Project Deliverable E - Project Schedule and Cost

GNG 1103: Engineering Design

Section #A02

Group #6

Team members:

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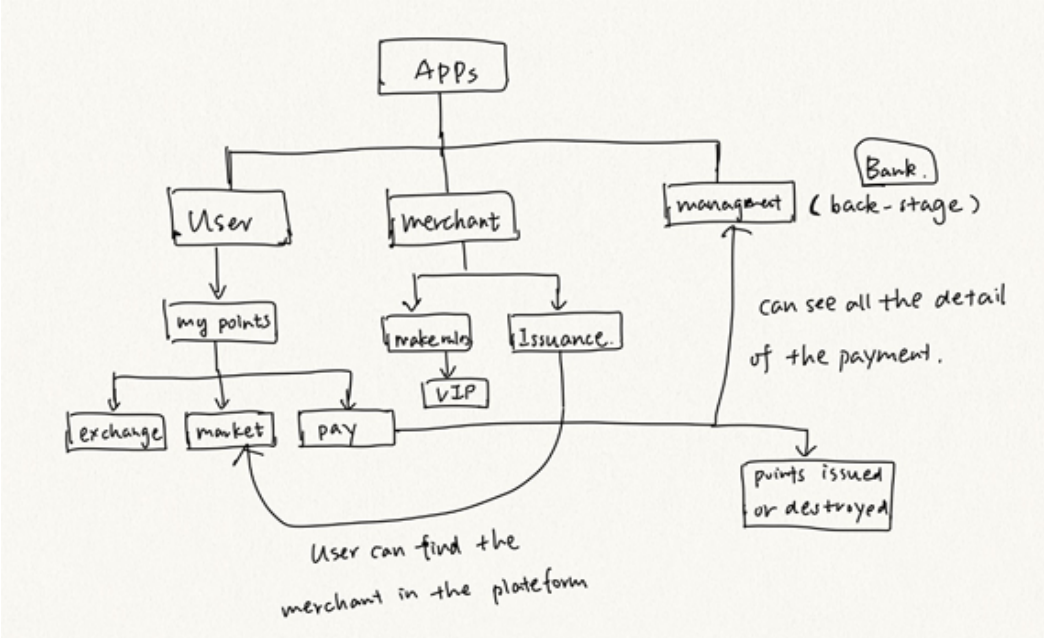
Functions of the Software:



For merchants:

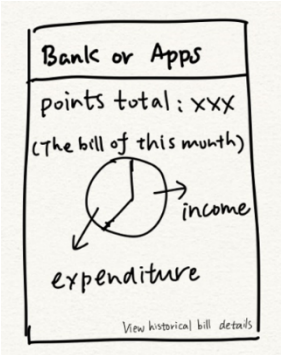
- Can register an institutional account through the point wallet first, and a pair of accounts and keys are generated by the bottom layer of the blockchain. After merchants get their asset issuance account, they can issue their points on the platform.
- Through the circulation of points between users, points can be exchanged between institutions naturally. The point exchange between merchants and merchants can be achieved through limited-time activities. For example, I like McDonald's very much. I eat at McDonald's every day, so I already have a lot of McDonald's points. But today I saw a Burger King, and he is doing free points redemption activities, so I can use the points I

accumulated at McDonald's to pay for this Burger King. In this way, businesses can attract more customers through points.

- Merchants can see the number of points under their accounts in real-time.

For users:

- You can trade and gift points. (something like e-transfer)
- Through the circulation of points between users, points can be exchanged between various merchants.
- In the circulation of points between merchants, the value of the points of the exchanged merchants should be kept equal. Or calculate its equivalent points according to the formula. In this way, the unity of payment is realized.



- Users can pre-deposit points in advance through a valid point redemption code. (The points should have a validity period)
- Rank the user who has the most points and give corresponding rewards.
- Distribute bonus points to those who successfully invite new users.

For management (The Bank):

- The platform can be divided into user version, merchant version, and developer management system.

- Points transaction tracking and history.
- The platform adds to the bank app interface.
- Users can track points transactions data collected by Zafin. (a file can be downloaded)
- Tracking user trends and merchant trends.
- Can monitor whether the activities of merchants and users comply.

