

GVSU Art

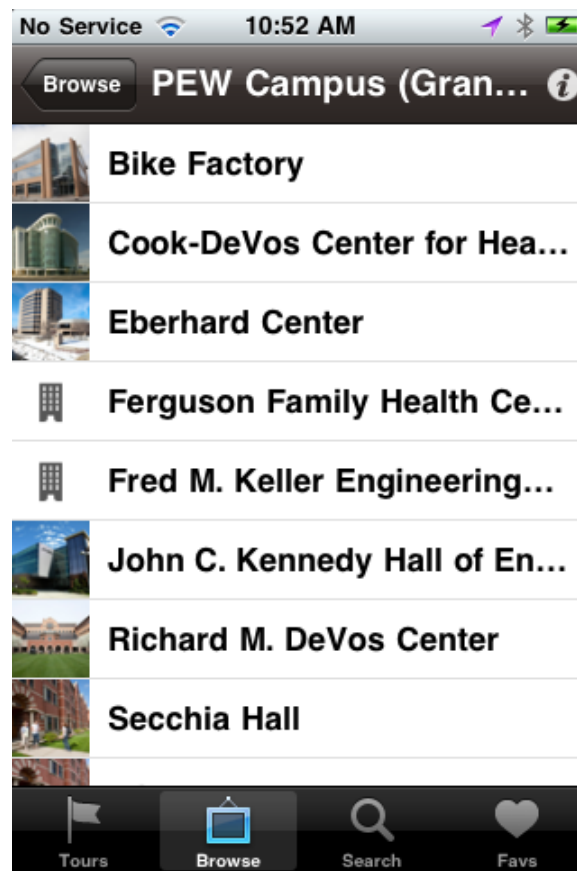
The content of this document is to illustrate which web services are being used in the application and how they work.

Note:

The application has a variety of features, but due to some server issues at the moment, some of these services are not functional like the Tours list (We can request a tour list but without the icons) among other things.

So far we can describe the location browse, the artwork list and the artwork detail.

Location Browse:



In order to get a list of the buildings, first we need to call this service (<http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest>) with the following parameters:

Method = Method name

Type = object type in Collective Access framework

Item_ids[] = Array of numeric Ids, 1 will bring the info of all campuses.

Bundles[] = Array of possible fields

Example:

[http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_storage_locations&item_ids\[0\]=1&bundles\[0\]=ca_storage_locations.children.location_id&options\[ca_storage_locations.children.location_id\]\[returnAsArray\]=1&bundles\[1\]=ca_storage_locations.children.preferred_labels.name&options\[ca_storage_locations.children.preferred_labels.name\]\[returnAsArray\]=1](http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_storage_locations&item_ids[0]=1&bundles[0]=ca_storage_locations.children.location_id&options[ca_storage_locations.children.location_id][returnAsArray]=1&bundles[1]=ca_storage_locations.children.preferred_labels.name&options[ca_storage_locations.children.preferred_labels.name][returnAsArray]=1)

The request above will return a list of campuses and some other facilities that after being parsed those who are not a campus will be filtered.

```
<ItemInfoService generator="zend" version="1.0">
<get>
<key_1>
<ca_storage_locations.children.location_id>
<key_2>2</key_2>
<key_3>3</key_3>
<key_44>44</key_44>
<key_45>45</key_45>
<key_81>81</key_81>
<key_82>82</key_82>
<key_187>187</key_187>
</ca_storage_locations.children.location_id>
<ca_storage_locations.children.preferred_labels.name>
<key_0>Allendale Campus</key_0>
<key_1>PEW Campus</key_1>
<key_2>Meijer Campus in Holland</key_2>
<key_3>Muskegon Campus</key_3>
<key_4>GVSU Storage</key_4>
<key_5>Print and Drawing Cabinet</key_5>
<key_6>On Loan</key_6>
</ca_storage_locations.children.preferred_labels.name>
</key_1>
<status>success</status>
</get>
</ItemInfoService>
```

If you want to get the buildings of one specific campus, you only need to use the same call and change the ID for one of the IDs of the campus and you'll get the list of buildings for that campus.

