Software Engineering Group Project

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Customizability vs Ease of use

Sprints

Team Number: 32

2.1 Sprint 1

Sprint Technical Lead: Jun Baek
Sprint start date: 6th February 2020
Sprint end data: 13th February 2020

The primary objective of the first week is to get to know each other. Doing so, we built up team cohesion and, together, read through the assignment. Some members did not understand the assignment fully, so members that did understand the assignment tried to answer every question. As a result of very good questions, members that thought they had understood the assignment found that they did not. Here are some of the key sticking points:

- Rule 15 states that "Players ... may not borrow money from the bank", but rule 22 goes to state "The bank will pay the player ... ". These two rules seem to contradict.

- What if a player mortgages a property that has houses/hotels already built on it? Will the bank only pay half the total value of the property, or only half the original price of the property?

These questions have been sent to the customer via an email for clarification.

Whilst explaining the assignment, we decided it would be useful to have a visual reference. Below is the diagram that was created, which is also the first design prototype of our product:

21	22	23	24	25	26	27	28	29	30	31
20		Oppurtunity Knocks					Pot Luck			32
19										33
18										34
17										35
16										36
15										37
14										38
13										39
12										40
11	10	9	8	7	6	5	4	3	2	GO

Player 1: £a

Player 2: £b

Player 3: £c

Player 4: £x

Player 5: £y

Player 6: £z

Figure 2.1: First Design Prototype

Figure 2.1 was created to help us explain the assignment. It also gives us a starting point for designing our product. Each colour represents the group that property belongs to.

Overall, this was a successful sprint as by the end of the week everyone understood the assignment and we all got along well. Next week's plan is to finish the planning phase.

2.2 Sprint 2

Sprint Technical Lead: Jihye Ahn
Sprint start date: 13th February 2020
Sprint end date: 20th February 2020

The main objective for this sprint is to finish the planning phase of the project. First we tried to assess risks but found our discussions to be too

broad. Instead, we moved on to try and create a PERT chart but we were having difficulty in assigning nodes to members. However, we found the planning process to go very smoothly after assigning roles. Only then did we create a PERT chart, and following this we identified risks and how to manage them.

Following this line of logic made the planning phase to go smoothly because creating the PERT chart was made easier due having assigned roles, which in turn made identifying risks easier due to the PERT chart. For example, a member whose role is to code was given nodes in the PERT chart that was related to coding. From there, we could better identify risks since we know whose doing what tasks e.g., does a member have a planned holiday? If so, then we know which node in the PERT chart will be affected and thus have a better plan on how to mitigate the problem.

$$\text{Assign Roles} \longrightarrow \text{PERT Chart} \longrightarrow \text{Identify Risks}$$

