
                              <xsd:element name="sortFields" type="es:sortFieldsType" minOccurs="0" maxOccurs="1" />
                        </xsd:sequence>
            </xsd:complexType>
           </xsd:element>

           <xsd:element name="searchResponse">
               <xsd:complexType>
                              <xsd:sequence>
                                    <xsd:element name="resultCode"   type="xsd:int"      minOccurs="1" maxOccurs="1"/>
                                    <xsd:element name="resultMessage" type="xsd:string" minOccurs="1" maxOccurs="1"/>
```

```
                                <xsd:element name="results" type="es:searchResultsType" minOccurs="0" maxOccurs="1"/>
                        </xsd:sequence>
                </xsd:complexType>
        </xsd:element>

                <xsd:element name="getEventsCategoriesRequest">
            <xsd:complexType>
                        <xsd:sequence>
                                <xsd:element name="sessionToken" type="xsd:string" minOccurs="1" maxOccurs="1" />
                        </xsd:sequence>
                </xsd:complexType>
        </xsd:element>

        <xsd:element name="getEventsCategoriesResponse">
            <xsd:complexType>
                        <xsd:sequence>
                                <xsd:element name="resultCode" type="xsd:int" minOccurs="1" maxOccurs="1"/>
                                <xsd:element name="resultMessage" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                        <xsd:element name="category" type="xsd:string"      minOccurs="0" maxOccurs="unbounded" />

                        </xsd:sequence>
                </xsd:complexType>
        </xsd:element>

                <xsd:element name="findFreeEventsRequest">
            <xsd:complexType>
                        <xsd:sequence>
                                <xsd:element name="sessionToken" type="xsd:string" minOccurs="1" maxOccurs="1" />
                                <xsd:element name="pageNumber" type="xsd:int" minOccurs="0" maxOccurs="1" default="1" />
                                <xsd:element name="pageSize" type="xsd:int" minOccurs="0" maxOccurs="1" default="20" />
                        </xsd:sequence>
                </xsd:complexType>
        </xsd:element>

        <xsd:element name="findFreeEventsResponse">
            <xsd:complexType>
                        <xsd:sequence>
                                <xsd:element name="resultCode" type="xsd:int" minOccurs="1" maxOccurs="1"/>
                                <xsd:element name="resultMessage" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                        <xsd:element name="results" type="es:freeEventSearchResultsType"  minOccurs="0" maxOccurs="1" />
```

```
                        </xsd:sequence>
                    </xsd:complexType>
        </xsd:element>
        <xsd:element name="topPicksRequest">
            <xsd:complexType>
                        <xsd:sequence>
                              <xsd:element name="sessionToken" type="xsd:string" minOccurs="1" maxOccurs="1" />
                        </xsd:sequence>
                    </xsd:complexType>
        </xsd:element>

        <xsd:element name="topPicksResponse">
            <xsd:complexType>
                        <xsd:sequence>
                              <xsd:element name="resultCode" type="xsd:int" minOccurs="1" maxOccurs="1"/>
                              <xsd:element name="resultMessage" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                        <xsd:element name="results" type="es:topPicksResultsType"  minOccurs="0" maxOccurs="1" />

                        </xsd:sequence>
                    </xsd:complexType>
        </xsd:element>
        <xsd:element name="upcomingEventRequest">
            <xsd:complexType>
                        <xsd:sequence>
                              <xsd:element name="sessionToken" type="xsd:string" minOccurs="1" maxOccurs="1" />

                        </xsd:sequence>
                    </xsd:complexType>
        </xsd:element>

        <xsd:element name="upcomingEventResponse">
            <xsd:complexType>
                        <xsd:sequence>
                              <xsd:element name="resultCode" type="xsd:int" minOccurs="1" maxOccurs="1"/>
                              <xsd:element name="resultMessage" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                        <xsd:element name="results" type="es:upcomingResultsType"  minOccurs="0" maxOccurs="1" />

                        </xsd:sequence>
                    </xsd:complexType>
        </xsd:element>
```

```
            </xsd:schema>
      </wsdl:types>

    <wsdl:message name="searchRequest">
      <wsdl:part name="searchRequest" element="searchRequest"/>
    </wsdl:message>
    <wsdl:message name="searchResponse">
      <wsdl:part name="searchResponse" element="searchResponse"/>
    </wsdl:message>

