Web Service

The primary role of the web service is to serve as the interface between the web administration interface/database and the Android application. It works by acting as a REST API, allowing the Android application to make HTTP GET requests, where the contents returned are determined by the HTTP URL. The content returned is in the JSON format.
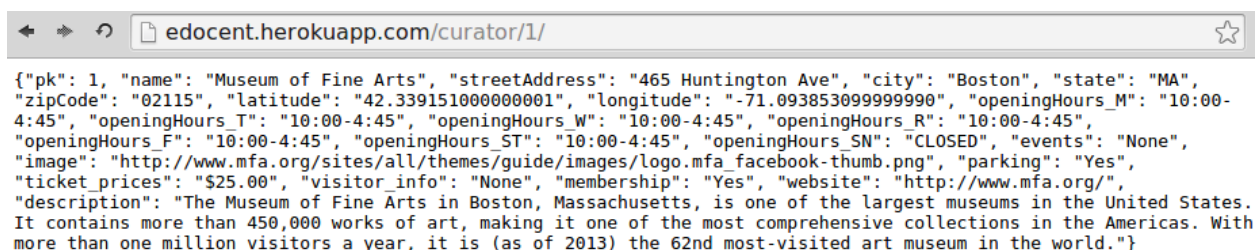
The main web application is titled 'curator'. The initial functionality focus on serving up information related to the museum itself, as opposed to the museums content. Each museum in the database, which uses PostGreSQL, has a primary key which is an integer. Thus the following URL "curator/1" will return the information related to the museum object with the primary key of 1. The URL "curator/" will return a list of the all the museums.

Museum Object

- Model
  - Searchable fields
    - *primary key*

- Web API and Museum objects

  To access a museum model you must have it's primary key value. To obtain the primary key, you must first access a list of all the museum objects. This location API is used to populate the splash pages of the Android application, it delivers the name of the museum, city, state and the primary key value.

  With the primary key, the museums direct information can then be accessed:

edocent.herokuapp.com/curator/1/

{"pk": 1, "name": "Museum of Fine Arts", "streetAddress": "465 Huntington Ave", "city": "Boston", "state": "MA", "zipCode": "02115", "latitude": "42.339151000000001", "longitude": "-71.093853099999990", "openingHours_M": "10:00-4:45", "openingHours_T": "10:00-4:45", "openingHours_W": "10:00-4:45", "openingHours_R": "10:00-4:45", "openingHours_F": "10:00-4:45", "openingHours_ST": "10:00-4:45", "openingHours_SN": "CLOSED", "events": "None", "image": "http://www.mfa.org/sites/all/themes/guide/images/logo.mfa_facebook-thumb.png", "parking": "Yes", "ticket_prices": "$25.00", "visitor_info": "None", "membership": "Yes", "website": "http://www.mfa.org/", "description": "The Museum of Fine Arts in Boston, Massachusetts, is one of the largest museums in the United States. It contains more than 450,000 works of art, making it one of the most comprehensive collections in the Americas. With more than one million visitors a year, it is (as of 2013) the 62nd most-visited art museum in the world."}

- To access all of the museum objects you use the following url:

