## **CPSC 304 Project Cover Page**

Milestone #: 1

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**Group Number: 72** 

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

## **Deliverables**

All the following items must be put together into a single PDF file.

- 1. A completed cover page (template on Canvas)
- 2. A brief project description answering these questions:
  - a. What is the domain of the application? Describe it. The domain of an application refers to the area of knowledge your application resides in. For example, if I am making an application for a hospital, the domain would be something like healthcare/patient management/logistics (it would depend on what the application is trying to do).

The domain of the application is gaming. It will be a video game where players will be able to choose one of the available missions to complete with the help of their desired NPC Ally. The mission will involve going to different map areas, and each area will have multiple battles with multiple enemies (and their minions). After all the battles in one area of the map is completed, the team will move on to the next area of the map or re-attempt the same area if they want to improve their performance. After the entire mission is completed, the stats of that attempt are added to the attempt history of that mission in the database.

b. What aspects of the domain are modeled by the database? In answering this question, you will want to talk about what your project is trying to address and how it fits within the domain. It is likely that in the process of answering these questions you will bring up examples of a real-life situation that the application could be applied to.

When the game starts, a player can choose which mission to attempt. The PlayerRecord stores the total points the player has earned on their missions so far, which determines their overall ranking. It also stores the data for each mission, which includes the completion status (number of areas in that mission completed) and attempt history. The stats for each attempt (amount of time taken to finish, amount of rewards points earned) at a Mission is added to that Mission's attempt history. In addition, the attempt history for each area is also included in an attempt of a Mission.

- 3. Database specifications: (3-5 sentences)
  - a. What functionality will the database provide? I.e., what kinds of things will people using the database be able to do. CPSC 304: Project Description Milestone 1: Project Proposal and ER Diagram Page 5 of 6

A player's PlayerRecord is updated every time after they complete a Mission. They can re-attempt a previous mission, and the new stats achieved from that attempt will be added to the database. Players can also see their highest score so far for any previously attempted mission, which will be updated accordingly after every attempt, allowing the player to track their improvements over time. This also allows the game developer to analyze player performance and make changes to the gameplay content according to the data analytics. They can also generate a seasonal ranking for all current players of the game.

- 4. Description of the application platform: (2-3 sentences)
  - a. What database will your project use (department provided Oracle, MySQL, etc.)? See the "Project Platforms" section of this document for more information.

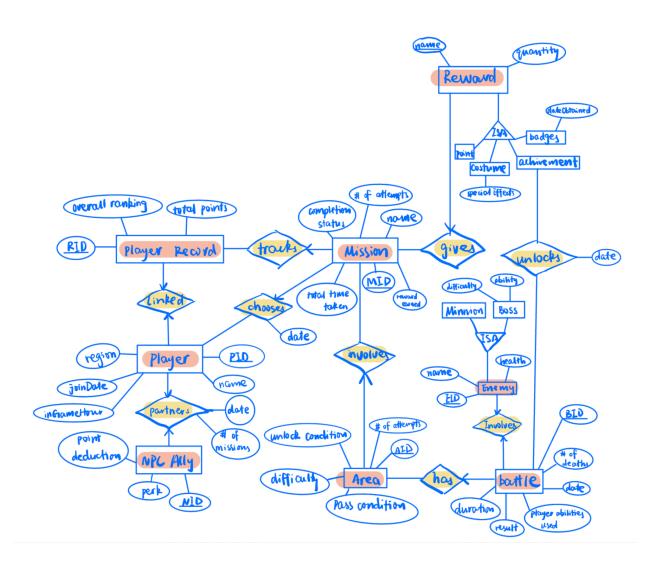
Our group will use the department provided Oracle server.

- b. What is your expected application technology stack (i.e., what programming languages and libraries do you want to use)? See the "Project Platforms" section of this document for more information.
  - i. You can change/adjust your tech stack later as you learn more about how to get started for the project via latter tutorials.

We will use Java and PHP with Oracle.

5. An ER diagram for the database that your application will use. It is OK to hand-draw it but if it is illegible or messy or confusing, marks will be taken off. You can use software to draw your diagram (e.g., draw.io, GoogleDraw, Microsoft Visio, Powerpoint, Gliffy, etc.) The result should be a legible PDF or PNG document. Note that your ER diagram must use the conventions from the textbook and the lectures. For example, do not use crow's feet notation or notation from other textbooks).

a. Please limit your diagram to a letter size page (8.5 x 11 inches). If you require additional space, talk to your project mentor beforehand as this might mean that your project is a bit more complicated than what we expect.



- 6. Your E/R diagram should adhere to the expectations listed above.
- 7. Other comments, as appropriate, to explain your project. Check the Milestone 1 assignment on Canvas for the rubric. Refer to the syllabus for information on late submission/penalty rules.