**COMP 490L HWK1**

1- Project/Game Name: CodeEscape

The name of the game is based on how the in-game character must learn Java to escape from a dungeon.

2- Product Owners: Ernie Ledezma and Dani Odicho

Scrum Master: Tariq Rafiq

Team Members: Oscar Lugo, Jose Pech, Abel Lawal, Kasun Hettiarachchi, and J[oseph](https://moodle.csun.edu/user/view.php?id=15821&course=67604)

[Pena](https://moodle.csun.edu/user/view.php?id=15821&course=67604).

Professor James T. Bible might be brought on as a consultant for this project.

3- The objective of this project is to create a first-person game which will assist players in learning the basics of Java. The potential customers for this product will be students who are taking an introductory course in Java and for those who are interested in learning the language. Normally, Java is learned through the classroom or through online guides. This product can be very useful to the customer, since it offers a different and fun manner in which to learn a programming language.

4- There have been several requirements placed on the game being created:

* The game shall be made for the PC platform
* The game shall be made using the Unity Game Engine
* The game shall be programmed in C#
* The game shall have 10 puzzles/tasks for the player to complete
* The game should teach the gamer the basics of Java programming

These requirements will be expanded upon throughout the duration of the project. It is also possible that there will be more requirements added if time allows.

5- For the first semester, these tasks should be accomplished:

* Learn Unity, C#, and Github
* Create a functional first-person room with movement
* Create model for the character
* Make first complete puzzle for player to complete
* Finish at least 3 puzzles/tasks by the end of the semester

The first half of the semester will be used to learn Unity. This will include making a basic first-person room while testing interactions and collisions with the in-game environment. Once the project members are comfortable with the software, the assignments will move towards creating an actual complete puzzle room and a model for the playable game character. Several smaller tasks have already been divided among team members to be completed by the end of the first sprint:

* Kasun & Joseph:Create a room in Unity
* Abel: Do research on music & sound effects for the game
* Oscar & Tariq: Come up with puzzles/tasks for the rooms
* Dani & Jose: Do research on the UI
* Ernie: Implement a gun into Unity

The remaining 7 puzzles will be created during the second semester. It is believed that puzzles will be more easily created during the second semester since all of the learning and research will be accomplished during the first semester. The second semester will also be dedicated to improving the aesthetics of the game by working on the graphical aspect of the game. Cutscenes and voice acting may be added in the second semester.

6- Approximately 10 to 15 KSLOC will be created for this project. This is only an estimate, since it is possible that this amount be exceeded. Several Unity tools will be used to help us complete the project in addition to 2D and 3D graphics designing software.

7- Potential Risks are:

* Whether each project member has enough time to work on their assignment during the course of the sprints
* Finding adequate time to meet with team members outside of the lab sessions
* How long it will take for Unity and C# to be learned
* Whether 10 puzzles might be too much to complete
* Failure to address priority conflicts
* Failure to resolve the responsibilities between team members
* Making sure the project requirements don’t change drastically
* Make sure the communication between team members stays strong at all times
* Trying to find the perfect balance of difficulty for a beginner programmer

8- The project code and all the resources can be found by following this link: <https://github.com/eledezma/firstpersonpuzzle>

The Planning Spreadsheet and all the project documents can be found in the “doc” folder.