(Instructions from Luca de Alfaro)

Download Web2py

Download the following Web2py zip file

(https://users.soe.ucsc.edu/~dustinadams/CMPS121/examples/web2py_backend_spring2017.zip) or follow these following steps:

Download the source version of web2py (http://www.web2py.com/init/default/download)

Unzip it

```
cd web2py
cp -r applications/welcome applications/backend
mv examples/app.example.yaml app.yaml
```

Edit app.yaml, removing the version and the application/project information.

```
cp examples/routes.parametric.example.py routes.py
```

Edit routes.py to define 'backend' as the default application.

Your code now goes into applications/backend/controllers/api.py (create this file, it does not already exist).

Installing Google Cloud and uploading your app

- 1. Install Google Cloud SDK https://cloud.google.com/sdk/downloads
- 2. Go through steps for Interactive Installer
- 3. Configure using the following steps:

```
gcloud config set account duwadams@ucsc.edu ;; (my account, for example) gcloud config set project UCSC ;; (the name of my project, for example) gcloud auth login gcloud config set app/promote_by_default false gcloud components update
```

(Quick-start guide for MacOS https://cloud.google.com/sdk/docs/quickstart-macos)

- Go to the Google Cloud Console. (https://console.cloud.google.com/)
- Create a new project. You can choose any name you like, but once you create the project, you can't change the name any more.
- When you create a new project, you will need to create a billing account. You won't be billed unless you use more than your free quota.
- Upload your application. You can use a command line similar to the following one, where the "-promote" flag is used to ensure that the version you have uploaded starts receiving all the traffic:

```
gcloud app deploy --promote web2py backend spring2017/app.yaml
```

Your app is now accessible through a URL such as: https://yourproject.appspot.com/api/your_function