    <wsdl:message name="getEventsCategoriesRequest">
      <wsdl:part name="getEventsCategoriesRequest" element="getEventsCategoriesRequest"/>
    </wsdl:message>
    <wsdl:message name="getEventsCategoriesResponse">
      <wsdl:part name="getEventsCategoriesResponse" element="getEventsCategoriesResponse"/>
    </wsdl:message>

    <wsdl:message name="findFreeEventsRequest">
      <wsdl:part name="findFreeEventsRequest" element="findFreeEventsRequest"/>
    </wsdl:message>
    <wsdl:message name="findFreeEventsResponse">
      <wsdl:part name="findFreeEventsResponse" element="findFreeEventsResponse"/>
    </wsdl:message>

    <wsdl:message name="topPicksRequest">
      <wsdl:part name="topPicksRequest" element="topPicksRequest"/>
    </wsdl:message>
    <wsdl:message name="topPicksResponse">
      <wsdl:part name="topPicksResponse" element="topPicksResponse"/>
    </wsdl:message>


    <wsdl:message name="upcomingEventRequest">
      <wsdl:part name="upcomingEventRequest" element="upcomingEventRequest"/>
    </wsdl:message>
    <wsdl:message name="upcomingEventResponse">
      <wsdl:part name="upcomingEventResponse" element="upcomingEventResponse"/>
    </wsdl:message>


      <wsdl:portType name="IEventsSearch">
```

```
        <wsdl:operation name="findEvents">
           <wsdl:input      message="searchRequest"/>
           <wsdl:output message="searchResponse"/>
        </wsdl:operation>
        <wsdl:operation name="getEventsCategories">
           <wsdl:input      message="getEventsCategoriesRequest"/>
           <wsdl:output message="getEventsCategoriesResponse"/>
        </wsdl:operation>
        <wsdl:operation name="findFreeEvents">
           <wsdl:input      message="findFreeEventsRequest"/>
           <wsdl:output message="findFreeEventsResponse"/>
        </wsdl:operation>
        <wsdl:operation name="getTopPicks">
           <wsdl:input      message="topPicksRequest"/>
           <wsdl:output message="topPicksResponse"/>
        </wsdl:operation>

        <wsdl:operation name="getUpcomingEvents">
           <wsdl:input      message="upcomingEventRequest"/>
           <wsdl:output message="upcomingEventResponse"/>
        </wsdl:operation>

    </wsdl:portType>

    <wsdl:binding name="EventsSearchBinding" type="IEventsSearch">
        <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http" />
        <wsdl:operation name="findEvents">
            <soap:operation soapAction="" />
            <wsdl:input>
                <soap:body use="literal" />
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal" />
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="getEventsCategories">
            <soap:operation soapAction="" />
            <wsdl:input>
                <soap:body use="literal" />
            </wsdl:input>
            <wsdl:output>
```

```
                        <soap:body use="literal" />
                    </wsdl:output>
                </wsdl:operation>
                <wsdl:operation name="findFreeEvents">
                    <soap:operation soapAction="" />
                    <wsdl:input>
                        <soap:body use="literal" />
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal" />
                    </wsdl:output>
                </wsdl:operation>
                <wsdl:operation name="getTopPicks">
                    <soap:operation soapAction="" />
                    <wsdl:input>
                        <soap:body use="literal" />
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal" />
                    </wsdl:output>
                </wsdl:operation>

                <wsdl:operation name="getUpcomingEvents">
                    <soap:operation soapAction="" />
                    <wsdl:input>
                        <soap:body use="literal" />
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal" />
                    </wsdl:output>
                </wsdl:operation>

            </wsdl:binding>

            <wsdl:service name="EventsSearch">
                <wsdl:port binding="EventsSearchBinding" name="EventsSearchPort">
                    <soap:address location="http://services.insing.com/api/1.0/search/events"/>
                </wsdl:port>
            </wsdl:service>

