Project Plan

Our goal is to create a social media network, this network will allow for communication between friends (this will most likely be a Direct message system), upload photos and have a status feed. I am aware there are many social media networks available, but they do not deliver what we aim to provide. There will be a leader board to the mini game that will be available to play for free. We must also ensure that we guard against abusive behaviour in order to keep our users safe on our network. This will be done by either a report system that is moderated by a human or keyword filter that will block specific words.

My group first communicated via direct message on discord, we discussed a time and date to meet up so we could further discus what we want our social network to do. We all met in-person around four times in total and discussed how we will tackle this project, each meeting we would gain more progress. The most recent meeting took place on an online discord call, in this meeting we made the final decision on what each project members roles were. I got assigned the role to create the mini game for the network. We allocated roles by finding each members computing skills and assigning them the role they feel most confidant in. I am currently studying computer games software development and have a keen interest to learn more and create my own game, therefore I am creating the game for our project.

Sprint plan

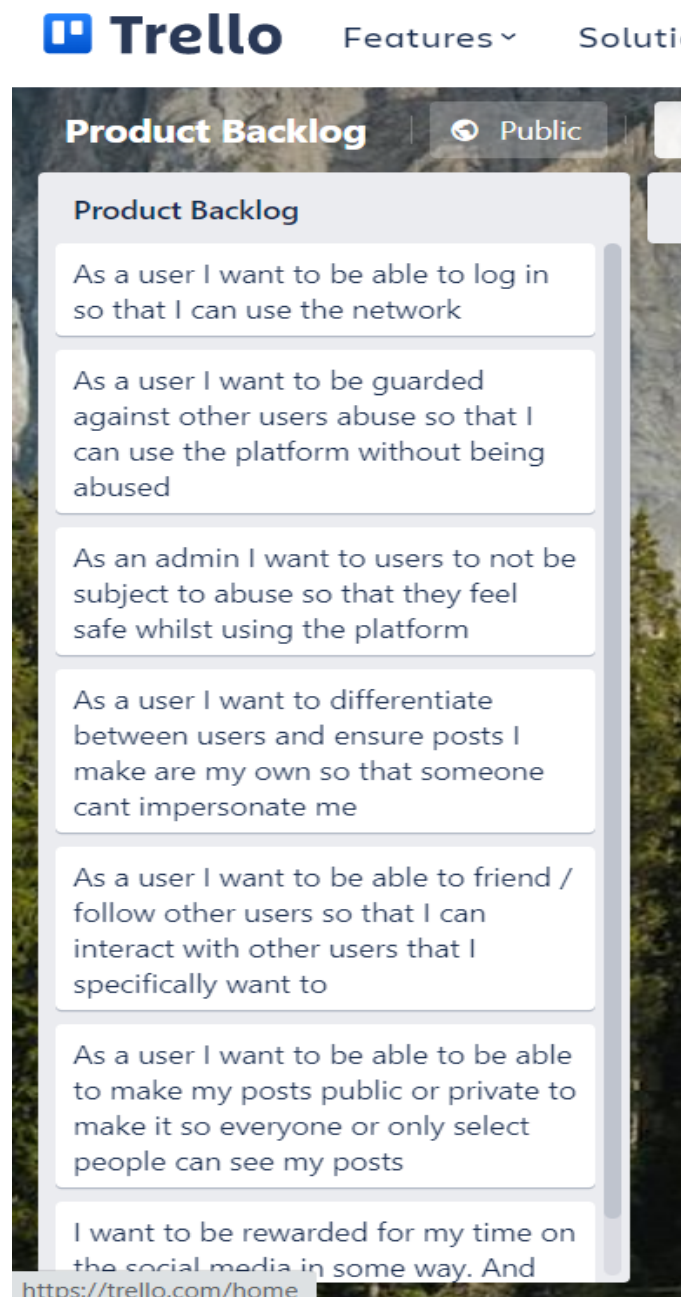| Sprint:	Date	Outcome
1	1st February- 2nd February	The group will meet up in the lab and discuss plans and start programming that day
2	2nd February – 28th February	Continue coding and creating the network
3	7th – 10th March	The group will meet up and review what progress each member has individually made
4	27th April -1st May	During the final week the group will meet in person for a meeting to check all the work is being completed and should start to consider testing
5	1st -4TH May	Ensure all testing is done as the deadline is the 4th, check every aspect of the network for bugs and errors and check all group members are happy for the network to be finalised

Sprint Backlog

Sprint:	Date	Outcome
1	20th September – 5th October	• Discussed a basic plan • Allocated Roles
2	7th October - 17th October	• Requirement analysis

		• **User stories created**
3	**20th October – 31st October**	• **Create UML documents from user stories**
4	**15th November – 10th January**	• **Created Detailed plan of project** • **Aim to start the implementation after January deadlines**

Project Backlog

Our team used Trello to create the project backlog, each member of the team can create and delete new posts in our Trello group. I analysed the project requirements that I previously identified and turned them into user stories, this was then uploaded to Trello as it will allow the rest of the team to view the new changes I have made.

