Big Project

Worth 60% of overall marks

(This is marked out of 100)

# What is being assessed (Mark breakdown):

|  |  |
| --- | --- |
| Description | Percent |
| * An understanding of REST API: |  |
| * + Creating an REST API, | 10% |
| * + Writing the server. | 15% |
| * Consuming a REST API: |  |
| * + Writing a program in either python or JavaScript that consumes an API, either your own API or a third party. | 15% |
| * Creating a web interface. | 10% |
| Sub-Total | 50% |
|  |  |
| * Elaborating on one or more of these areas | 50% |
| Total | 100% |

Assessment strategy:

You have flexibility as to what you do for this project. I understand that this can cause confusion as to what you should do, so here is a table of indicative grade ranges, for the kind of project you hand up.

|  |  |  |
| --- | --- | --- |
|  | Description | Range |
| **A. Web application project** | | |
| 1 | A rehash of the sample project lab, I will do in *Topic09-linking to db,* butwith your own data. I.e.:   1. A basic Flask server that has a 2. REST API, (to perform CRUD operations) 3. One database table and 4. Accompanying web interface, using AJAX calls, to perform these CRUD operations | 40%-45% |
| 2 | Same as 1, with more then one database table | 45%-50% |
| 3 | Same as 2, with authorization (logging in) | 50%-55% |
| 4 | Same as 3, working very smoothly e.g. User error checking, logs, hosting etc. Something you can publish. | 70% + |
| Extra | The web page looks nice. | Plus 0- 15% |
| Extra | A more complicated API. | Plus 0 – 15% |
| Extra | Linking to some third party API. | Plus 5% - 15% |
| Extra | If the third party API requires authentication. | Plus 0-10% |
| Extra | Hosted online (e.g. Azure, Pythonanywhere) | Plus 10% |
| **B. Third Party API project** | | |
| 5 | 1. Linking to a simple third party API, 2. Storing the data in a database, 3. Creating a web page to view that information. (This may not be necessary if you are outputting to another API, or an excel spreadsheet etc.) | 40%-50% |
| 6 | Performing some update function through the  API (Create, update, Delete). | 45%-60% |
| 7 | A fully working application. | 60%+ |
| Extra | The same extras as above. |  |

The project should be well laid out and easy for me to run.

Marks may be deducted for:

* Poorly formatted code, that I find hard to read (Do not over comment your code),
* If I find it hard to run,
* I find it hard to understand your GitHub layout. (a README file is handy).

# Handup:

A link to the GitHub repository directory that contains the project (and only this project). The repository should contain:

1. Your code.
2. A “ReadMe” file if there is anything (complicated) I need to do to run this code.
3. You do not need to host the server on a cloud hosting site (Azure, Pythonanywhere) but if you do, please provide the link.
4. Any other documentation you feel is appropriate.

I will probably open the place for you to submit your repository name after *Topic 08-server side.*

# Deadline:

The official deadline for the project is Friday the 11th December, but I will give an automatic extension to Friday 25th December for anyone who asks for it. In reality, I know that I won’t be correcting this until after Christmas.

My absolute “drop dead” deadline is Tuesday the 5th January, but that is if you are really, really stuck!

## Best of Luck.

Email me if you have any questions