

Report CA377 - Programming Fundamentals (Project)

CA377 Programming Fundamentals (Project)

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Name:Sufyan Kerboua

_Date: 13/12/2019

Summary

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Introduction

The aims of this project were to create a web application using the framework Django, the name of this application is “Eat at DCU”.

The purpose of this one, is to help any customer to find a place/restaurant in a DCU campus.

Indeed, among the several campuses at DCU a lot of restaurants are available with some special dishes.

However, sometimes it is only open for the staff, or the restaurant got some specific hour opening/closing.

That’s why an application has been setting up. Thanks to our application we can easily find a restaurant in a specific campus and see what kind of dishes this one can offer to us.

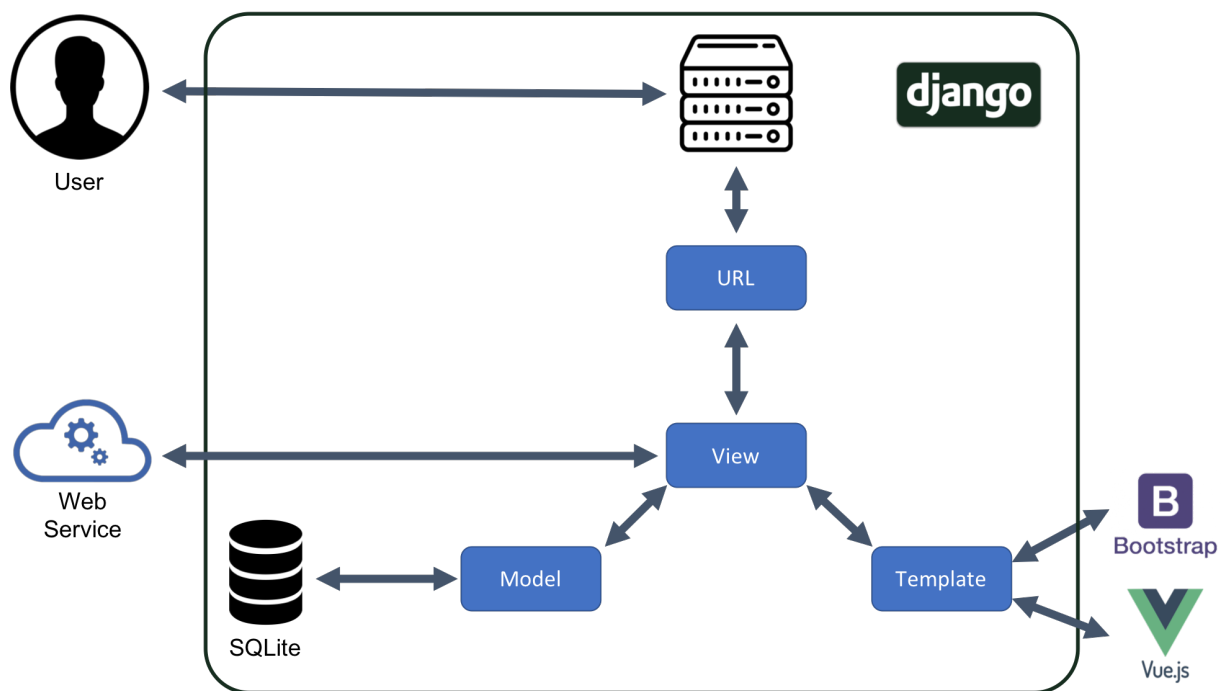
Among the campus available, we can find Glasnevin, St Patrick’s, DCU Alpha and All Hallows.

System Architecture

To do this project several technologies have been use together as Django, VueJS library, SQLite Database, and some external web service.

And the whole project is host on a web host pythonanywhere, by the following address:
(<http://kerbous2.pythonanywhere.com/eatatdcu/>)

To have a better overview of the whole project here is a diagram of the Architecture of our project.



As we can see the project rest on a MVT (Model, View, Template) model. Here is an explanation of this model.

View: The view will handle all the logical part of our system. So it is possible to call some web service as API or other in this section.

Model: The model will do some ORM (Object-Relational Mapping), it is a programming technique for converting data between incompatible type systems using object-oriented programming languages.

Template: The template will simply display the logic of our system to the user, so it is writing in HTML/CSS and python. Furthermore, here our template will interact with some external library as Bootstrap and VueJS.

UI Description

For the UI, I choose to use some external library to help me in this mission.

