

# eDocent

a museum guide for your Android device

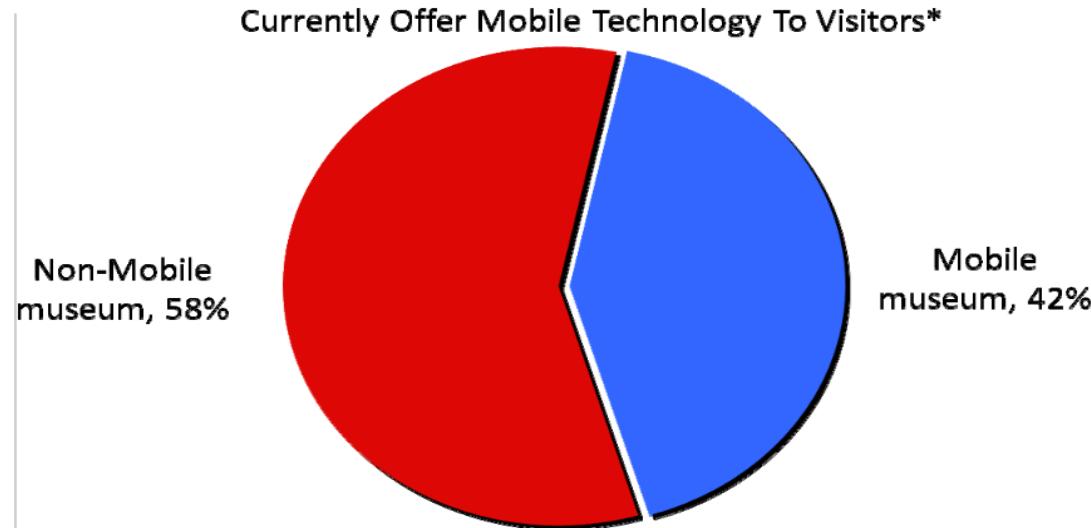
# Group

- Casey
- Ashley
- Kritika
- Sukaynah
- Nisreen
- Chethan

# Overview

- Museums are enthusiastic about using mobile technology
- Lack the technical and financial resources to do so on their own
- Providing museums with an open source solution to engage visitors through mobile applications

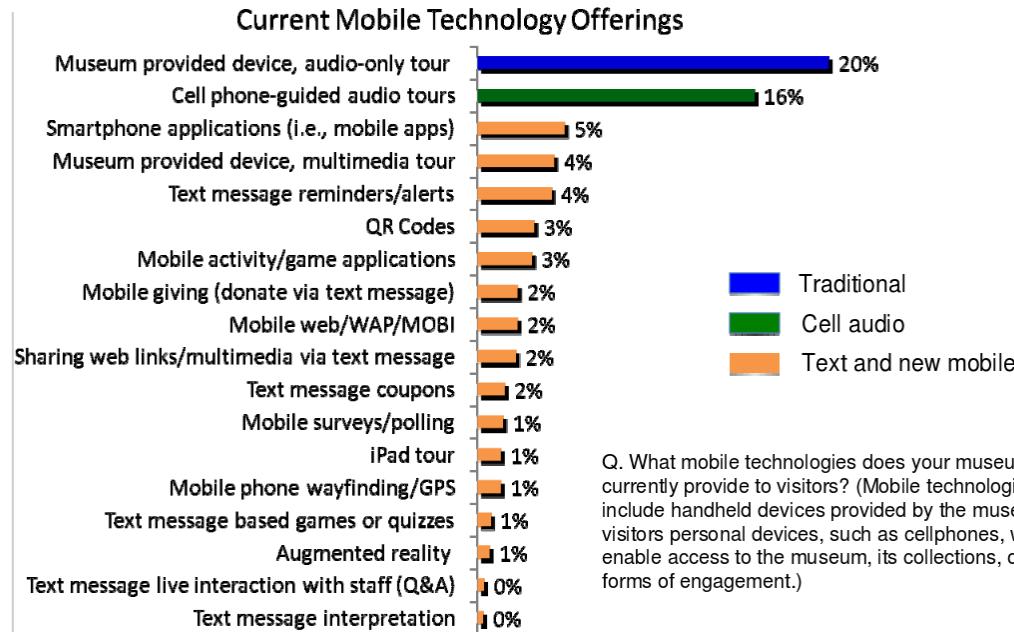
# Motivation



Q. What mobile technologies does your museum currently provide to visitors? (Mobile technologies include handheld devices provided by the museum or visitors personal devices, such as cellphones, which enable access to the museum, its collections, or other forms of engagement.)

