COMP 2140 Project Rough Draft of Problems

This is a rough draft of the problems we have identified. This should only be used when/if we are going to explain our problem to the lecturer so we can do it properly without having to waste time trying to remember our reasons. This should NOT be sent to a lecturer; this is for our use only.

**Bert’s Auto parts**

*The Problem*

A very popular auto parts business here in Jamaica with very little online presence. To purchase something from Bert’s one must either walk in and ask if the item is available or call in and place an order. Calling in and placing an order is also something that I realized only businesses and specific individuals have access too. Most ordinary people can only call and ask if the part is available, and the price then have to walk in to make the purchase on a part that might not even be there anymore (because it wasn’t reserved). Walking in to enquire about a part can also be frustrating because sometimes otp they will say the part is there but upon arrival the part is not there. This is frustrating to customers and leads customers to look elsewhere.

*Our Solution*

A (webapp/app/website) anything that is most feasible that we all can work with or grasp enough to fully complete this project.

The webapp should be able to:

1. Display all parts to user, even unavailable ones. For the unavailable parts it should allow the user to be able to sign up and receive a notification when the part is back in stock (This feature is not high on the priority list and can be incorporated at the end or in the future.)
2. Allow the user to select a part/accessory and make it available for pick up at the nearest Bert’s to them/or the Bert’s that has the part because Jamaica is small and the stores aren’t that far from each other. NO payment information should be needed to reserve a part, the customer must also pickup the part within 48 hrs or the part will no longer be reserved. The customer should pay for the part upon arrival and ofc they would already know the price. i.e When a customer reserves a part, that part should also be subtracted from the amount of that part in stock just to ensure people don’t reserve a part that isn’t there because someone else would have done so already.
3. Keep track of all items in inventory. More than likely we are going to need to subtract an item automatically off the app when it is sold in person. Because remember that the business sells most of their parts F2F so we shouldn’t expect that to change. Some system must be implemented, or we can use the system they currently have if they have one to send an update to our system to show the current items in stock. This is important because a discrepancy between the parts available online and the parts available in person would not be beneficial unless the webapp is able to tell where the discrepancies are and which stores actually have the items in stock.
4. To be continued if you guys think of anything important you may add it here. But I’m writing this late, and my mind got blank.

**Additional Information** about Bert’s they currently have a website, it is empty. This shows that they could possibly be trying to innovate but keep getting side-tracked or haven’t found the best way to go about it yet. Our solution could possibly provide great value to their business which could earn us a bit of money. Of course, we cannot think about this yet, when making an approach to them we will have to do things for free (our skl grades) we could possibly ask for compensation and maybe be hired to maintain the software part time if our solution is executed good enough. Based off of what I could find about them they also seem to be working with the .net frameworks a lot, mostly Visual Basic.net, C#, and ASP.net. They also seem to be using SQL to manage their databases. So our webapp will need to communicate with their database or vice versa to keep everything running in unison. This does not mean that we need to create our webapp in any of their .net frameworks, but this does mean that whatever language we use we are going to somehow need to communicate with the SQL database. I have a feeling Django can get this job done and it is also written in python something we are all familiar with. I have not looked into this deeply yet and would appreciate some assistance.

**UWI Degree Planner App**

*The Problem*

As we are all students here at uwi I’m sure we can all agree that planning out your degree is a very tedious and time-consuming process. A lot of persons don’t even plan out their degree they just work with a semester-to-semester basis. The mode of delivery of information about available courses, new courses, obsolete courses and course requirements is also tedious because it requires scrolling through multiple pages back and forth to find everything. Choosing required courses and free electives are tedious as you have to first find the course number and name and then scroll through the handbook to find the course description to see if you’re even interested in that course.

*Our Solution*

An app that would aid all students in planning out their degree. From first year to final year depending on major and minor selected or the degree selected. The app should show them the required courses for the major and minor while also showing them the free spaces they have to select free electives while also suggesting good free electives to compliment their required courses.

The app should be able to :

1. Allow user to select degree/major/minor. Maximum majors to select can be two, if the coding of this is too troublesome, we can leave this function off and keep it to one.
2. Depending on the selected degree/major/minor the app should generate a 3,4- or 5-year plan to help the student get the selected degree. Some degrees here at uwi have a fixed course plan that is not flexible at all. The app should display this inflexible course plan to the student. The flexible plans should be displayed and allow the user to make changes to free electives on the plan or select free electives for the plan. Whether it is the suggested free electives or anyone the student wants to search up and use.
3. Allow the student to enter their CSEC, and CAPE grades. This would be used to determine if a student will need to do some preliminary courses for the degree they want. (Also a useful feature but very iffy depending on how troublesome coding it will be).
4. Show the course description of courses when selected making it easy for students to see what the course is about.

**Additional Information**: The app should not need the student’s ID number or anything specific about a student or need access to uwi databases or services. It should be a standalone generic application that plans out the path for a student based on what was selected. Things such as pre-requisites after CSEC & CAPE aren’t something the app should worry about yet. Or we can ask the user to enter the grades they’ve received from whatever courses that they have already taken. Compare it to the required courses needed for their degree and let them know how much they are on or off the right path. This would aid students who have already finished first year and probably should be a main feature of the app as well. But I will leave it in the additional information for right now because I am tired. THE APP SHOULD STAY AWAY FROM UWI DATABASES OR SERVICES, because we don’t know much about security yet, wouldn’t want to compromise anyone’s information.