Big Project

Worth 60% of overall marks
(This is marked out of 100)

Description:

Write a program that demonstrates that you understand creating and consuming RESTful APIs. I will allow a lot of flexibility in this project, so that you can use it as an opportunity to do something that is useful for your work.

If you cannot think of a project to do:

>Create a Web application in Flask that has a RESTful API, the application should link to one or more database tables.
>You should also create the web pages that can consume the API. I.e. performs CRUD operations on the data.

Assessment strategy for Project Type A:

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 a Web based Project.

	Description	Range
Sample marking scheme (Web application project)		
Level 1	A rehash of the sample project lab, I will do in *Topic09-linking to db,* but with 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%
Level 2	Same as 1, with more than one database table	45%-50%
Level 3	Same as 2, with authorization (logging in)	50%-55%
	Plus	
	The web page looks nice.	Plus 0- 10%
	A more complicated API.	Plus 0 – 10%
	Server Links to some third party API.	Plus 0 - 10%
	If the third party API requires authentication.	Plus 0-10%
	Hosted online (e.g. Azure, Pythonanywhere)	Plus 10%
I may award extra marks for very good projects		

These are only indictive marks, I reserve the right to change marking scheme to suit the type of project it is.

To get over 70% your application should be very well laid out, look good and work efficiently and well.

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 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.

Project Type B:

This is a lot more open.

I am happy to take work that you have done for your company (or yourself) that demonstrates you understand APIs.

Your project should interact with an API, or create one.

The marking scheme is a lot more open on this.

If the data you are dealing with is sensitive and so you cannot give me access to it, you may make a video of you demonstrating your application working (with the sensitive information blurred out)

Deadline:

The official deadline for the project is Friday the 22$^{nd\ of}$ December, but I will give an automatic extension to Friday 5 January for anyone who asks for it. In reality, I know that I won't be correcting this until January.

My absolute "drop dead" deadline is Friday the 13$^{th\ of}$ January.

After this date you should look at deferring this module until the autumn sitting

Best of Luck.

Email me if you have any questions.