\* Note: Estimate is based on individual museum responses

# Motivation



# Two Components

1. Web application and service for hosting and pushing material
2. Android application for viewing material

# Management Plan

- Two teams
  - Web Application and Service
  - Android application
- Process Model
  - Agile Approach
  - Two development teams
    - Scrum approach

# Communication

CS673

CHANNELS

- # backend
- # frontend
- # general
- # random
- # todo\_this\_week
- Create a channel...

DIRECT MESSAGES

- ashley
- chethank
- kritika
- ndahod
- sukaynah

+1 More...

chethank 9:52 AM

It is possible that you can convert your image at your server to a Base64 encoding string. Then you can send the string to your app via JSON.

You can use Apache Common IOUtils:

```
Base64.encode(FileUtils.readFileToByteArray(imageFile));
```

On the app you can convert the string to image,

<http://stackoverflow.com/questions/22550950/send-image-via-json-in-android>

Send image via json in android

Hi I am working with android.I want to send an image from server to android and I had done it with sending url from server.How can I send an image from server to android app via json?? is it possib...



ashley 10:09 AM

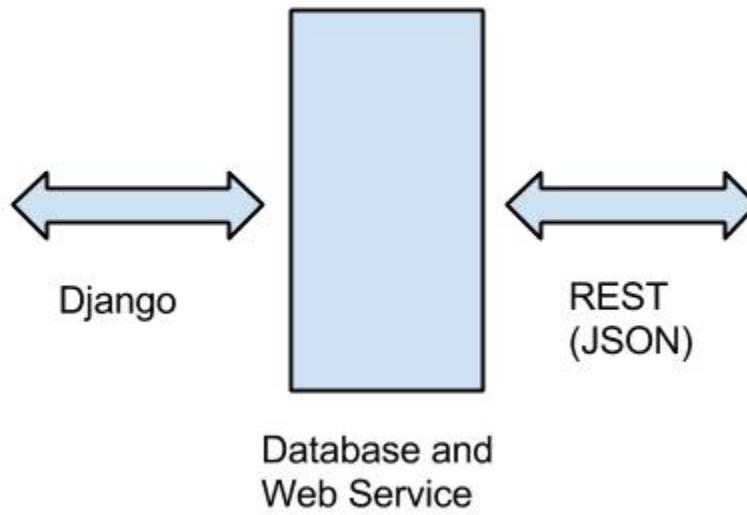
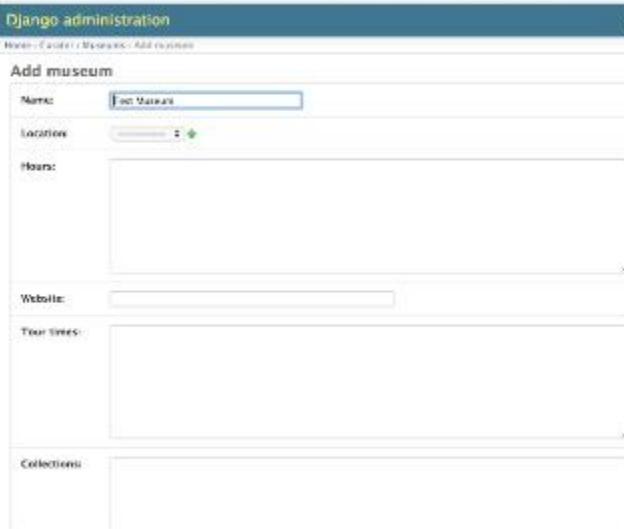
cool stuff! i'll make sure to model name, hours, latlong, and an array of things like tour, spotlight, collections

i should be able to create a json in whatever format is easiest for you to parse. once the data is fetched (which i don't know how to do yet...), i know how to produce different jsons.