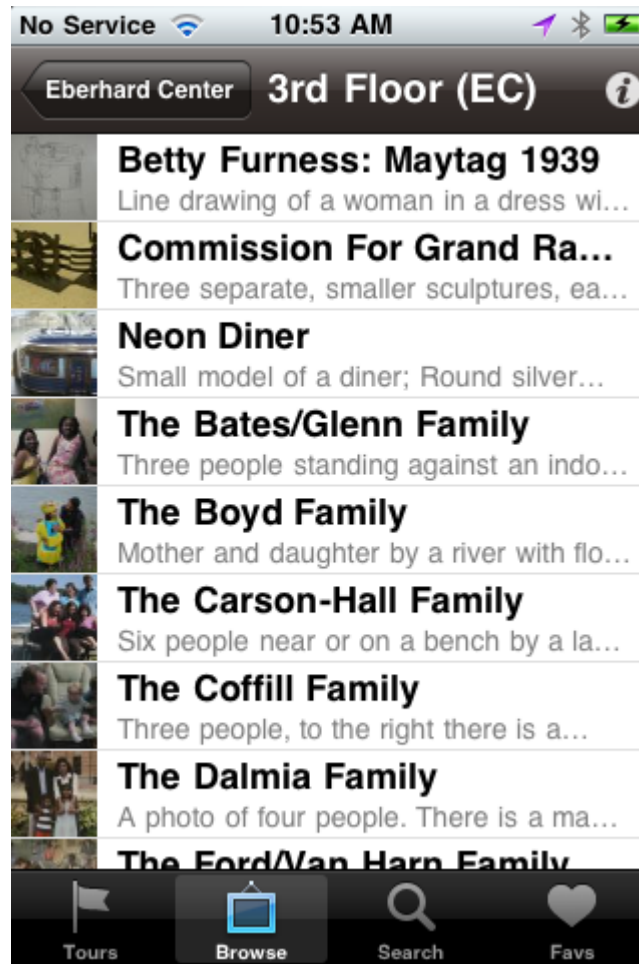
Example:

[http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_storage_locations&item_ids\[0\]=3&bundles\[0\]=ca_storage_locations.children.location_id&options\[ca_storage_locations.children.location_id\]\[returnAsArray\]=1&bundles\[1\]=ca_storage_locations.children.preferred_labels.name&options\[ca_storage_locations.children.preferred_labels.name\]\[returnAsArray\]=1](http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_storage_locations&item_ids[0]=3&bundles[0]=ca_storage_locations.children.location_id&options[ca_storage_locations.children.location_id][returnAsArray]=1&bundles[1]=ca_storage_locations.children.preferred_labels.name&options[ca_storage_locations.children.preferred_labels.name][returnAsArray]=1)

Server response for PEW Campus ID = 3 is:

```
<ItemInfoService generator="zend" version="1.0">
<get>
<key_3>
<ca_storage_locations.children.location_id>
<key_10>10</key_10>
<key_13>13</key_13>
<key_20>20</key_20>
<key_21>21</key_21>
<key_41>41</key_41>
<key_42>42</key_42>
<key_43>43</key_43>
<key_50>50</key_50>
<key_51>51</key_51>
</ca_storage_locations.children.location_id>
<ca_storage_locations.children.preferred_labels.name>
<key_0>Bike Factory</key_0>
<key_1>Cook-DeVos Center for Health Sciences</key_1>
<key_2>Richard M. DeVos Center</key_2>
<key_3>Eberhard Center</key_3>
<key_4>Ferguson Family Health Center</key_4>
<key_5>Fred M. Keller Engineering Lab Building</key_5>
<key_6>John C. Kennedy Hall of Engineering</key_6>
<key_7>Secchia Hall</key_7>
<key_8>Winter Hall</key_8>
</ca_storage_locations.children.preferred_labels.name>
</key_3>
<status>success</status>
</get>
</ItemInfoService>
```

Artwork list:



