

Project2 - Description

July 31, 2019

1 Project 2: Web Portal

The goal of the three course projects is to get towards building a finished “Web Application”. The three project iterations will get us there incrementally

- **Project1:** Develops the basic data model in SQL for storing out application’s data, followed by python utility functions to manipulate the data.
- **Project2:** Deploys the application to the “cloud” (Google App Engine’s appspot.com site) and present’s a web interface to the application.
- **Project3:** Develop an Android app (written in Kotlin) to access the site.

I will continue to use “PickupSport” as the context for explaining what the second phase of project must possess in terms of features.

The narrative: There are a lot of venues for pickup sports in Austin but there is no way to find out where there is one now (or in the future) that one can join. Enter PickupSport site that allows you to either start a new pickup sport event or join one that somebody already started

1.1 Deploy on the Web

The goes of this phase is to deploy your app on the web so one can access it using a Browser. This entails:

1. Getting the site to be publicly available. As discussed, Google App Engine (GAE) will provide the infrastructure and hosting(<yoursite>.appspot.com) for your app.
2. Writing the python script that will handle http requests. For example in the Guestbook project the `guestbook.py` script file is where all http requests to the application get routed. The script in turn provides paths and corresponding classes to act on those paths.
3. For your datastore you have two choices:
 - The Cloud Datastore which is what the Guestbook example uses [Link](#)
 - An SQL-based database called Google Cloud SQL [Link](#)

1.2 Browser UI

You will provide a simple UI to access the features that you worked out in Project 1. For example, there could be two “routes” that the app provides:

1. `http://<yoursite>.appspot.com/`: Allows users to:

- Create an account
- Login into an account
- Search for events
- Join an event
- Show events the user has currently joined in

2. `http://<yoursite>.appspot.com/admin`: Allows an admin user to:

- Login into the admin account
- Add/Delete a new venue
- Delete a Event
- Delete a User

Note the following:

1. The actual content that is sent to the Browser can be plain HTML or a mix of HTML and Javascript.
2. Each feature (from the above list) could have its own html template file. This makes your code easy to maintain.