chethank 12:34 PM ★

thanks

# Architecture



Web Application

Database and  
Web Service

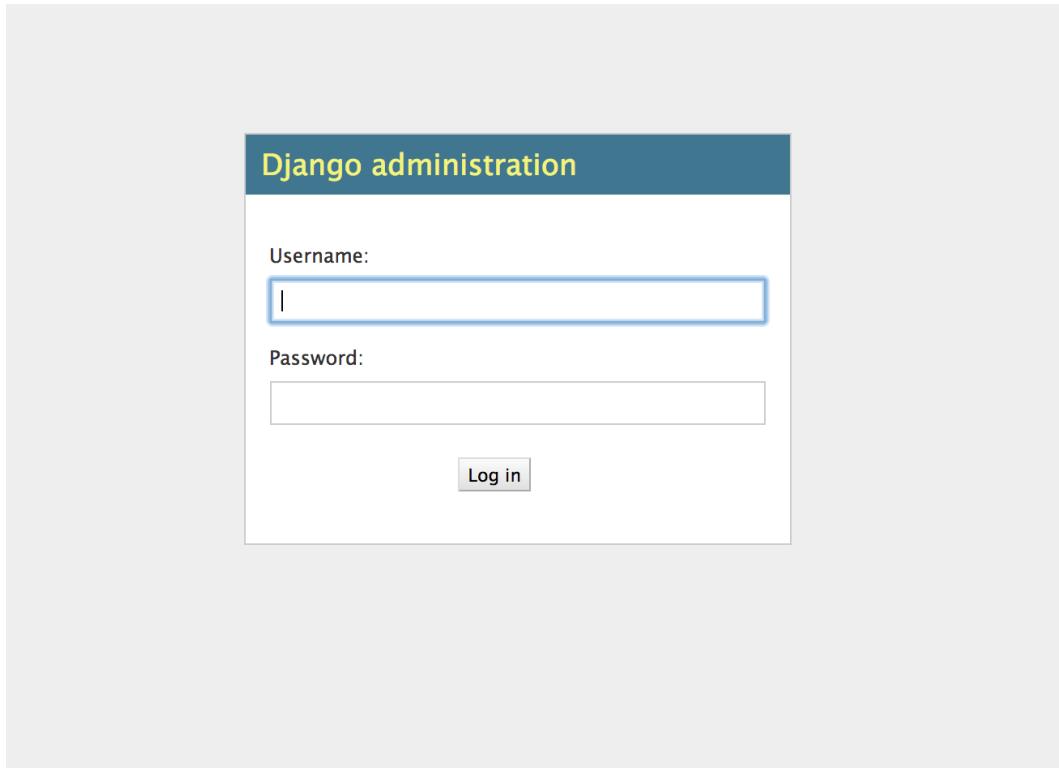
REST  
(JSON)

Android Application



# Interface for museum curators

- Django admin interface
- museums can logon
- ability to add information about museum
- ability to add information about art



# Login page

[Home](#) > [Curator](#) > [Museums](#) > Add museum

## Add museum

Name: Location:   

Hours:

Website:

Tour times:

Collections:

# Add and edit museum information

[Home](#) > [Curator](#) > [Arts](#) > Add art

## Add art

Museum:

Test Museum

casey's museum

Title:

Artist:

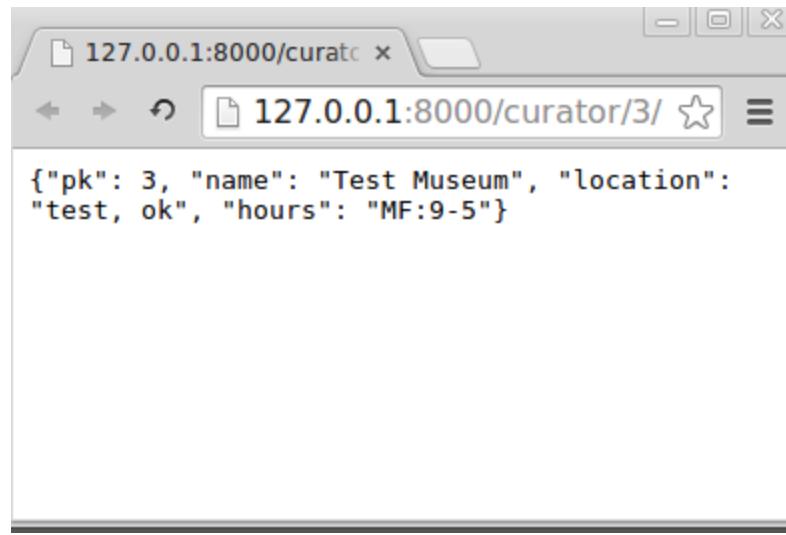
Year created:

Movement:

Description:

[Save and add another](#)[Save and continue editing](#)[Save](#)