edocent.herokuapp.com/curator/

[{"name": "Museum of Fine Arts", "streetAddress": "465 Huntington Ave", "city": "Boston", "state": "MA",
"zipCode": "02115", "latitude": "42.339151000000001", "longitude": "-71.093853099999990", "openingHours_M":
"9-5", "openingHours_T": "9-5", "openingHours_W": "9-5", "openingHours_R": "9-5", "openingHours_F": "9-5",
"openingHours_ST": "10:00-4:45", "openingHours_SN": "CLOSED", "events": "None", "image":
"museum_images/mfa.jpg", "parking": "Yes", "ticket_prices": "$25.00", "visitor_info": "Yes", "membership":
"Yes", "website": "http://www.mfa.org/", "description": "The Museum of Fine Arts in Boston, Massachusetts,
is one of the largest museums in the United States. It contains more than 450,000 works of art, making it
one of the most comprehensive collections in the Americas. With more than one million visitors a year, it i
(as of 2013) the 62nd most-visited art museum in the world.\r\n\r\nFounded in 1870, the museum moved to its
current location in 1909. The museum is affiliated with an art academy, the School of the Museum of Fine
Arts, and a sister museum, the Nagoya/Boston Museum of Fine Arts, in Nagoya, Japan. The director of the
museum is Malcolm Rogers."}, {"name": "Portland Museum of Art", "streetAddress": "7 Congress St", "city":
"Portland", "state": "ME", "zipCode": "04101", "latitude": "42.729259100000000", "longitude":
"-73.694498699999997", "openingHours_M": "9-5", "openingHours_T": "10:00-4:45", "openingHours_W": "10:00-
9:45", "openingHours_R": "10:00-9:45", "openingHours_F": "10:00-9:45", "openingHours_ST": "10:30-5:30",
"openingHours_SN": "CLOSED", "events": "Yes", "image": "museum_images/portland-museum-of-art.jpg",
"parking": "Yes", "ticket_prices": "$10.00", "visitor_info": "None", "membership": "Yes", "website":
"http://www.portlandmuseum.org/", "description": "The Portland Museum of Art is an art museum in Portland,
Maine. Founded as the Portland Society of Art in 1882, it is located in the downtown area known as The Arts
District, and is the largest and oldest public art institution in the U.S. state of Maine."}, {"name":
"Institute of Contemporary Art", "streetAddress": "100 Northern Ave", "city": "Boston", "state": "MA",
"zipCode": "02210", "latitude": "44.325130199999997", "longitude": "-69.774839599999993", "openingHours_M":

Art Object

- To access art objects, the primary key is needed. To get the primary key, a collection must be accessed via the API (see below). With the primary key obtained, the art object can be accessed in the following manner.

edocent.herokuapp.com/curator/art/1/

{"id": 1, "title": "Painting #1", "collection": 1, "creationDate": "2000-11-17", "image":
"art_images/painting.jpg", "audio": "audio_files/example_audio.mp3", "description": "\"Lorem ipsum dolor sit
amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut
enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.
Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.
Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est
laborum.\"", "museum": 1, "artist": {"name": "LEGOlas", "nationality": "Dutch", "biography": "Made of
plastic", "dateOfBirth": "1990-11-17", "dateOfDeath": null, "image": "artist_images/artist_Legolas.jpg",
"owner": 2}}

Artist Object

- To obtain an artist object, the primary key is needed. This can be obtained via an art object, though art object will included the artist object as well. With the primary key, the following url can access the artist object

edocent.herokuapp.com/curator/artist/1/

{"name": "LEGOlas", "nationality": "Dutch", "biography": "Made of plastic", "dateOfBirth": "1990-11-17",
"dateOfDeath": null, "image": "artist_images/artist_Legolas.jpg", "owner": 2}

Collection Object

- To access a collection object, you must specify the museum of interest via its primary key to get a list of the collections. This is done with the following url:

edocent.herokuapp.com/curator/1/collection/

[{"title": "Modern", "id": 2}, {"title": "Main", "id": 1}]

- To access the individual collections, you then take the primary key of the collection of interest and use the following url to access the collection details (which is a list of art objects)

edocent.herokuapp.com/curator/1/collection/1/

[{"id": 4, "title": "Sculpture #1", "collection": 1, "creationDate": "2014-11-18", "image": "art_images/3D-
Abstract-Nature-Painting.jpg", "audio": "audio_files/example_audio.mp3", "description": "Lorem Ipsum is
simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard
dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a
type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting,
remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets
containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker
including versions of Lorem Ipsum.", "museum": 1, "artist": {"name": "LEGOlas", "nationality": "Dutch",
"biography": "Made of plastic", "dateOfBirth": "1990-11-17", "dateOfDeath": null, "image":
"artist_images/artist_Legolas.jpg", "owner": 2}}, {"id": 3, "title": "Painting #2", "collection": 1,
"creationDate": "2014-11-18", "image": "art_images/painting2.jpg", "audio": "audio_files/audio.mp3",
"description": "Facer aeterno officiis mea ei, an eum nemore pericula intellegam, nec zril omnes putent at.
Latine commodo dissentias et sed, detracto lobortis id vim, sea quaeque tibique albucius cu. ", "museum": 1,
"artist": {"name": "LEGOlas", "nationality": "Dutch", "biography": "Made of plastic", "dateOfBirth": "1990-
11-17", "dateOfDeath": null, "image": "artist_images/artist_Legolas.jpg", "owner": 2}}, {"id": 2, "title":
"Painting #3", "collection": 1, "creationDate": "2004-11-17", "image": "art_images/painting3.jpg", "audio":