</wsdl:definitions>
```

Appendix E. EventsSearchSchema.xsd

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                    xmlns:api="http://services.insing.com/api/types"
                    xmlns:tns="http://services.insing.com/api/search/events/types"
                    targetNamespace="http://services.insing.com/api/search/events/types"
                    elementFormDefault="unqualified">

      <xsd:import namespace="http://services.insing.com/api/types" schemaLocation="APISchema.xsd"/>

      <xsd:complexType name="sortFieldsType">
            <xsd:sequence>
                  <xsd:element name="sortField" type="tns:sortFieldType" minOccurs="0" maxOccurs="unbounded" />
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="sortFieldType">
            <xsd:sequence>
                  <xsd:element name="fieldName" type="xsd:string" minOccurs="0" maxOccurs="1" />
                  <xsd:element name="reverse" type="xsd:boolean" minOccurs="0" maxOccurs="1" default="false" />
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="searchResultsType">
            <xsd:sequence>
                  <xsd:element name="maxResults" type="xsd:nonNegativeInteger" minOccurs="0" maxOccurs="1" />
                  <xsd:element name="result" type="tns:eventDetailType" minOccurs="0" maxOccurs="unbounded" />
                  <xsd:element name="facets" type="tns:searchFacetsType" minOccurs="0" maxOccurs="1" />
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="eventDetailType">
            <xsd:sequence>
                  <xsd:element name="id" type="xsd:nonNegativeInteger" minOccurs="1" maxOccurs="1" />
                  <xsd:element name="name" type="xsd:string" minOccurs="1" maxOccurs="1" />
                  <xsd:element name="startDate" type="xsd:date" minOccurs="0" maxOccurs="1" />
                  <xsd:element name="endDate" type="xsd:date" minOccurs="0" maxOccurs="1" />
                  <xsd:element name="eventType" type="tns:eventType" minOccurs="0" maxOccurs="1" />
                  <xsd:element name="venue" type="xsd:string" minOccurs="0" maxOccurs="1" />
```

```
                <xsd:element name="hours" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="description" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="imageUrl" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="thumbnail" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="thumbnailBig" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="eventUrl" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="venueAddress" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="venuePostalCode" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="pricing" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="ticketUrl" type="xsd:string" minOccurs="0" maxOccurs="1" />
                <xsd:element name="likes" type="xsd:long" minOccurs="0" maxOccurs="1" />
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="searchFacetsType">
        <xsd:sequence>
                <xsd:element name="categoryFacetList" type="tns:categoryFacetListType" minOccurs="0" maxOccurs="1" />
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="categoryFacetListType">
        <xsd:sequence>
                <xsd:element name="categoryFacet" type="tns:categoryFacetType" minOccurs="0" maxOccurs="unbounded" />
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="categoryFacetType">
        <xsd:attribute name="name" type="xsd:string" use="required" />
        <xsd:attribute name="count" type="xsd:int" use="required" />
    </xsd:complexType>

    <xsd:complexType name="eventType">
        <xsd:sequence>
                <xsd:element name="channels" type="tns:channelsType" minOccurs="0" maxOccurs="unbounded" />
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="channelsType">
        <xsd:sequence>
                <xsd:element name="name" type="xsd:string" minOccurs="1" maxOccurs="1" />
                <xsd:element name="categories" type="tns:categoriesType" minOccurs="0" maxOccurs="unbounded" />
```

```
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="categoriesType">
        <xsd:sequence>
            <xsd:element name="name" type="xsd:string" minOccurs="1" maxOccurs="1" />
            <xsd:element name="subcategory" type="xsd:string" minOccurs="0" maxOccurs="unbounded" />
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="freeEventSearchResultsType">
        <xsd:sequence>
            <xsd:element name="events" type="tns:freeEventDetailType" maxOccurs="unbounded" minOccurs="0" />
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="freeEventDetailType">
        <xsd:sequence>
            <xsd:element name="id" type="xsd:int" />
            <xsd:element name="name" type="xsd:string" />
            <xsd:element name="startDate" type="xsd:string" minOccurs="0" />
            <xsd:element name="endDate" type="xsd:string" minOccurs="0" />
            <xsd:element name="eventType" type="tns:eventType" minOccurs="0" />
            <xsd:element name="venue" type="xsd:string" minOccurs="0" />
            <xsd:element name="hours" type="xsd:string" minOccurs="0" />
            <xsd:element name="description" type="xsd:string" minOccurs="0" />
            <xsd:element name="imageUrl" type="xsd:string" minOccurs="0" />
            <xsd:element name="eventUrl" type="xsd:string" minOccurs="0" />
            <xsd:element name="venueAddress" type="xsd:string" minOccurs="0" />
            <xsd:element name="venuePostalCode" type="xsd:string" minOccurs="0" />
            <xsd:element name="pricing" type="xsd:string" minOccurs="0" />
            <xsd:element name="ticketUrl" type="xsd:string" minOccurs="0" />
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="topPicksResultType">
        <xsd:sequence>
            <xsd:element name="result" type="tns:eventDetailType" minOccurs="0" maxOccurs="unbounded" />
        </xsd:sequence>
    </xsd:complexType>
```

```
	<xsd:complexType name="upcomingResultType">
		<xsd:sequence>
			<xsd:element name="result" type="tns:eventDetailType" minOccurs="0" maxOccurs="unbounded" />
		</xsd:sequence>
	</xsd:complexType>


</xsd:schema>
```