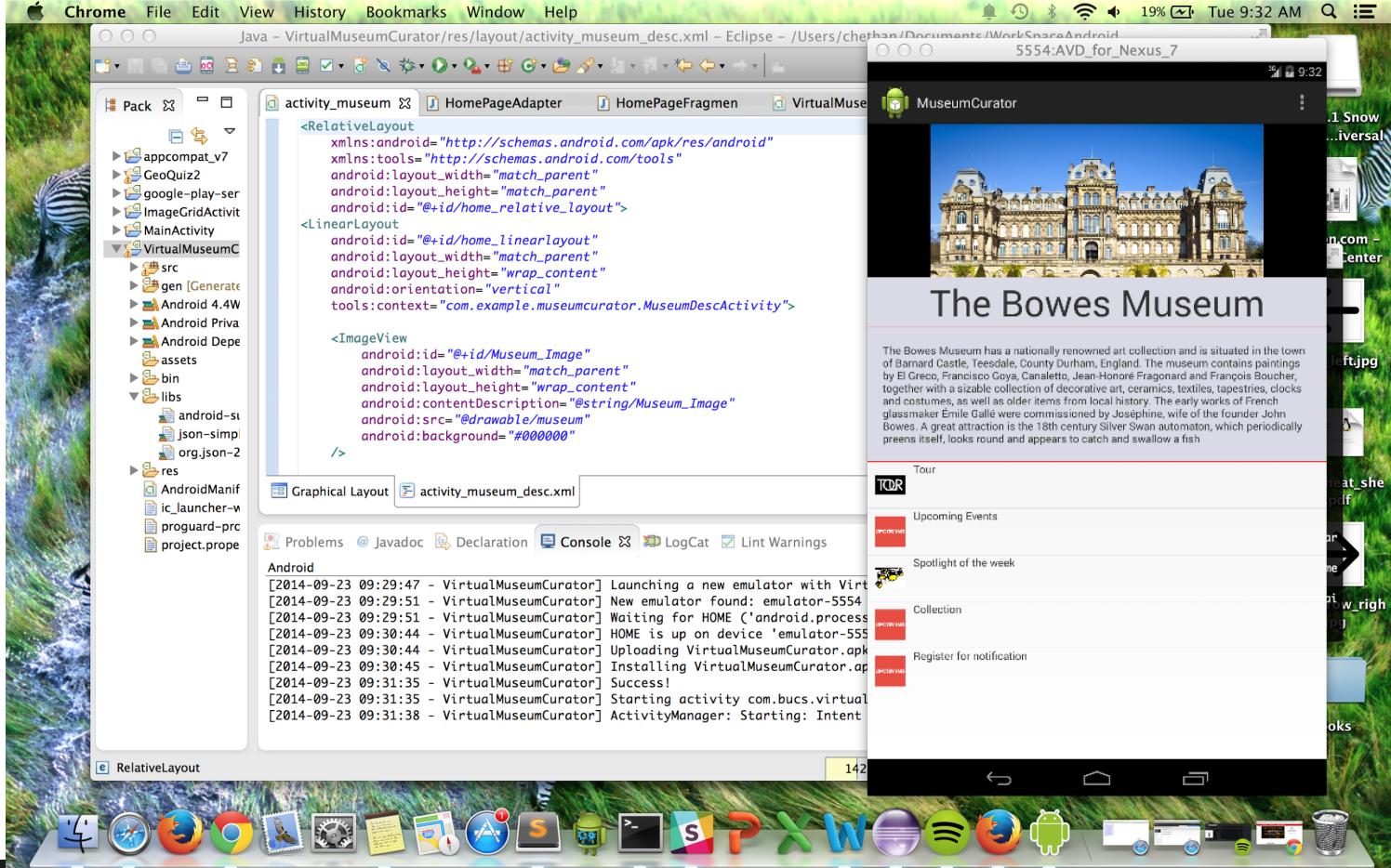
# Add and edit art associated with museum



# Web Service

# Interface for museum patrons

- 1) The front end will have a QR code scanner to look up information.
- 2) Will also have list of Collections, Events, Tours, Spotlight.



# Prototype of the Front page Activity

# Timeline

## Iteration 1

- Models for database
- Museums can add all their information
- REST protocol for communicating with Android application
- Android visual of museum information and ability to select museum on the app and see the museum info

# Timeline

## Iteration 2

- Museum can upload art objects
- Mobile application has access to these objects through search or browse.

# Timeline

## Iteration 3

- Add QR/bar code to directly look up objects in mobile application.
- The mobile application will be able to play audio files about each art objects.

# Quality Assurance

- Metrics
  - Fault Profile
  - Breadth Testing
- Standards
  - Documentation
  - Coding
  - Comments
- Inspection
- Testing
  - Unit Testing
  - System Testing
  - Integration Testing
- Defect Management

# Configuration Management

- GitHub repository
- Main branches: front end and back end
- New features will be tested in branches off of the two main branches

# Questions?