

Google App Engine Assignment

Introduction

The purpose of this assignment is to get used to and started with developing on Google App Engine. You will need to install the Google App Engine SDK for Python before moving onto the actual assignment itself.

First, install python2.7 on your machine. For your IDE we recommend to install Eclipse and iPyDev plugin for Eclipse. Then, go to <https://developers.google.com/appengine/> to download Google App Engine SDK for Python as well as Google Plugin for Eclipse if you decided to use Eclipse for development. The website also provides extensive information on the Google App Engine environment and coding examples. Please read carefully to gain a background if you never used Google App Engine before.

Assignment

A basic REST-based student & course management web service that allows administrative users to go through a number management tasks for students and course schedules. See requirements for details.

Requirements

1. Functional requirements
 - a. Allows user to add /edit/remove student information:
 - i. Student Id, name, department, address, phone number, study list, etc.
 - b. Allows user to add/edit/remove course information:
 - i. Course id, department, name, instructor, time, place, etc.
 - c. Allows user to add/edit/remove course schedule:
 - i. Quarter, department, courses provided in the quarter, etc.
 - d. Allows user to enroll/drop a student to/from a course
 - e. Allows user to list students enrolled in a course
 - f. Allows user to list courses a student enrolls in
 - g. Allows user to list courses a department provides in a specific quarter
2. The implementation should use REST-based APIs to manage all kinds of resources
3. Your code should be readable and maintainable as-is, i.e. contains good coding practices, documentation, etc.

Bonus/Optional Features:

1. Create a simple user-interface
2. Be creative and extend the features listed above
3. Create effective unit test cases and scripts along with the implementation

Running and Testing Your Code

The Google App Engine SDK provides a local running environment for you to run your web service on your local machine. Alternatively you can deploy your service to Google App Engine too.

Deliverables

You will need to turn in your entire Eclipse project and source code. You do not need to turn in any unnecessary files, like those under /bin as they can be recompiled. Zip up your project and email it to your Assignment Coordinator.

Deadline

The deadline should be contained in your email from your assignment coordinator.

Questions

If you have any questions or need clarification please email your assignment coordinator.