Brightbuds
Week#2

Team
Darshit Thesiya (CMPE202 – Section 03 | github id: dthesiya)
Hiral Parikh (CMPE202 – Section 03 | github id: hirparikh)
Shruti Padmanabhan (CMPE202 – Section 03 | github id: TootyFrooty)
Varsha Kankariya (CMPE202 – Section 03 | github id: varsha-kankariya)
Vikas Miyani (CMPE202 – Section 03 | github id: vikasmiyani)

Team github repository link :
https://github.com/hirparikh/Team-Project-1

Team Task Board link :
https://waffle.io/hirparikh/Team-Project-1

Team kanban CFD Google Sheet link :
https://docs.google.com/a/sjsu.edu/spreadsheets/d/1Zo7pvzG7xTV4LKbKM1PxWPupaIyo0Ft5a5h_sTSi8A/edit?usp=sharing

Name : Darshit Thesiya

Build Integrity In

- During last week, following points are noted from team efforts:

- Last Thursday, we had a meeting about work distribution and implementation details.
- Every team member picked up different UML diagrams to model the project structure.
- Learned differences between Prim's and Kruskal's algorithms and decided to go on with Prim's.
- Discussed ideas about entities, interactions between entities and images to represent those entities on the game board.
- Started working on wireframes for easier understanding at implementation time.
- Started searching some audio files to use them on some user input events.
- Explored a few different minimal spanning trees to build multiple game worlds.
- Discussed about putting hints/suggestions with user interactions to make it easier to understand for the user/player.
- Discussed about designing scoring mechanism.
- All of us decided to start developing smaller pieces of project in order to get started and plug them later.

In next week, all of us will be developing different modules of the project which will be integrated later to build entire project. Along with the development, we will keep meeting to discuss doubts and problems with implementation.

Name: Hiral Parikh

Simplicity & Eliminate Waste

Simplicity:

Agenda followed during this week:

- Point out the basic functions and complex functions for each of the Game Theme discussed.
- Discuss about the feasibility of the stipulated feature development of the game, considering the expected time frame of the project, for each proposed idea
- Set a rough idea about smaller project tasks and see whether it is testable and easy to navigate, for each proposed theme

Agenda to follow pertaining to Simplicity in the upcoming weeks:

- keep the basic functionality and flow, of the project such that it is testable, understandable and Explainable
- Define and document smallest of the task in such a way that It becomes easy to understand and follow for any third person

Eliminate waste:

Agenda followed during this week:

- As we went on to discuss the objective and develop the Game Theme, for each of the 2 activity topic – Minimal Spanning Tree and Binary Search, we did make sure that we are not straying away from the basic goal of – making kids learn the activity and funda behind these algorithms through the game
- Complex ideas that shadows the strategy of the game were discarded as we have a goal of teaching kids through game
- Kept an extremely simple interface to expose the algorithm -Minimal Spanning Tree
- Discarded the ideas that were irrelevant and involved multiple computer science concepts
- Decided a Game Theme in such a way that it focuses on the graph and visually aids the understanding to eliminate chaos

Agenda to follow pertaining to this point in the upcoming weeks:

- To ensure that we are not adding a feature or development task that is remotely related to the objective or no more required
- To make sure that we does not spend time after unnecessary features or meetings
- To make sure we don't set unrealistic goals

Name: Shruti Padmanabhan

See the Whole

This week we scoped out weeks to come.Basically planning tentative weekly goals/ meet up schedules and division of tasks within the group.

Tasks accomplished this week:

- Each of us picked a UML diagram and started uploading their rough draft versions to GitHub. More than accuracy, the goal was to brainstorm ideas for our game. These would be eventually improvised after reviewing them as a team and after going over in class.
- To kick start, we first drew out our wireframe that we plan to follow closely in future. For more specifics, please check our Team GitHub directory.
- Another item was setting the stage ready for all of us to start coding. We brainstormed various elements that we might require in our world:
    - Finalizing entities/ graphics or images for the world: researching images required to set up our world
    - Creating multiple worlds with random graphs: finding a maximum of 3 graphs that we plan to solve for players to actually learn the algorithm while playing than memorizing patterns.
    - Selecting appropriates audios: to add being user interaction, we are looking into recording and downloading some audios for our game.
    - Planning scoring mechanism: we were having couple of ideas on implementing scoring system but need to try implementing and visualizing how it would work out.
    - Displaying result screen: it's highly unlikely a user might lose our game as our main intention to leave them on a positive note therefore we would most like have a WON screen with final path highlighted.
- Currently our goal is to get our base version of the code ready so that we can scale it up to multi-player later on receiving further instruction during upcoming classes.

In the upcoming weeks, we shall look into:

- Integrating all of our pieces into the world and having some minor functionalities working.
- Design patterns that might work with our game – while giving it some room for growth in future by loosely coupling.

- Clarify and conceptualize how to implement multiplayer into the game.
- Come up with use cases/ test cases to validate functionality after development.

Reuse and recycle code to maximize OOP

Name: Varsha Kankariya

Feedback

- This week we started working on developing on the idea selected.
- With required planning, we came together to finally decide on the implementation of the base version of the idea so that we can finalize the theme and idea.
- Initially, we had decided on the Kruskal's algorithm for implementing minimal spanning tree but now we have opted for Prim's algorithm based on everyone's feedback for the game. (Note: Game can be made more interesting for the students with the finalized idea)
- We divided the work amongst the members. The team is divided into pairs for each task to decrease the feedback time for the task they are doing.
- Feedback is taken even for the smallest task done (like the images to be used) for the game so that rework is avoided.
- Also based on everyone's experience from the lab assignments, Greenfoot was selected for designing the game.
- We as a team are taking efforts to ask other members' opinion to finalize on things that are done so as to reduce the time to redo things.

For the upcoming week:

- As we are going to start building small modules for the base version, I will suggest everyone to write test cases for the modules so even after they are integrated they can still be tested.

Name: Vikas Miyani

Communication

Following points are observed during third week.

- All the team members were invited for project meeting which was held on Thursday.
- All the members communicated their own ideas for GUI as project theme and also finalized one as theme and also started work on it.
- New tasks have been introduced in the waffle board.
- Two team members designed images to use it in project as objects.
- Other team members created wireframes and also shared with others.
- Development plan has been created and also shared across team.
- Tasks have been assigned to each team member to start development to create base version of the project.
- Every team member participated and suggested their views on project.

Future plan has been discussed and also conveyed to all the team members.