

CSS 385: Intro to Game Development

Team: [team name]

Members: Mykyta Skiba, Skyla Tran, Cordelia Notbohm, Sydnee Haugen

Development Log

Week 4: Conceptual Prototype

Date: 4/15/2023

Name: Mykyta

Hours: 3

Worked on: system design and planning the project in the long term

Date: 4/18/2023

Name: Cordelia

Hours: 2

Worked on: looking into pixel art, trying out drawing a test asset, brainstorming ideas for the game

Date: 4/18/2023

Name: Sydnee

Hours: 2

Worked on: looking into different options for players attacking

Date: 4/19/2023

1) What has been recently completed

A conceptual prototype for the game was made, and some supporting documentation about our planned design for the game, including some UML documents about how to structure the scripts for the battle portion of our game. This supporting documentation can be found here: [System Architecture](#) [System Diagram](#)

The idea is that we will be creating a grid, turn-based battle game with a world map where the goal is to survive all the battles.

A paper prototype was made, with ideas for some of the different screens that players will interact with. The initial development log has been made and shared. This GitHub was shared and a unity project has been made. More brainstorming on the game mechanics has been worked on. The art style has been fleshed out more, we are thinking about having the game be critters in the forest with very simple single-color designs. We are taking inspiration from a board game called Root.

2) What each person is currently working on

All members of the team are working together to brainstorm the concept for the game, the art style, and the game mechanics.

Mykyta is working on designing how to structure the scripts for the game. Mykyta will also work on creating the GitHub and Unity project.

Skylla is watching videos to learn about the different grid-based movement details, and how to implement our battle grid.

Cordelia is working on creating the development log and supporting the website for the game. Cordelia is also working on learning how to do the world map functionality, where a player moves from one battle to another

Sydnee is also working on supporting the website and is looking into how to do the different player options for attacking

3) What features/ideas on the backlog are to be done next

- Brainstorming story, art style, and game mechanic ideas
- Watching videos and learning more about how to implement planned features within Unity
- Creating a GitHub and shared project
- Development log structuring
- Initial website
- Paper prototype

4) Analysis of playtesting (probably as a separate page)

No playtests have been done yet

5) Obstacles that are blocking development

Not yet having a concrete idea of what the game is going to look like and what stories and mechanics we want to include.

Not yet understand how to implement the mechanics we plan to implement

Other classes being busy and tests have made it difficult for some members to have the time to work on the project.

6) Reflection on the game and process. What is working, what is not working.

Creating the Architecture and UML diagrams for the project has helped everyone get on the same page about how we currently plan to tackle the project

Talking over Discord about ideas when they occur to us has been helpful in getting an initial game and story idea fleshed out.

Not setting clear expectations about what we are expecting to get done by the next week is leading members to be unsure about what to work on next - in the future should make clear plans on what each member should work on

Our story feels incomplete, right now it is just critters attacking something for no real reason, need to come up with a good objective for the game and a premise for the story

Week 5: Game AI / Digital Prototype-1

Date: 4/24/23, 4/29/23

Name: Mykyta

Hours: 5

Worked on: Made Dijkstra's algorithm pathfinding and movement.

Date: 4/26/2023

1) What has been recently completed

The most recent update is we have refined our story for the game. The premise behind the game will be that bears are the ruler of the forest. During the winter the bears hibernate, and now that spring has come they awaken to find that foxes, bunnies, and other creature have taken over their territory. It is up to the player to fight off those critters and take back the forest.

2) What each person is currently working on

Mykyta is working on utility functions that will be helpful for all of the digital prototypes, primarily raycasting functions that will make mouse controls easy to program. He is also working on using Dijkstra's algorithm to generate the number of movements need to get to a tile on the battle map.

Skylla is working on the digital prototype for player movement. This will use the Dijkstra algorithm functionality that Mykyta worked on to allow a character to choose a location to move to, and then move from tile to tile till it reaches the destination.