For every building or artist there is a list of artworks. The problem is this list can be huge and besides that there is no way to get the whole information we need to display just in 1 call. Then the procedure would be something like this:

1. We get an entire list of all the artworks inside a building or from an artist.

Method = Service method to be summoned

Type = the collective access object

Item_id = numeric ID for the object type

http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=getRelationships&type=ca_storage_locations&item_id=29&related_type=ca_objects

```
<ItemInfoService generator="zend" version="1.0">
<getRelationships>
<key_208>
<item_type_id>8</item_type_id>
<object_id>3291</object_id>
<source_info/>
<sdatetime/>
<edatetime/>
<relationship_type_id>5</relationship_type_id>
<idno>1998.130.1</idno>
<relation_id>208</relation_id>
<name>Hothouse Flowers</name>
<locale_id>1</locale_id>
<row_id>29</row_id>
<_key>relation_id</_key>
<effective_date/>
<labels>
<key_1>Hothouse Flowers</key_1>
</labels>
<direction>rtol</direction>
<relationship_typename>is location of</relationship_typename>
<label>Hothouse Flowers</label>
</key_208>
<key_251>
<item_type_id>8</item_type_id>
<object_id>3312</object_id>
<source_info/>
<sdatetime/>
<edatetime/>
<relationship_type_id>5</relationship_type_id>
<idno>1998.152.1</idno>
<relation_id>251</relation_id>
<name>Fusion</name>
<locale_id>1</locale_id>
<row_id>29</row_id>
<_key>relation_id</_key>
<effective_date/>
<labels>
<key_1>Fusion</key_1>
</labels>
<direction>rtol</direction>
<relationship_typename>is location of</relationship_typename>
```

```
<label>Fusion</label>
</key_251>
<status>success</status>
</getRelationships>
</ItemInfoService>
```

2. We call another service that allows us to call a partial list of the list we got in the first call and build a different XML with the information we need.

[http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_objects&%@&bundles\[0\]=ca_objects.object_id&bundles\[1\]=ca_object_labels.name&bundles\[2\]=ca_objects.work_description&bundles\[3\]=ca_object_representations.media.icon&options\[ca_object_representations.media.icon\]\[returnURL\]=1](http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_objects&%@&bundles[0]=ca_objects.object_id&bundles[1]=ca_object_labels.name&bundles[2]=ca_objects.work_description&bundles[3]=ca_object_representations.media.icon&options[ca_object_representations.media.icon][returnURL]=1)

```
<ItemInfoService generator="zend" version="1.0">
<get>
<key_3291>
<ca_objects.object_id>3291</ca_objects.object_id>
<ca_object_labels.name>Hothouse Flowers</ca_object_labels.name>
<ca_objects.work_description>
Multicolored flowers (reds, blues, and yellows) in a blue vase with a
white background.
</ca_objects.work_description>
<ca_object_representations.media.icon>
http://www.gvsuartsGallery.org/media/gvsu/images/5/7/8787_ca_obj
ect_representations_media_5709_icon.jpg
</ca_object_representations.media.icon>
</key_3291>
<key_3312>
<ca_objects.object_id>3312</ca_objects.object_id>
<ca_object_labels.name>Fusion</ca_object_labels.name>
<ca_objects.work_description>
Surrealistic scene; Body of water, leafless trees over hanging.
</ca_objects.work_description>
<ca_object_representations.media.icon>
http://www.gvsuartsGallery.org/media/gvsu/images/2/5/28550_ca_o
bject_representations_media_2539_icon.jpg
</ca_object_representations.media.icon>
</key_3312>
<status>success</status>
</get>
```

