John Colonna
Game Designer/Programmer
9/20 (Area 51 game)

Culmination Proposal Document

1. Project description:

Throughout my time at City Tech I have studied all of the necessary components of being a game designer. I learned about the coding behind the game to make it run, the modeling and artwork that it takes to make a game look good, and the pipeline for sitting down and creating a title from start to finish. As of right now I am very well rounded in basics for designing games, but my main focus is programming. My goal after school is to get a job working in a company as a program, while on the side honing my skills and trying to make my own projects. For culmination I am working on a game with my team members, Sabrina and Anthony, in hopes to better myself at all aspects of team building, cooperation, and general design. My main focus will be programming, however I plan to push myself to develop assets and other parts of the game to better understand how the game will function.

For our game we are making a top-down, 3rd person shooting game based on area 51. The player will use different weapons and actions to fend off hoards of civilians that are trying to break into the base. We already have a starting prototype, but there are many things we need to fix in order to get the game to the level we want it. The three of us have vastly different roles in order to make the game function and to produce the project we want.

I will be focusing on many of the User Interface functionalities, programming for small pieces that are crucial to the game, as well as creating and finding 2D assets for us to use. The User Interface (UI) elements are some of the first things you notice while loading into a game for the first time, so the visuals and functionality must be perfect. The UI elements include the main menu, pause menu, dialog boxes and triggers, displaying the character's statistics and current standings, and the shop. I will need to design the buttons and the visuals of the different menus, while also programming each button for what we want. Does the "save" button on the pause menu actually save the game? Does the "continue" button on the main menu bring you back to that last save? Do the items you purchase at the shop show up on screen in your inventory? These are just a few examples of the tasks I will have when it comes to the UI elements of the game. I will also be working on the enemy spawner, the wave counter, a currency and points system for the shop, picking up items and adding them to an inventory, and fine tuning the ammo system. I will also be gathering/creating 2D assets wherever they are necessary throughout the game. I will need to use all of my various skills in order to pull off each of these tasks, and these tasks combined with the skills and tasks of my team will create an amazing culmination project.

2. Methods:

In order to achieve my tasks of creating UI elements, programming the UI elements, programming other various functions, and creating/gathering 2D assets, I will need to use various skills and softwares. Our project is being created in Unity and will use C# code to run

the game. All of the programming will be done through scripts in Unity, and will all be written in the same language. There are many things I'm not quite sure how to do, so in order to fill in those blanks for the programming I will be using various YouTube videos and the existing Unity documentation found on their website. For creating the UI elements and 2D assets, I will be using my skills in Illustrator in order to capture the image we want for our game. While I am not the best at using Illustrator, throughout my time working on this project I hope to better my skills I have through Illustrator's documentation, and YouTube videos.

3. Project Deliverables:
- Game Design Document (GDD)
- Compiled list of research (list of articles and videos used)
- Photos and videos of the game throughout the development stages
- OpenLab Portfolio
- Poster
- Playable demo of the game

4. Schedule/Calendar of the project

When it comes to designing a game, things usually don't go the way you would like them to. It is possible more tasks will get added to the schedule as time goes on, because there may be unforeseen problems we come across. This schedule includes roughly when we want different stages of the game done, as well as my personal tasks for the project.

February:
- Complete the Game Design Document
- Assign the specific roles to each member of the team
- Assess the current state of the game and prioritise fixing glitches that already exist
- Begin compiling research on my various tasks
- Begin work on the UI elements and chart a course for implementing their functionality
- Begin work on gathering/creating 2D assets
- By the end of the month have at least one work level, and test each group members parts with how well they are implemented within the game
- Take photos and videos of the current progress

March:
- Assess the current state of the game
- Plan and prioritise what each group member should be working on within their specific tasks
- Continue developing the UI assets
- Continue work on 2D elements
- Develop the shop/pick up functionality, enemy wave spawners, the wave counter, and the currency/points for the wave
- Implement whatever menus we have so far and test as we go to make sure there are no bugs
- By the end of the month have the main menu and the pause menu complete, with progress on the dialog boxes

- Have a few more of the levels complete, with more mechanics implemented on top of the base game
- Take photos and videos of the current progress

April:
- Assess the current state of the game
- Plan and prioritise what each group member should be working on within their specific tasks in order to finish the game on time
- Finish the dialog boxes and functionality
- Revamp the pause menu and the main menu to make sure they work throughout the various levels and waves
- By Spring Break have a majority of the game done and have as little bugs as possible
- By the end of the month have a near complete game, with minimal things to do besides documentation, playtesting, and fixing glitches within the game
- Take photos and videos of the current progress

May:
- Playtest the game and purposefully try to "break" the game/ cause glitches at the beginning of the month to give us enough time to fix them
- Finishing touches on the menus and the visuals of the game
- Compile photos and videos for a presentation of the project
- Make the poster
- Showcase final playable demo
- Finalize the OpenLab Portfolio

5. Required resources
- Unity, which I have on my laptop and we also have access to throughout the school
- Illustrator, which I will use in the school
- Free assets found online
- Poster for final presentation

6. Budget
      Of all of the things that are in this proposal, this is the one that is subject to most change. As of right now we won't need to spend anything because the main software we're using, Unity, is free, and so is Illustrator. In the case that we would need to spend money, we are accounting for possibly spending $10-$50 on possible assets within Unity to make the game run smoother, but we are going to try and avoid this.

7. Proposed table of contents/Portfolio Outline
- Introduction to the project
- Roles/team members
- Methods
- Schedule/calendar
- Concept art/documents
- Scripts
- Photos and videos of project

- Video clip of playable demo
- Conclusions

CULMINATION PROJECT AGREEMENT
Submit signed copy to your ENT 4499 Professor
1. Student Name: John Colonna
2. Phone number: 646-904-3502
3. Email: colonna614@gmail.com
5. Title of the project.
Area 51 Raid Game / 9-20 Raid game

6. This Agreement is entered into between:
Student's name: John Colonna
Faculty advisor: Ryoya Terao
Technical advisor: Hosni Auji

1. This is an agreement whereby grade and credit for ENT 4499 will be awarded in return for specified project efforts. It is agreed that all work described in this Agreement will be completed as scheduled and within the cost total and other parameters as noted.
2. Student will meet with the technical adviser at least 3 times throughout the course of the project.
3. Failure to maintain the agreed-upon plan and schedule may result in grade penalties. Failure to submit the complete project and report by the scheduled date will result in failure of ENT 4499
4. You will provide both your advisor and technical advisor with a copy of your proposal which will include the following:
   - Project description
   - Methods
   - Project Deliverables
   - Schedule or calendar
   - Required Resources
   - Budget
   - Proposed table of contents/Portfolio Outline
   - Culmination Project Agreement (this page)

Technical Advisor's Statement: I agree to serve as Technical Advisor for this culmination project and will participate in the evaluation as appropriate.

_____Hosni Auji_____   02/06/2020
Technical Advisor Signature   Date

Student's Statement: I fully understand the Project description, the Procedure, and the agreed-upon contributions of my Technical Advisor and others who may be involved in this Agreement. I agree to meet all requirements and to request, in writing, any significant changes, which may become necessary during this Culmination project. Any such request will become valid and a part of this Agreement/Contract when accepted by my Faculty Advisor.

_____John Colonna_____   2-6-20
Student Signature   Date