PROJECT PROPOSAL

Nguyen Minh Quang - 001142841

9/12/2020   COMP1682

Contents

Introduction

This report will provide the basic idea of my projects and how I will develop the application. I will also explain why I choose to do this project and discuss about social, legal, ethical and professional issues in my project.

Aim of the project

The main focus of the project is to create a **hybrid expense tracker application** that help people to **manage, analyze and categorize their spending** so that they can **save money** and **stopping** them from **reckless spending**.

The reason why I choose to develop this application is because nowadays, more and more products are becoming cheaper and cheaper and people are making more money as well. Every time you go to your social media or and any other sites, you are bombarded with advertisements about deals and discounts and naturally, people are attracted with items with great value but sometimes, it is too much and you end up wasting money on things you don't need. They also increasingly buy delivering food and go to fancy restaurant for food with friends rather than cooking food by themselves so even more money spent with their consent. The application is designed to prevent you from wasting money on things that you don't need and set a limit on what you can spend in a month and spend money with more responsibility.

Key phrase: **hybrid expense tracker application, manage, analyze and categorize their spending, save money, stopping reckless spending**

Objects and activities

 First, I need to make a literature review so that I can gain better understanding about the application and to see the domain and the state of the domain that I'm working with. The process could take up **to a week to a month** depending on how reliable the source and how fast I can obtain it. The literature review should contain:

- Review of domain: this is where I will dive deeper into the reason why I want to create an expense tracker and research to justify my reasoning to create the app. Specifically, I will find out exactly why there are so many advertises about deal/discount around the internet, the average spending across the all age group, ...

- Review of development tools: I will do research on what development tools that I will use to develop the app. It will include programming language, IDE,

framework, libraries, ... All development tools that will make the development easier and convenient while giving the best app quality.

- Review of methodologies: It is the research of developing methods that I consider to follow during the process of developing the application.

- My choice of the development tools and methodology: I will explain what development tools and methodology that I will use to develop the app and explain why I choose those.

After that, I need to research about the similar application for see what common features they have and try to create the mid-fidelity prototype to have similar features. As of now, I think the prototype should have basic functions such as follows:

- Login via registered account.

- Keep record of all spending and income information via credit card link or manual input by user for each month and year.

- Display the record in diagrams and graph form to help analyze spending and manage budget.

- Display information of transactions within the month.

- Categorize type of transactions (spending on food, bills, etc)

- Snap pictures of the diagram and download records to the user's device.

- Automatic currency converter with up-to-date rate on demand.

- Warn the user when they about to hit the budget limit of the month and give them advice on how to use their budget in a month.

The prototype is probably the longest activities in the development since the prototype need to work on both the computer's website and the phone as an app with a different interface that is suitable for the screen size of the phone and I have to come up with a UI design for both versions. To make sure that the app can be functional on both devices before deadline, I will limit the time of this activity to **1 month to 2 months**.

The next activity is depended on how satisfied the users are with the prototype, I will fix bugs and make changes with the app according to the users' feedback. The final deadline for this is the end of March. And after that is the final phase of

testing and finalization based on the feedback result, which should last a week. Finally, it is the documentation of the application and the final report of the application which should take up from a few days to a week at most.

Legal Social Ethical and Professional problems

Legal

As the app can use credit card link to read the user transaction, I need to learn to respect the user private information and make sure that the information of their credit card is secure. This problem is also a core problem to the social and ethical aspect with this project.

Social

The user privacy of information is also affected the social aspect of the users. As mentioned before, the app will not share information of the users' credit card information as well their transaction and make sure that it won't be leaked to anyone except for the user themselves.

Ethical

As mentions above, the application will not leak or sell the users' information for benefit myself. I respect their privacy rights and will make sure that the app is secure enough so that no one could breach the database where all the user's information is stored.