</ItemInfoService>

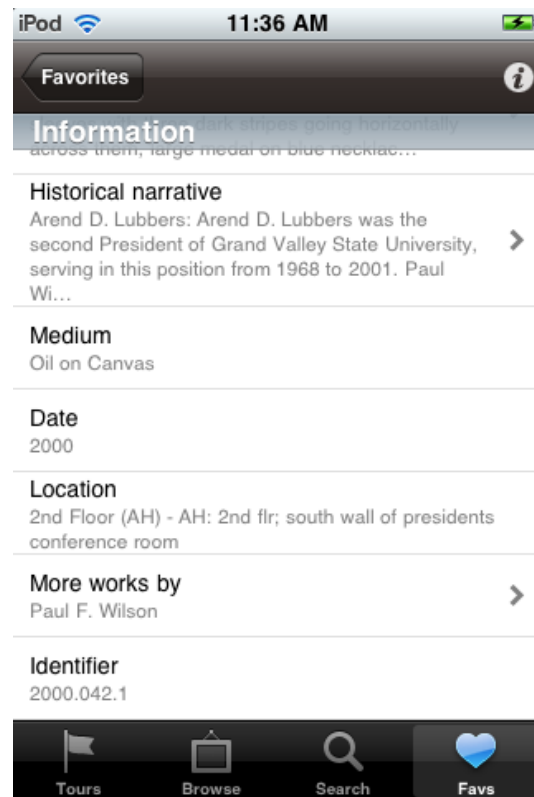
3. We get the images from the link in the second call.

```
<ca_object_representations.media.icon>  
http://www.gvsuartsGallery.org/media/gvsu/images/2/5/28550_ca_o  
bject_representations_media_2539_icon.jpg  
</ca_object_representations.media.icon>
```

Every single image will be used to get the icon from the server.

4. We repeat the first 3 steps until we find the piece we are looking for or until the list reach its last element.

Artwork detail:



The detail uses the same call the get method using the item array in position 0 with the value of the object ID, in this case the artwork ID.

Example:

[http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_objects&item_ids\[0\]=%d&bundles\[1\]=ca_objects.object_id&bundles\[2\]=ca_object_labels.name&bundles\[3\]=ca_objects.work_description&bundles\[4\]=ca_objects.idno&bundles\[5\]=ca_object_s.work_date&bundles\[6\]=ca_objects.historical_context&bundles\[7\]=ca_object_representations.media.small&bundles\[8\]=ca_storage_locations.preferred_labels.name&bundles\[9\]=ca_entities.preferred_labels.displayname&options\[ca_object_representations.media.small\]\[return URL\]=1](http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_objects&item_ids[0]=%d&bundles[1]=ca_objects.object_id&bundles[2]=ca_object_labels.name&bundles[3]=ca_objects.work_description&bundles[4]=ca_objects.idno&bundles[5]=ca_object_s.work_date&bundles[6]=ca_objects.historical_context&bundles[7]=ca_object_representations.media.small&bundles[8]=ca_storage_locations.preferred_labels.name&bundles[9]=ca_entities.preferred_labels.displayname&options[ca_object_representations.media.small][return URL]=1)

```
<ItemInfoService generator="zend" version="1.0">
<get>
<key_3312>
<ca_objects.object_id>3312</ca_objects.object_id>
<ca_object_labels.name>Fusion</ca_object_labels.name>
<ca_objects.work_description>
Surrealistic scene; Body of water, leafless trees over hanging.
</ca_objects.work_description>
<ca_objects.idno>1998.152.1</ca_objects.idno>
<ca_objects.work_date>1995</ca_objects.work_date>
<ca_objects.historical_context>
The painting "Fusion" is a surrealistic piece of which some characteristic
traits are owed to the acceptance of the early theories of psychoanalysis, an
interest in the non-rational, unconscious domain of the mind and a distrust of
knowledge gained from what generally could be called "the sciences".
Dominating the center of the painting is a blank canvas mounted on an easel.
This is meant to allude to a favorite theme of the Surrealists, namely "tabula
rasa", literally meaning "blank slate". After witnessing the carnage of the First
World War, the Surrealists maintained that continuing culture or civilization
as it had been would only lead to another disaster. They adopted the concept
of tabula rasa as a signal of their desire to begin again the culture from a pure,
uncorrupted state of thinking.
</ca_objects.historical_context>
<ca_object_representations.media.small>
http://www.gvsuartsGallery.org/media/gvsu/images/2/5/29603_ca_object_r
epresentations_media_2539_small.jpg
</ca_object_representations.media.small>
<ca_storage_locations.preferred_labels.name>Kirkhof
Center</ca_storage_locations.preferred_labels.name>
<ca_entities.preferred_labels.displayname>Joseph E. Kinnebrew,
Jr.</ca_entities.preferred_labels.displayname>
</key_3312>
<status>success</status>
```



