COMPUTER ENGINEERING DEPARTMENT

Graduation Project Proposal Form

CMPE 405 /CMSE 405 /BLGM 405

Instructor Name:	Prof. Dr. Önsen Toygar
Project Title:	Comparison of Supermarket Prices with a Mobile Application
Number of team members:	4
Semester & Year:	Spring 2023/2024
Type of Project (HW/SW):	SW

Project proposal should be in accordance with ABET requirements, which are stated as: **"The curriculum must include a culminating major engineering design experience that 1) incorporates appropriate engineering standards and multiple constraints, and 2) is based on the knowledge and skills acquired in earlier course work."**

1. Project Overview

Describe the project here. What will students do? What will students learn?

It is a global reality that customers appreciate shopping without hitting their pocket sizes. Therefore, they are looking for solutions that obtain products at a reasonable price and satisfy all their quality requirements. Mobile applications cover every industrial area, and in that project, they are merely set to cover the mobile applications price comparison notion. Therefore, a mobile application should be prepared to enter and compare prices of different supermarkets selling the same categories of products and same items. Additionally, a website can be prepared to enter and show the prices in different supermarkets and then compare them.

2. Detailed specification of the project

Give a clear and reasonably complete specification of the project with inputs, outputs, target users, and required functionality.

The project should include the following user panel and administrative panel functionalities for the admin (administrator) and the customers (users):

User panel

Any pricing comparison app development will be affected by the features it offers consumers. If consumers are happy with the program and can use it effortlessly, the commitment would improve, leading to increased revenues.

- Registration/login

That is the app's essential component. In addition, users may join their social network or email account credentials.

- Account checking

That is highly significant. A verification code is provided to the email id or phone number to validate user data.

- Products browse

Users may browse items as required. In addition, they may filter the items in various categories and the pricing standard on various eCommerce websites.

Administrative panel

The cost of developing price comparison apps also depends on other panels we would incorporate for practical application working. The following features should be learned and explored:

- Dashboard management

Admin may verify all orders with their order status. He/she also analyses the connected shipping parameters and cost structures.

- Customer Management

All users registered with the app, using the services, are saved and recorded by the admin.

- Management of products

All goods on the app and corresponding pricing on multiple supermarket websites are listed and maintained by the admin.

- Module Service

The administrator monitors all the app's services such as product listing, offers, shipping services, alerts, rate guidelines, and much more.

- Module Notification

The admin controls all notifications about the confirmation of offer, payment, delivery of goods, etc.

4. Standards that should be used in the project

Standard mobile application software/packages/platforms can be used.

5. Constraints

Any constraints that must be observed on the final product or during the development stages.

Different supermarkets should be investigated that sell the same category of products and same items in order to make a fair comparison in a specific city.

6. Tasks to be completed by students

Stages and tasks that must be completed by the students in the development of the project.

User panel and administrative panel should be implemented as stated in the detailed specification of the project.

7. Tools Required/Expected to be used in the development of the project

Standard mobile application software/packages/platforms should be used.

8. Resources Required (HW/SW/Data, etc.)

Standard mobile application software/packages/platforms are required.

9. Complete list of Project Deliverables Expected at the End of Project Completion

Deliverable	Description
Supermarket Price Comparison with a Mobile Application	A mobile application to enter and compare supermarket prices for several supermarkets in a city selling same categories of products and same items.
A website for Supermarket Price Comparison	A website to enter, show and compare supermarket prices for several supermarkets in a city selling same categories of products and same items.

(add more rows as needed)

10. Other related information

Hints and ideas that will help students in the development of the project. These may include pointers to similar projects, resources such as books, web sites etc.

The following websites can be useful and studied before starting to design and implement the project:

1. https://github.com/bensonokiora/android-supermarket-price-comparison-app-
2. https://www.aalpha.net/articles/price-comparison-app-development-cost-features/
3. https://www.octalsoftware.com/blog/price-comparison-mobile-app-development