Professional

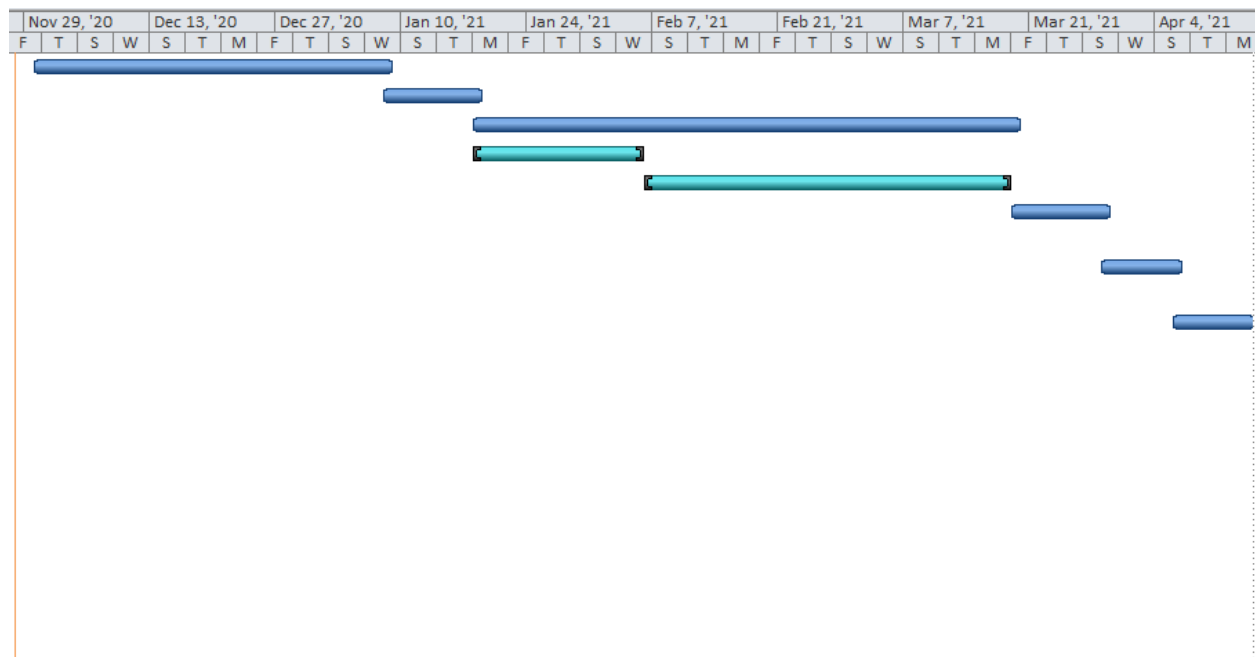The technology used to develop the application is new to me so I may have problems during the development process and this will be the number one factor in slowing down the development but I will try my best to deliver it in time.

The plan

Here is the visualized and more detailed plan, please note that it is subjected to change as there may or may not problems occur during the development process:

	ⓘ	Task Mode	Task Name	Duration	Start	Finish
1		⇨	Literature review	30 days?	Mon 11/30/20	Fri 1/8/21
2	▦	⇨	Requirement analysis	7 days	Fri 1/8/21	Mon 1/18/21
3	▦	⇨	Prototyping	45 days?	Mon 1/18/21	Fri 3/19/21
4		📌	Design interface	15 days	Mon 1/18/21	Fri 2/5/21
5		📌	Implement code	30 days	Sat 2/6/21	Thu 3/18/21
6	▦	⇨	Testing prototype and taking feedback	7 days	Fri 3/19/21	Mon 3/29/21
7	▦	⇨	Making final changes and bug fixes	7 days	Mon 3/29/21	Tue 4/6/21
8	▦	⇨	Writing documentation and final report	7 days?	Tue 4/6/21	Wed 4/14/21

Initial reference

Dragomirov, N. (2020). E-Commerce Platforms and Supply Chain. *Economic Alternatives*, 250-261.

Eko Bayu Prasetyo, Sopiah, Fadia Zen. (2019). The Effect of Discount Price on Purchasing Intentions Through Consumer's Perceived Risk in the Flash Sale Program at Shopee. In *Proceedings of the 4th Padang International Conference on Education, Economics, Business and Accounting (PICEEBA-2 2019).* Atlantis Press.

Samadrita Bhattacharyya, Indranil Bose,. (2020, August 24). *Sciencedirect.* Retrieved from S-commerce: Influence of Facebook likes on purchases and recommendations on a linked e-commerce site: https://www.sciencedirect.com/science/article/abs/pii/S016792362030138X

Thanapal, P. (2015). Income and Expense Tracker. *Indian Journal of Science and Technology*, 118–122.