Software related functions for future Prototypes:

We need to increase the transparency of the procedure. Allow the user to understand better what goes on behind the scenes and make it simple enough for them to get a grasp of the idea. For now, since we don't have the luxury of full focus and time (as we are students), we will do this in a simple way. We will do this by creating a "Help" page that will simply explain the functions in the software and how to use the software and access what they need to. Later, in the future, if we have the time, we could create an even better way by creating a quick free crash course of videos, that show how the transactions are made, how the crypto works, how it gains its value, and how the crypto (points) are spent and how to gain more and so on… The software also needs to be aesthetically pleasing… But again since we don't have much time, we will mainly focus on the functionality of the software.

To address a previous question: How will we give the crypto its value?

As the usability of coin increases, its demand rises, which, in turn, increases the coin's value. This has been one of the important reasons why major cryptocurrencies have appreciated in value in the last few years. Now before we give it its value, we need to figure out how we will even create it. To put it simply, creating a cryptocurrency can be done in one of two main ways. Either by creating an entirely new blockchain with a coin or by forking an existing one and creating a token. (More research will be done on this as the semester goes on). After we figure out how the crypto is created and given its value… It will be easier to figure out how it will be marketed to the companies to have them accept the coin.

Final General Idea:

To create a user interface (website) that will be used to show the number of points (crypto owned), the transactions, and what different functions are available for different kinds of users as mentioned above. We will also be creating our own cryptocurrency and that will be the form of our points. That way we will be able to democratize the usage of points by allowing people to buy whatever they want with the crypto. Realistically speaking we don't expect this software project to cost us anything (moneywise). HOWEVER, if this was to be applied in the real world and Zafin wishes to take the idea, then it will cost us money to hire professionals to create cybersecurity, a better UI.. and so on. But as far as this course is concerned, it shouldn't cost us money.

Schedule for Prototype I (Also done Wrike):

For Prototype I the focus should be more about how we will create the functions for the different kinds of users (Merchants, Users, Banks), and create a cryptocurrency:

For Zeyad:

By November 19th: Understand how crypto and blockchain works.

By November 25th: create the cryptocurrency and blockchain with documentation explaining how it was done.

For Jeanne:

By November 19th: come up with more ideas for the program and start building it on wix.com. Then plan a meeting with the team to start building together and discuss the feature.

By November 25th: Have the first draft (prototype) for the Merchant page.

For Yang:

By November 19th: Work on the design of the User page of the website and build it on wix.com. Then explain how to relate to the homepage?

By November 25th: Have the first draft of the User page of the website and instructions with documentation explaining how it works.

For Sean:

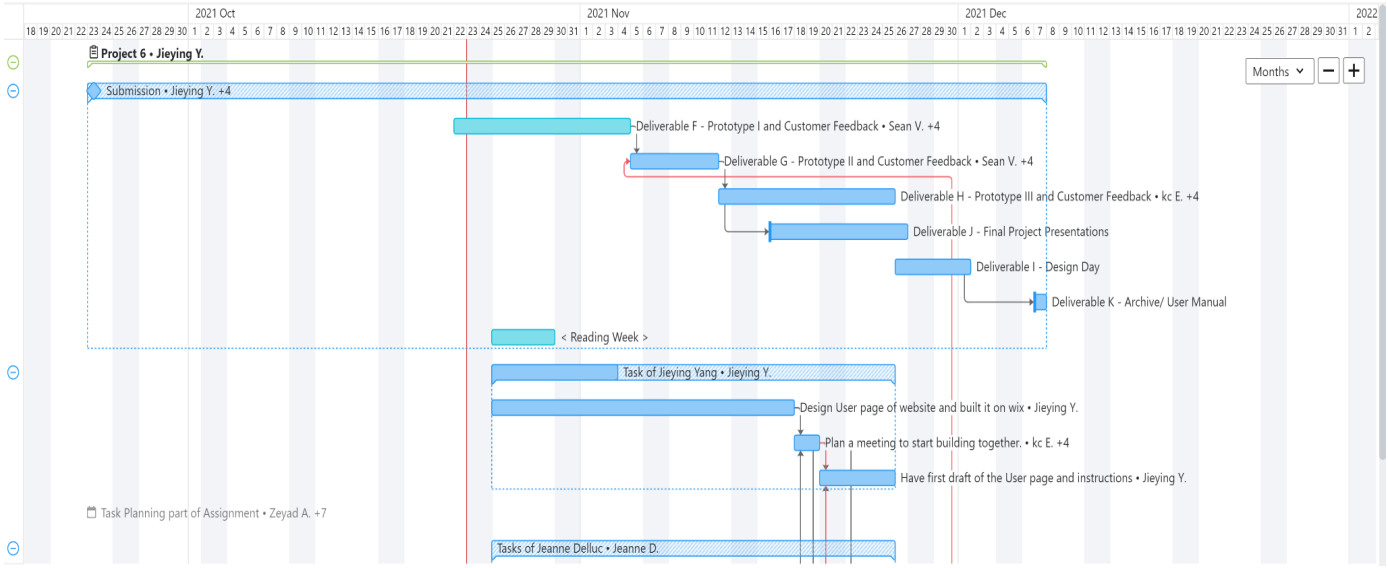
By November 19th: come up with more ideas for the program and start building it on wix.com. Then plan a meeting with the team to start building together and discuss the feature. Working on the management(bank) page.

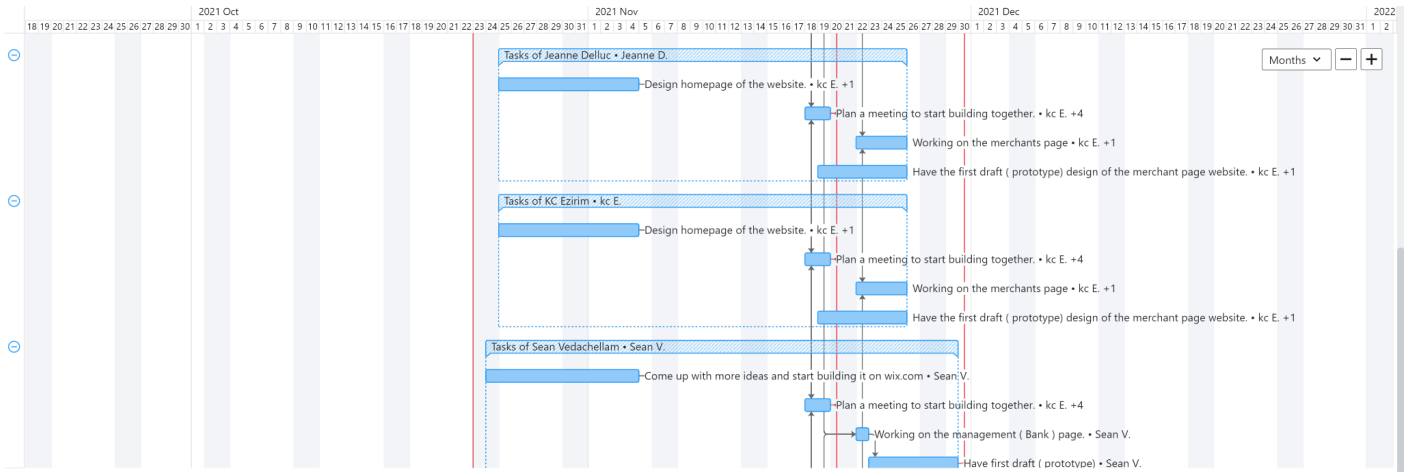
By November 25th: Have the first draft (prototype) built with the features that the team came up with. (The management page should be encrypted. Merchants and users are not allowed to enter at will.)

For KC:

By November 19th: working with Jeanne on the design of the home page of the website. How the Qcoin (cryptocurrency) is going to be displayed. working on the merchant page. The test would be successful when the merchant can create an account.