Appendix F. MEDIA SERVICE XSD

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                    targetNamespace="http://services.insing.com/api/search/hotdeal/types"
                    xmlns:tns="http://services.insing.com/api/search/hotdeal/types"
                    elementFormDefault="unqualified">

      <xsd:complexType name="stringList">
            <xsd:sequence>
                  <xsd:element name="item" type="xsd:string" minOccurs="1" maxOccurs="unbounded" />
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="filtersType">
            <xsd:sequence>
                  <xsd:element name="neighbourhood"      type="xsd:string"                minOccurs="0" maxOccurs="1"/>
                  <xsd:element name="distanceLimit"             type="xsd:nonNegativeInteger"    minOccurs="0" maxOccurs="1"/>
                  <xsd:element name="category"                  type="xsd:string"   minOccurs="0" maxOccurs="unbounded"/>
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="locationType">
            <xsd:sequence>
                  <xsd:choice>
                        <xsd:element name="location"     type="xsd:string"         minOccurs="0" maxOccurs="1"/>
                        <xsd:element name="geocode"      type="tns:geocodeType"    minOccurs="0" maxOccurs="1"/>
                  </xsd:choice>
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="geocodeType">
            <xsd:all>
                  <xsd:element name="latitude"     type="xsd:double" minOccurs="1" maxOccurs="1"/>
                  <xsd:element name="longitude"    type="xsd:double" minOccurs="1" maxOccurs="1"/>
            </xsd:all>
      </xsd:complexType>


      <xsd:complexType name="structuredAddressType">
```

```
        <xsd:sequence>
            <xsd:element name="postcode"       type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="blockNumber"    type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="streetName"     type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="unitNumber"     type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="buildingName"   type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="sectorCode"     type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="neighbourhood" type="xsd:string" minOccurs="1" maxOccurs="1"/>
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="hotDealDetailType">
        <xsd:sequence>
            <xsd:element name="id"                 type="xsd:nonNegativeInteger"          minOccurs="1" maxOccurs="1"/>
            <xsd:element name="business"     type="tns:businessDetailType"          minOccurs="1" maxOccurs="1"/>
            <xsd:element name="title" type="xsd:string"                             minOccurs="1" maxOccurs="1"/>
            <xsd:element name="description" type="xsd:string"                              minOccurs="1" maxOccurs="1"/>
            <xsd:element name="remarks" type="xsd:string"                                  minOccurs="1" maxOccurs="1"/>
            <xsd:element name="startDate"    type="xsd:date"                               minOccurs="1" maxOccurs="1"/>
            <xsd:element name="endDate"      type="xsd:date"                               minOccurs="1" maxOccurs="1"/>
            <xsd:element name="bankName"     type="xsd:string"                             minOccurs="0" maxOccurs="1"/>
            <xsd:element name="categoryList" type="tns:categoryListType"            minOccurs="1" maxOccurs="1"/>
            <xsd:element name="distance"     type="xsd:double"                             minOccurs="0" maxOccurs="1"/>
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="businessDetailType">
        <xsd:sequence>
            <xsd:element name="id"    type="xsd:nonNegativeInteger"          minOccurs="1" maxOccurs="1"/>
            <xsd:element name="imageMediaId" type="xsd:nonNegativeInteger"     minOccurs="1" maxOccurs="1"/>
            <xsd:element name="tradingName"  type="xsd:string"                             minOccurs="1" maxOccurs="1"/>
            <xsd:element name="url"   type="xsd:string"                             minOccurs="1" maxOccurs="1"/>
            <xsd:element name="latitude"     type="xsd:double"                             minOccurs="1" maxOccurs="1"/>
            <xsd:element name="longitude"    type="xsd:double"                             minOccurs="1" maxOccurs="1"/>
            <xsd:element name="address"      type="tns:structuredAddressType" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="outletName"   type="xsd:string"                             minOccurs="0" maxOccurs="1"/>
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="categoryListType">
        <xsd:sequence>
```