Cordelia is working on the digital prototype for the world map, and having a character be able to click on a new level and move to that level smoothly. Having the character only be able to move to levels that are adjacent and closer to the finishing position.

Sydnee is working on the digital prototype for players attacking during the battle. This will involve clicking a character to select which character should attack, and then clicking a character to select which character should be attacked. There will then be some indication of how much damage was done.

3) What features/ideas on the backlog are to be done next

- Raycasting functions
- Dijkstra's algorithm for calculating the distance
- Collecting an array of tiles required to get to a location
- Moving through all of the tiles to get from one tile to another

- Making a graph to represent a world map
- Script for the player to move from one node in the graph to another smoothly
- Character health
- Character attacking
- WebGL Build that has all digital prototypes available to look at

4) Analysis of playtesting (probably as a separate page)

No playtests have been done yet

5) Obstacles that are blocking development

Still unclear how we want to logically develop each of the levels if each level will be a different scene if we want levels to have a random seed, or how to attach the levels to the choices that the player makes in the world map.

Unsure about how to get a player to move from one tile to another and not just jump to the destination tile.

Still slightly unsure about who wants to work on which aspects of the project

6) Reflection on the game and process. What is working, what is not working.

Again, in terms of our process, discord is working as a good communication tool, and hopeful GitHub should be a good way to share the project - though have yet to develop much to test that

The story feels like it is working a lot better now, there is a clear objective and a premise for the game, that fits in with the theme of spring

In terms of our process it has been hard to get the development log filled out with everyone - need to come up with a plan or habit that will make logging our progress easier.

Without seeing the prototypes it is hard to know what about the game mechanics are not working well - so all is good there for now.

Date: 4/26/23

Name: Cordelia

Hours: 4

Worked on: setting up the graph for the world map, and the script for player movement.

Date: 4/27/23, 04/28/23

Name: Skyla

Hours: 5

Worked on: (27) reading through Mykyta's scripts to help implement player movement, setting up the movement scene, and starting scripts.
(28) debugging, finished the player movement scene and scripts

Date: 4/27/23, 4/28/23

Name: Sydnee

Hours: 5

Worked on: (27) Started the digital prototypes for player attacking,
(28) finished the player attacking prototypes

Week 6: Digital Prototype-2

Date: 5/1/2023

Name: Cordelia

Hours: 1

Worked on: setting up the initial game website and prototype build

Date: 5/2/2023

Name: Skyla

Hours: 1

Worked on: looking at assets!

Date: 5/2/2023

Name: Mykyta

Hours: 5

Worked on: tried to refactor the code from the prototype into a single project

Date: 5/3/2023

1) what has been recently completed

All three of the digital prototypes were completed, as described in last week's TODO list.

The initial game website was created.

Some research has been done as to what assets we might want to use in the game

We have attempted to merge the movement and attacking scripts together into one prototype, and to refactor the code - still a work in progress.

2) what each person is currently working on

Mykyta is going to continue to work on combining the movement and attacking scripts/prototype into one unified scene and set of scripts. Mykyta is going to work on the turn system and setting up the enemy AI controllers system.

Skyla is going to work on animations, and learning how to use Unity's animator functions so that movements and attacks lead to animations.

Cordelia is going to work on creating a playtesting script and forms for people to fill out when playing our game. She will also work on learning about GitHub pages and fleshing out the site. She will work on the tutorial box systems.

Sydnee is also going to work on animations, and learning how to use Unity's animator functions so that movements and attacks lead to animations.

3) What features/ideas on the backlog are to be done next

- Research and look for assets we may want to use in the game

- Combine all the player scripts into one script
- Add in basic enemy AI
- Implement a turn system (controllers)
- Implementing actors (what the controllers can control)
- Work on defining and implementing different player actions: attacks, items, potions, and what not
- Work on adding animations to the player characters
- Adding terrain to the map
- Tutorial boxes
- Add menuing for when a player selects a path on the world map (later - beta thing probably)
- Add a duel camera system that will show the battle map once a player selects a battle to fight in (later - beta thing probably)

4) Analysis of playtesting (probably as a separate page)

No playtesting has been done yet, but we are starting to generate ideas for people we can ask to playtest: classes we are in, classes we are grading, friends from other classes, club discords, etc.