Test plan

Test Case Type	Description	Test Step	Expected result	Status
Usability of game	Ensure the game runs and works without any errors or bugs	Test play the game for multiple hours checking for any bugs	The game is expected to run fine without any errors, if any occur than the code will be debugged and tested until the game is working	Pass or fail
Possible game crashes	Once the game is launched check to see if it instantly crashes	Launch the game on different types of Pcs and browsers to see if this may have an affect on the game crashing	The game should launch without any crashes	Pass or fail
Messages get sent to correct destination	Allows direct messages to be sent to the intended user	The team will send messages to each other over the network, this will allow us to see if all the messages get delivered and sent to the correct destination	The messaging system will allow 1 user to send a direct message to 1 other user. If any errors occur the code will need to be revised	Pass or fail
Reporting system	Once an account has been reported the reported message will be reviewed by an admin which will decide the consequence	Test to see if the report sends a message to the admin	If an alert/notification does not trigger once the report has been sent than the report system will need to be revised	Pass or fail

Self-Learning Plan

I have been allocated the role of the game designer for this project, to ensure I carry out my tasks for the project to the best of my ability I will need to self-learn specific game development skills. I have had experience before in programming games such as when I made a 2D game using unreal engine and unity. I will be using Java for this game, However I have never programmed a game in java before, to ensure I know what to do I will practice using online coding tutorials and YouTube videos in order to gain the needed skills.
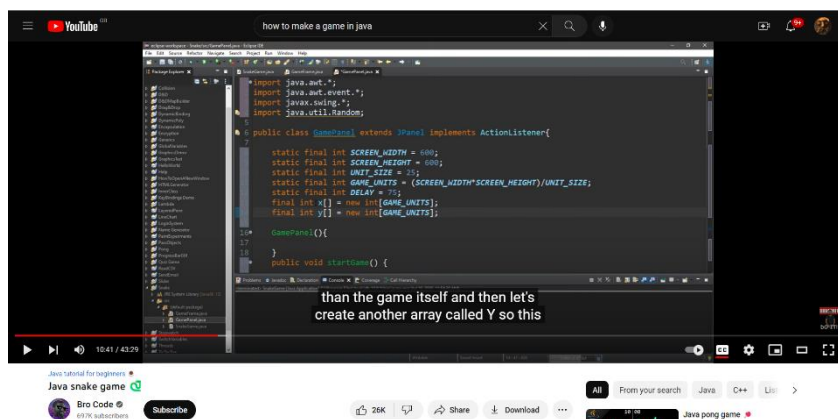
How to Make a 2D Game in Java
RyiSnow

How to Make a 2D Game in Java #1 - The Mechanism of 2D Games • 18:11
Game Loop and Key Input - How to Make a 2D Game in Java #2 • 34:48

VIEW FULL PLAYLIST

This particular video will teach me how to use java to make a 2D game, there is 60 videos in this playlist so I will need to plan a few days where I can sit down and get it all done in one go as I remember information much better that way.