Figure 2.2: Planning Logic

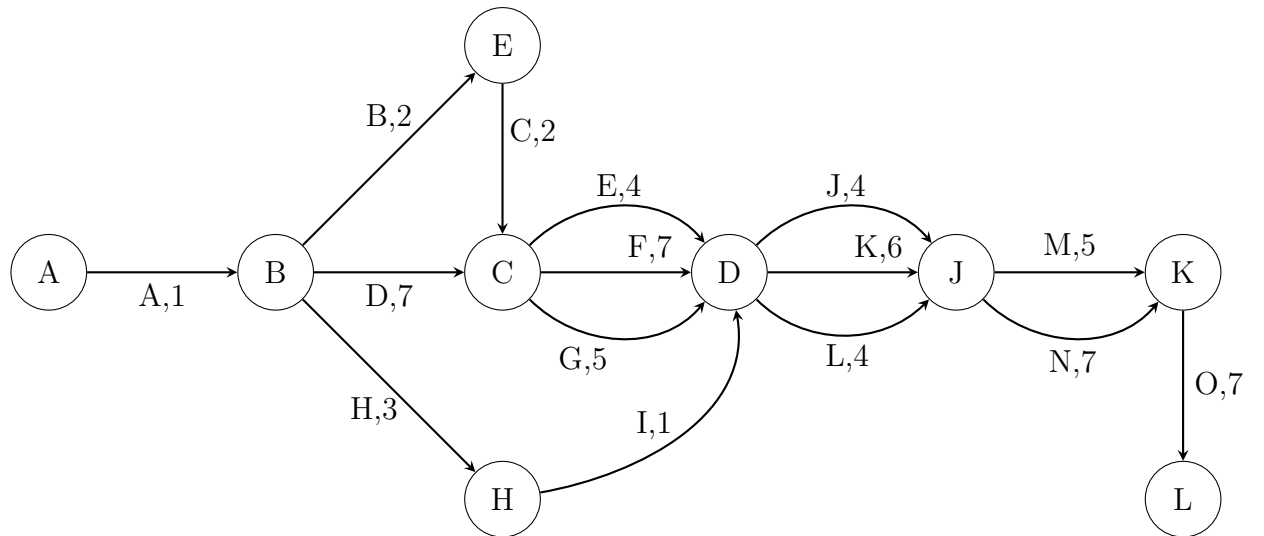Below is the PERT chart that we created:

Figure 2.3: First PERT chart

Tasks	Days				Critical Path
	Earliest Start	Earliest Finish	Latest Start	Latest Finish	
A	0	1	0	1	Yes
B	1	3	4	6	No
C	3	5	6	8	No
D	1	8	1	8	Yes
E	8	12	11	15	No
F	8	15	8	15	Yes
G	8	13	10	15	No
H	1	4	11	14	No
I	4	5	14	15	No
J	15	19	17	21	No
K	15	21	15	21	Yes
L	15	19	17	21	No
M	21	26	23	28	No
N	21	28	21	28	Yes
O	28	35	28	35	Yes

Task	Description
A	Meet up and get to know each other
B	Plan out tasks and roles by creating a PERT chart
C	Carry out risk assessment
D	Code first prototype
E	Unit testing
F	Code in game rules
G	Code excel data to board environment
H	Design game board
I	Design characters
J	System testing
K	Code "full" game mode
L	Code "abridged" game mode
M	Create and code menu
N	Code game agent
O	Test the whole game

Figure 2.4: PERT chart task descriptions and calculations

Documentation of Classes

Documentation of Testing

Team Meetings

This is where we will document everything that was accomplished and discussed in every group meeting.

5.1   6th February 2020

Introduced ourselves to each other for the first time. Then, we had to choose a sensible time where all members are free for a group meeting. We chose a day by sharing our timetables, and decided there will group meetings every Thursday. Some members were confused on some aspects of the assignment. As a group, we thoroughly read through the assignment, explaining parts that were not understood. We found some aspects of "the rules of Property Tycoon" to be ambiguous, especially rules 22 and 23 which are concerned with mortgages. Consequently, we sent an email to the customer's representatives for clarification. Lastly, we plan to assign roles, identify risks and finish planning next week.

5.2   13th February 2020

This week we focused on the planning aspect of the project, namely creating a PERT chart and conducting risk management. We will review and update the likelihood of a risk at the end of every week, so we can be prepared if something were to go wrong.

We also decided team roles. Here are the following roles assigned to each member:

- Jun Baek: Project Manager

- Ye-rang Lee: Technical Support

- Jihye Ahn: Design Coordinator

- Ibi Khan: Technical Lead

- Georgios Ladikos: Technical Support

Next week's focus will be designing and coding the first prototype.

Weekly Log

6.1   Week 1

- Got to know each other

- Decided that we would meet every Thursday

- Everyone understands the assignment

- Plans for next week: assign roles and complete risk management

6.2   Week 2

- Created a PERT chart

- Assigned roles to each member

- Identified risks and how to manage them

- Plans for next week: start coding and designing the prototype

Report

Peer Review Marks