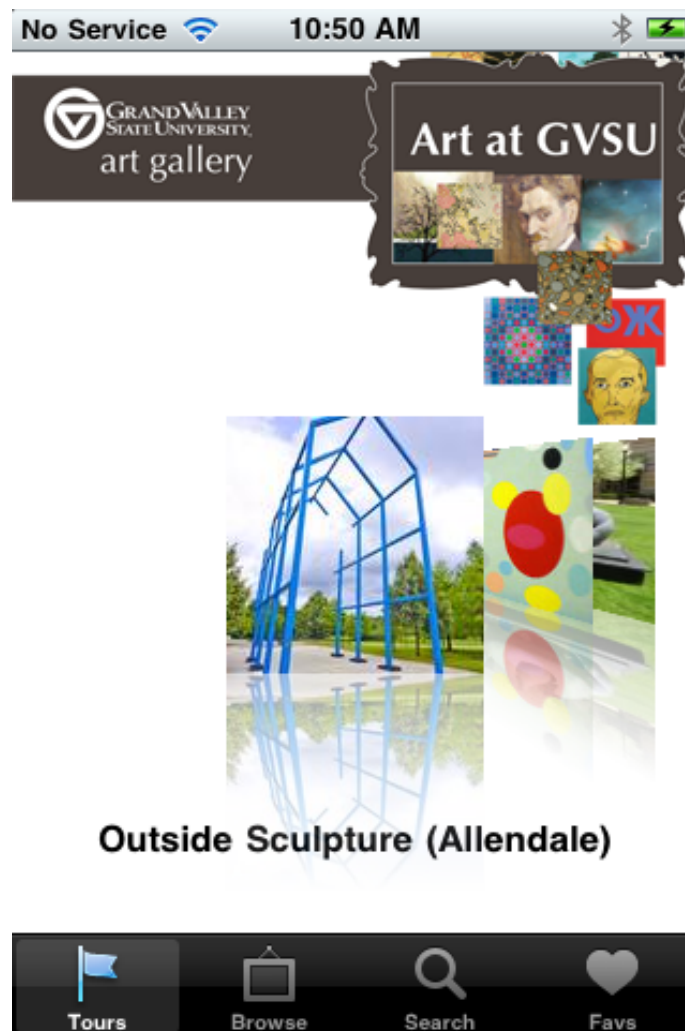
```
</get>  
</ItemInfoService>
```

These are the methods used to bring the information we are showing in the application right now.

Tours

This is the first screen the user will see once the app is running on iOS.

[http://gvsuartsGallery.org/service.php/search/Search/rest?method=queryRest&type=ca_tours&query=*&additional_bundles\[ca_tours.icon.largeicon\]\[returnURL\]=1&additional_bundles\[ca_tours.access\]](http://gvsuartsGallery.org/service.php/search/Search/rest?method=queryRest&type=ca_tours&query=*&additional_bundles[ca_tours.icon.largeicon][returnURL]=1&additional_bundles[ca_tours.access])