On the university DLE there are many resources that help and tech how to program in java, I will use these resources to gain more knowledge on programming in java.
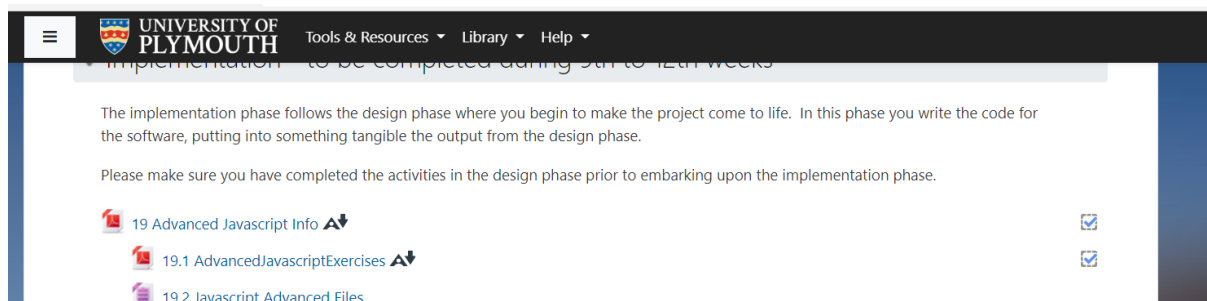
The game I have planned to make is a 2D old school snake type of game, where the snake is controlled using w,a,s,d and the objective is to get as high as score as you can. The game must be easy to understand and adapt to as it's the only game currently available on our site. There is a possibility of more games coming to our network in the future but for now we will just have the one, the reason for this is that I am the only person working on making games and I believe it's not possible to single handily make more than one game with the time I have been given.

Project Vision

The outcome goal for our project is to create a social network that users can use to communicate with friends, this can be done via direct message or by posting a feed. The project vision for my task is to create a working mini game that makes the user want to log back on and play more. I have plans in the future to expand this mini game into becoming a multiplayer game that allows you to compete against your friends for the highest score.

Requirements

After discussing with the team about how we would tackle the task I came up with a list of team and individual requirements. I created the requirement lists by using the knowledge I have already acquired on what the network needs to do, I took into consideration all the roles that will need completing.

I also created a list of individual and team desirable requirements, this will be looked at more in depth once the base requirements have been completed as they are less relevant and not urgent.

Team Requirements:

- Account System
- Needs to be a way to differentiate between the users and to ensure posts are owned
- Messaging System
- Mini game
- Security (Prevent/Block abusive behaviour)
- Leader board for the game and posts
- Statuses

Desirable Team requirements:
- Photographs
- Friends' system
- Differentiation between public and private posts
- Block system

Individual requirements:

- Create the Mini game
- Create multiple levels for the game

Desirable Individual requirements:
- Create a second min game
- Implement playing with friend features
- Implement different "Skins" for more customizability

Architecture

Use case Diagram:

In this use case diagram it shows what would happen if a user wants to play the mini game. Once the user has launched the game there will be a level select option, once they have selected the first level they will then play the game. After the game is completed the user will be faced with an option to save their game. I have <extended> two more levels to the diagram as in the future we may wish to implement more levels into the game.

Social Media Network
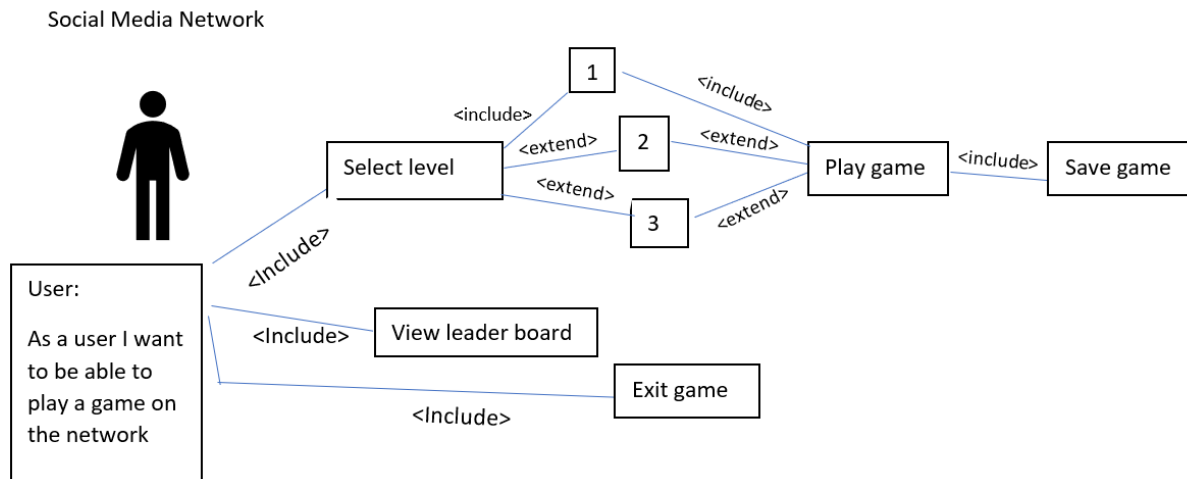
Flowchart on how the game starts: