School of Computing
CA326 Year 3 Project Proposal Form

SECTION A

Project Title: DCU MUNCH
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Description:

Our project is a website application that is based on DCU Catering (DCU Cafeteria, Business Café and DCU Nubar) it is used to help students to find foods to eat on campus and to aid students in making better food choices. It will be available on all devices with browsers. Students can log in and add all their dietary requirements and any useful information like sex, height, weight, activity level etc. The application will then show different meals catered to their choices.

DCU Munch will have a unique rating algorithm very similar to a social media feed algorithm. The app will sort the food on the users feed based on the user information, if the user has liked the food or similar foods to it and if other users like or dislike certain foods in the feed. The application is going to be vibrant, modern and exciting for students from all backgrounds. The price of each meal will also be shown, so the user knows how much they are spending.

There will be an admin version of the application where DCU Catering can create their own profile, the aim of this side of the application is to make the process as easy as possible for admin users. Admins can upload their name, phone number and all relevant information. They can also upload all the meals and different meal deals a drop down menu will be used where the catering can easily input their meals and we can translate those meals into their nutritional values like calories, sugars, carbs to make the process fast and easy for the catering. All that DCU Catering have to do is essentially upload their menu and the application will complete the rest. Menus can be changed at any time if there is a slight change or even a menu revamp. To do this we will be using Edaman API to browse and retrieve the nutritional information and any food or meal inputted.

Affordable and healthy recipes for students who are living away from home and that have to cook for themselves will also be displayed on the app based on the students food requirements. These recipes will have video tutorials and students can rate the recipes so the cafeteria knows which recipes work for students. The recipes section will use the same rating algorithm mentioned above.

Users will also be able to order and pay for food using the application. Students will then be given a confirmation number after successful payment and a qr code to scan at the cafeteria to pickup the food when it is ready. This will help the cafeteria avoid long queues at rush hours.

There will also be sections to locate the cafeteria, contact and other useful information that students have been struggling to find in the past. One of our aims to make the project as real as possible inputting real menus and getting real students to use the app to rate the meals. This project will hopefully shed more light on the many food choices the college has and in turn improve student well being in the college.

Division of Work:

The presentation will be done by both of us. The functional specification will be done by Joseph. The project code will be done by both of us. The Blog and User Guide will be completed by Destiny, the technical specification and video walkthrough will be completed by Joseph.

Programming Languages:

- Django (Python)
- Node (JavaScript)

Programming Tools:

- Webserver
- Database

Learning Challenges:

The main challenges is learning how to use Django properly with Node. Before we used these frameworks everything was done for us but this time we are starting from scratch by ourselves. The webserver is also a challenge as we have never uploaded a live website application to the webserver. Making the application available on all browsers on all devices will also be a hard task for us.

Hardware/Software Platform:

The platform used will be PC's with Linux. Software used will be a normal text editor (VS Code).