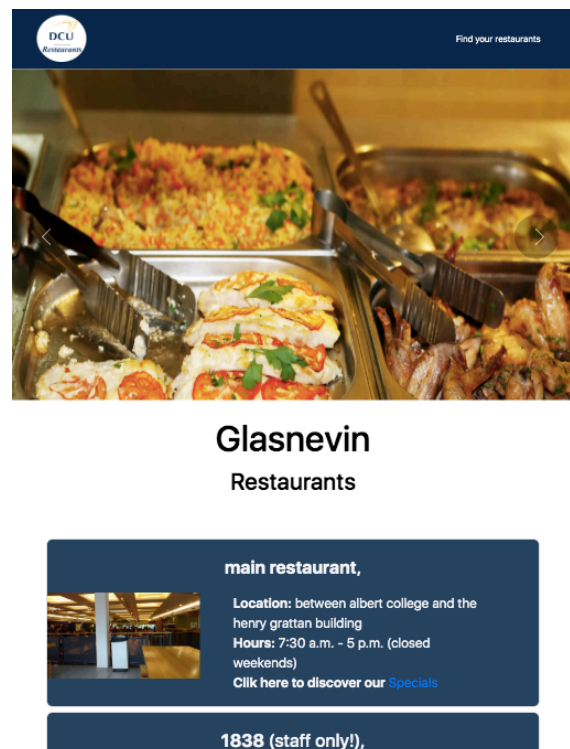
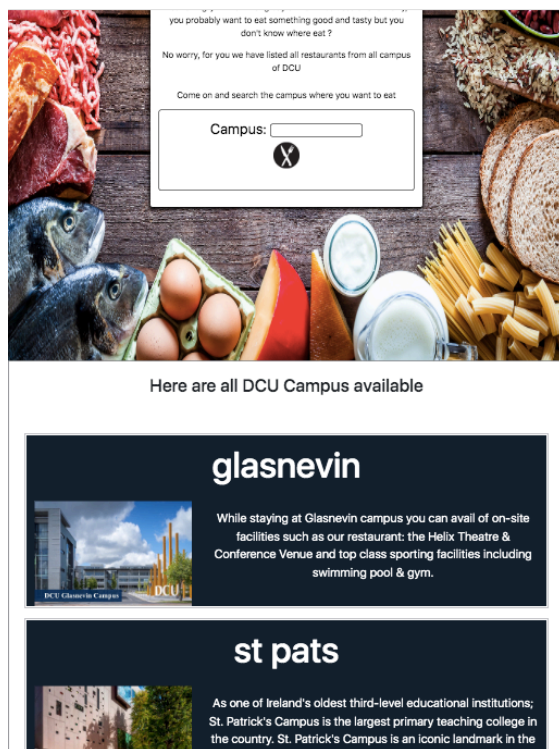
Indeed, I use Bootstrap a CSS framework and VueJS.



The Bootstrap Framework allow us to use more simply the CSS over our project, it really easy me the portability of the project for the mobile view.

Meanwhile, VueJS help me with the interaction of my element on my views as for example the carrousel and other.

Furthermore, I added some section on the Home page to describe campuses. Indeed, to help the user I added some pictures of the real campus/restaurants in the web application.



Using Source Code Repository

How did I use it?

So, for the use of my GIT / repository, I work with different branches.

In fact, during this project I preferred to work with different branches as for example: master, UI, Implementation-vueJS.

All the final code is on my master branch, and all the work I have done on the other branches were merged on the master so.

Furthermore, I make my own norm for my commit messages, as example when I wanted to implement a feature, I name the commit “[ADDED] the feature I added”. And so, I followed this norm for any modification or deletion.

What worked/didn't work?

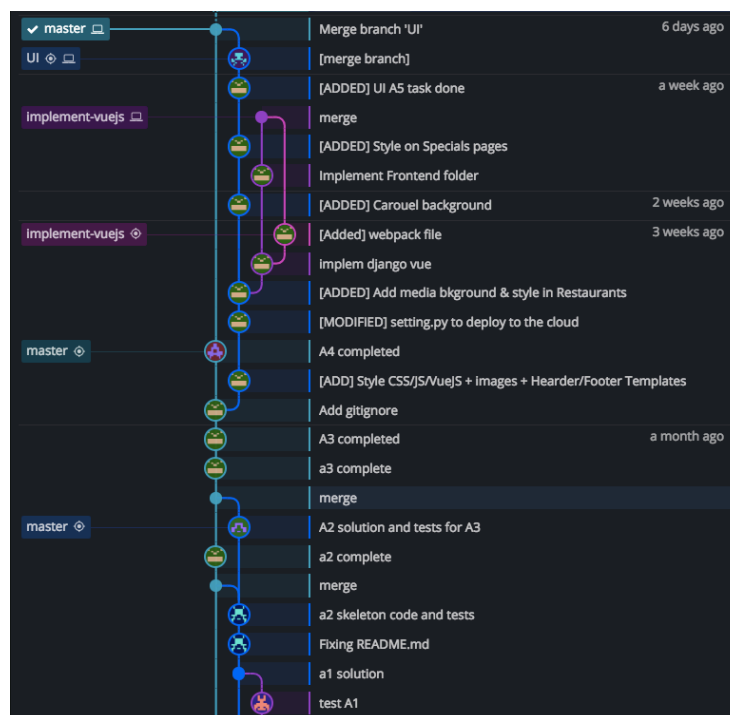
In fact, it's been a while I use git, so I don't find too much problem during my development.

However, 1 of my branches ended without merging request, because I don't find it necessary to add the feature.

How could I have used it more effectively?

I used this norm for the commit very lately in my development, while I could use it earlier.

Here is a little overview of my workflow (thanks to GitKraken).



Additional Functionality

Among the functionalities I added, we can notice:

- A completion of the database (for the description of the campus)
- A lot of pictures
- A phone/tablet portability
- Other way to navigate through the web application
- A special page to find easily a restaurant from several criteria.

DCU Restaurants

Find your restaurants

Need to find a place to eat near DCU ?




Come on and find the best restaurant at DCU in function of your preference !

Indifferent

Anyone

Special contain ?

Submit

	Restaurant name: Main Restaurant	Staff Only: False	Seats availables: 500	Campus: Glasnevin	Special: shepherd's pie
	Restaurant name: 1638	Staff Only: True	Seats availables: 100	Campus: Glasnevin	Special: salmon cutlets
	Restaurant name: Helix Cafe	Staff Only: False	Seats availables: 100	Campus: Glasnevin	Special: lemon cheesecake

DCU Restaurants

Eat at DCU!

You're angry ? After a long day of work business of chemistry, you probably want to eat something good and tasty but you don't know where eat ?

No worry, for you we have listed all restaurants from all campus of DCU

Come on and search the campus where you want to eat

Campus:

Here are all DCU Campus available

glasnevin

Conclusion

Through all this project I learned how to use django, create and manage a database with SQLite.

How to migrate a python application web, to an distant host.

I also learned to implement a Frontend framework like VueJS with a backend framework like django.