

# Big Project

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

## What is being assessed (Mark breakdown):

Description	Percent
• <b>An understanding of REST API:</b>	
○ <b>Creating an REST API,</b>	10%
○ <b>Writing the server.</b>	15%
• <b>Consuming a REST API:</b>	
○ <b>Writing a program in either python or JavaScript that consumes an API, either your own API or a third party.</b>	15%
• <b>Creating a web interface.</b>	10%
<b>Sub-Total</b>	50%
• <b>Elaborating on one or more of these areas</b>	50%
<b>Total</b>	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
<b>A. Web application project</b>		
1	A rehash of the sample project lab, I will do in <i>Topic09-linking to db</i> , but with your own data. I.e.: <ol style="list-style-type: none"><li>1. A basic Flask server that has a</li><li>2. REST API, (to perform CRUD operations)</li><li>3. One database table and</li><li>4. Accompanying web interface, using AJAX calls, to perform these CRUD operations</li></ol>	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>B. Third Party API project</b>		
5	<ol style="list-style-type: none"><li>1. Linking to a simple third party API,</li><li>2. Storing the data in a database,</li><li>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.)</li></ol>	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 11<sup>th</sup> December, but I will give an automatic extension to Friday 25<sup>th</sup> 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 5<sup>th</sup> January, but that is if you are really, really stuck!

## Best of Luck.

Email me if you have any questions