5) Obstacles that are blocking development

Unsure about the best way to organize and design the game. The best way to implement different features (how to do actions and controllers and what should be actions and controllers)

6) Reflection on the game and process. What is working, what is not working.

The clearer objectives for each member of the team have made it much easier for members to make further progress.

Messaging in the discord, whenever someone is struggling with some unity issue and needs help, has made it very easy to tackle obstacles we encountered in the digital prototypes.

The movement is on point and feels very natural. Feels fun and will be easy to expand and use for the alpha playtest.

Currently, the rounds and moving between different actors need work and are not working properly.

Date: 5/6/2023

Name: Cordelia

Hours: 7

Worked on: setting up the tutorial boxes. Adding Round information text. Adding attack actions

Date: 5/6/23, 5/7/23

Name: Sydnee

Hours: 5

Worked on: (6) look at how to use assets to make a battle map
(7) build the battle map

Week 7: Alpha Playtest

Date: 5/8/2023

Name: Cordelia

Hours: 3

Worked on: added a theme to the website and started working on adding sections to the site. Built the game

Date: 5/9/2023

Name: Cordelia

Hours: 3

Worked on: worked more on website and adding different navigation elements so that everything can be on it's own page

Date: 5/10/23

1) what has been recently completed

The alpha version of the game has been released. A fully functioning turn and multiplayer system is in place (albeit with

some bugs) A skeleton of the website structure is place. Animations have been added, and assets integrated. World maps created.

2) what each person is currently working on

Mykyta is going to work on the enemy AI

Skylla is going to work on animations

Cordelia is going to continue to fleshing out the site and work on generating playtesting report for the alpha version.

Sydnee is also going to creat more battle maps

3) what features/ideas on the backlog are to be done next

- begin the enemy AI
- Complete some more battle maps (and work on aligning them to the theme
- Add menuing for when a player selects a path on the world map
- Add a duel camera system that will show the battle map once a player selects a battle to fight in
- Add in more characters and their animations
- File in the info box text
- Add in a end turn button
- Add in a switch selection button
- Fill out the first playtesting report
- Strech goal: maybe a simple inventory system

4) Analysis of playtesting (probably as a separate page)

We plan to integrate the feedback from last class, as well as generate some feedback from other testers over the weekend. Our alpha playtesting report will be available here when completed: https://wolflegend523.github.io/CSS385_GameDocuments/alphatests/

5) Obstacles that are blocking development

The 430 Exam we have coming up is taking a lot of our time :(

6) Reflection on the game and process. What is working, what is not working.

The animations for the game are looking really smooth and people are liking them

Not being able to end your turn or select a new character after clicking them makes players frustrated, should add those features

Currently is hard for people to tell which characters can take there turn at any given time

Week 8: Beta Playtest

Date:

- 1) what has been recently completed
- 2) what each person is currently working on
- 3) what features/ideas on the backlog are to be done next
- 4) Analysis of playtesting (probably as a separate page)
- 5) Obstacles that are blocking development
- 6) Reflection on the game and process. What is working, what is not working.

Week 9: Postmortems

Date:

- 1) what has been recently completed
- 2) what each person is currently working on
- 3) what features/ideas or on the backlog are to be done next
- 4) Analysis of playtesting (probably as a separate page)
- 5) Obstacles that are blocking development

6) Reflection on game and process. What is working, what is not working.

Week 10: Final Presentations

Date:

- 1) what has been recently completed
- 2) what each person is currently working on
- 3) what features/ideas or on the backlog are to be done next
- 4) Analysis of playtesting (probably as a separate page)
- 5) Obstacles that are blocking development
- 6) Reflection on game and process. What is working, what is not working.