```
                <!-- <xsd:element name="maxResults"    type="xsd:nonNegativeInteger"    minOccurs="0" maxOccurs="1"/>  -->
                <xsd:element name="category" type="xsd:string"      minOccurs="0" maxOccurs="unbounded"/>
            </xsd:sequence>
        </xsd:complexType>

        <xsd:complexType name="searchResultsType">
            <xsd:sequence>
                <xsd:element name="result"             type="tns:hotDealDetailType"     minOccurs="0" maxOccurs="unbounded"/>
            </xsd:sequence>
            <xsd:attribute name="maxResults" type="xsd:int" use="optional" default="0"/>
        </xsd:complexType>


        <xsd:complexType name="facetType">
            <xsd:sequence>
                <xsd:element name="name" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                <xsd:element name="count" type="xsd:nonNegativeInteger" minOccurs="1" maxOccurs="1"/>
            </xsd:sequence>
        </xsd:complexType>

        <xsd:complexType name="searchFacetsType">
            <xsd:sequence>
                <xsd:element name="locationFacet"      type="tns:facetType" minOccurs="0" maxOccurs="unbounded"/>
                <xsd:element name="categoryFacet"      type="tns:facetType" minOccurs="0" maxOccurs="unbounded"/>
            </xsd:sequence>
        </xsd:complexType>

        <xsd:complexType name="sortFieldsType">
            <xsd:sequence>
                <xsd:element name="fieldName" type="xsd:string" minOccurs="0" maxOccurs="unbounded" />
            </xsd:sequence>
        </xsd:complexType>

</xsd:schema>
```

Appendix G. MEDIA SERVICE WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
      xmlns:api="http://services.insing.com/api/types" xmlns="http://services.insing.com/api/media/types"
      targetNamespace="http://services.insing.com/api/media/types"
      elementFormDefault="unqualified">

      <xsd:import namespace="http://services.insing.com/api/types" schemaLocation="APISchema.xsd" />

      <xsd:complexType name="transcodeFormats">
            <xsd:sequence>
                  <xsd:element name="imageFormats" type="transcodeFormat" minOccurs="0" maxOccurs="unbounded" />
                  <xsd:element name="videoFormats" type="transcodeFormat" minOccurs="0" maxOccurs="unbounded" />
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="transcodeFormat">
            <xsd:sequence>
                  <xsd:element name="transcodeName" type="xsd:string" minOccurs="1" maxOccurs="1" />
                  <xsd:element name="fileType" type="xsd:string" minOccurs="1" maxOccurs="1" />
                  <xsd:element name="width" type="xsd:int" minOccurs="1" maxOccurs="1" />
                  <xsd:element name="height" type="xsd:int" minOccurs="1" maxOccurs="1" />
                  <xsd:element name="background" type="xsd:string" minOccurs="0" maxOccurs="1" />
                  <xsd:element name="audioCodec" type="xsd:string" minOccurs="0" maxOccurs="1" />
                  <xsd:element name="videoCodec" type="xsd:string" minOccurs="0" maxOccurs="1" />
            </xsd:sequence>
      </xsd:complexType>

      <xsd:complexType name="transcodedMedia">
            <xsd:sequence>
                  <xsd:element name="id" type="xsd:int" minOccurs="1" maxOccurs="1" />
                  <xsd:element name="url" type="xsd:string" minOccurs="1" maxOccurs="1" />
            </xsd:sequence>
      </xsd:complexType>


</xsd:schema>
```