By November 25th: have the first draft design of the merchant page website


2021 Oct
2021 Nov
2021 Dec
2022
Project 6 • Jieying Y.
Months
Submission • Jieying Y. +4
Deliverable F - Prototype I and Customer Feedback • Sean V. +4
Deliverable G - Prototype II and Customer Feedback • Sean V. +4
Deliverable H - Prototype III and Customer Feedback • kc E. +4
Deliverable J - Final Project Presentations
Deliverable I - Design Day
Deliverable K - Archive/ User Manual
< Reading Week >
Task of Jieying Yang • Jieying Y.
Design User page of website and built it on wix • Jieying Y.
Plan a meeting to start building together. • kc E. +4
Have first draft of the User page and instructions • Jieying Y.
Task Planning part of Assignment • Zeyad A. +7
Tasks of Jeanne Delluc • Jeanne D.


2021 Oct
2021 Nov
2021 Dec
2022
Months
Tasks of Jeanne Delluc • Jeanne D.
Design homepage of the website. • kc E. +1
Plan a meeting to start building together. • kc E. +4
Working on the merchants page • kc E. +1
Have the first draft (prototype) design of the merchant page website. • kc E. +1
Tasks of KC Ezirim • kc E.
Design homepage of the website. • kc E. +1
Plan a meeting to start building together. • kc E. +4
Working on the merchants page • kc E. +1
Have the first draft (prototype) design of the merchant page website. • kc E. +1
Tasks of Sean Vedachellam • Sean V.
Come up with more ideas and start building it on wix.com • Sean V.
Plan a meeting to start building together. • kc E. +4
Working on the management (Bank) page. • Sean V.
Have first draft (prototype) • Sean V.

Risk and Contingency Plans:

RISK	LIKELIHOOD (out of 5)	CONTINGENCY PLANS
We could lose a file or the file can be corrupted and not useful.	3	We can have a backup saved in hardware or something like Onedrive.
Lacking Coding skills, our team members are not proficient in programming or website production skills. so maybe there are problems in website production.	4	Deep learning can be done on youtube or other websites. Seek help from TA or professionals when necessary.
Website crashing	4.5	Establish a backup website or backup link. When the web page crashes, display the backup link on the home page and make a link to allow the two pages to be converted to each other.
Work pressure and team conflicts	3	Put more experience in a more important part. Keep practicing with other team members and keep working together at all times.

Bill of Materials:

MATERIAL (Software used)	PRICE $$$	Why am I using this material?
Wix.com	0$	Because it will help us build the software for the project, without using so much difficult code.
Solidity	0$	It is a programing language that we might use to build the blockchain/ crypto

Prototyping Test Plan:

Test ID	*Test Objective (Why)*	*Description of Prototype used and of Basic Test Method (What)*	*Description of Results to be Recorded and how these results will be used (How)*	*Estimated Test duration and planned start date (When)*
1	for the client to be able to create an account	the website	the result would show that the account can be saved on the website	2 weeks
2	Users can use points to exchange gifts and track their exchange history	Simulating users to redeem points	After the redemption, check whether the points in the account have decreased and whether the redeemed items are displayed on the personal homepage at the same time. And use the history tracking function to check whether it has been recorded in the bill.	10 days. We will begin when we finished the user page of the website (before 11.29)
3	The points of different businesses can be	Try to convert points between two businesses.	If the points in merchant A can be successfully used in merchant B.	7 days. We will begin when we finishd both the merchants part

	converted to each other		Then the function of converting points among different businesses will be successful.	and user part. Also when we successfully create a merchant account.
4	Whether management can track both users' and merchants' activities.	Simulating users to redeem points	After completing several points redemption, check whether the management interface can view the billing records of the merchant and the user at the same time.	7 days. We will begin when we finished the user page, merchants page, and management page. (before 11.29 at least)

Conclusion

In this deliverable, we were able to get a deeper understanding of how to complete our subsystems and tasks. We also make a plan that each one should do which part and their own deadline. The Risk and Contingency Plan also be discussed. We also generated a list of materials. We didn't need any cost to complete this project because I used a free website for design, which is under the project's budget. Overall, the proposal is well-planned, and given that everything goes according to plan, the project will be finished in time for Design Day.