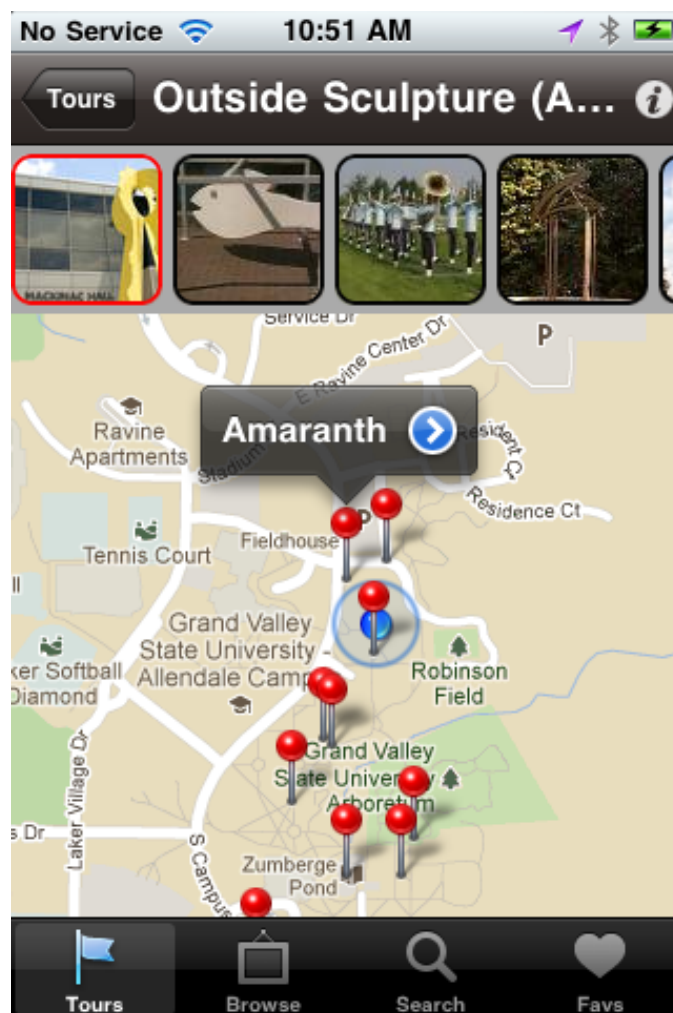
This call return some of the elements from the ca_tours objects and add to additional fields to the call, the icon and the tour access, the last one is required for the app to enable or disable tours.

Once the user clicked on one of the items a map will appear showing the stops, to get that info the call you'll need to make is the following URL:

[http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=getRelationships&type=ca_tours&item_id=%d&related_type=ca_tour_stops&options\[bundles\]\[ca_objects.georeference\]=&options\[bundles\]\[ca_objects.object_id\]=](http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=getRelationships&type=ca_tours&item_id=%d&related_type=ca_tour_stops&options[bundles][ca_objects.georeference]=&options[bundles][ca_objects.object_id]=)

And to get the images call the next URL:

[http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_objects&%@bundles\[0\]=ca_objects.object_id&bundles\[1\]=ca_objects.access&bundles\[2\]=ca_object_representations.media.icon&options\[ca_object_representations.media.icon\]\[returnURL\]=1](http://gvsuartsGallery.org/service.php/iteminfo/ItemInfo/rest?method=get&type=ca_objects&%@bundles[0]=ca_objects.object_id&bundles[1]=ca_objects.access&bundles[2]=ca_object_representations.media.icon&options[ca_object_representations.media.icon][returnURL]=1)



Search:

Depending on how the user is looking for something the app must call one of these 2 requests:

http://gvsuartsGallery.org/service.php/search/Search/rest?method=queryRest&type=ca_entities&query=ca_entity_labels.displayname:%@*&additional_bundles=

The call above will bring the artists using the name and replacing “%@” with the name the app should retrieve from the server; for example: ca_entity_labels.displayname:David*.

For the next call is the same thing except that instead of replacing the name is change the same character (%@) in the String for the IDNO of the artwork.

[http://gvsuartsGallery.org/service.php/search/Search/rest?method=queryRest&type=ca_objects&query=idno:%@*&additional_bundles\[work_description\]&additional_bundles\[access\]&additional_bundles\[ca_object_representations.media.icon\]\[returnURL\]=1](http://gvsuartsGallery.org/service.php/search/Search/rest?method=queryRest&type=ca_objects&query=idno:%@*&additional_bundles[work_description]&additional_bundles[access]&additional_bundles[ca_object_representations.media.icon][returnURL]=1)

