**Classic Arcade Game**

CMSC 495 6382

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Technical Plans and Specifications

Instructor: Shanna Kuchenbecker

Group 2: John Borra, Sarah Drury, Oanh Woodworth, Yeng Veng, and Thayne Emery

**Revision Log**

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| --- | --- | --- | --- |
| **Revision** | **Date** | **Editor Name** | **Description** |
| 1 | 01/21/2023 | Oanh | Create the original version of Classic Arcade Game Plans and Specifications document |
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1. **Introduction**

This document outlines the project plan for the development of Classic Arcade Game: Pacman. Pacman is one of the most famous arcade games that is originally from Japan. The game requires players to navigate the yellow character Pacman through a maze to eat these white points while avoiding the ghosts that chase him. This 2D game application creates a simple Pacman game clone.

1. **Requirement Specifications (Desired Features)**

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| --- | --- |
| **Requirement** | **Description** |
| No.1 | This app will display a welcoming message when the user runs it and allow user to enter his name. |
| No.2 | This app will have a “Start to play” button to start the game. |
| No.3 | This app will allow user to navigate Pacman in the maze to collect points and run away from the ghost. |
| No.4 | This app will keep track on the points collected and display the score on the bottom right of the screen. |
| No.5 | This app will contain a few big points located around the maze. |
| No.6 | If Pacman is caught by a ghost, he loses a live, and this app will display a message banner and let user know they have 2 lives remaining. |
| No.7 | If user only has 1 live remaining and Pacman gets caught, it’s game over. The app will then give a report of their score and options if the user wants to restart the game or exit. |

1. **Test Scenarios**

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| --- | --- |
| Scenario no. | Description |
| 1 | Validate if the user is able to open the application. |
| 2 | Validate if the user is able to enter his name. |
| 3 | Validate if the game starts after “Start to play” button is clicked |
| 4 | Validate if the user is able to navigate Pacman in the maze as expected. |
| 5 | Validate if the score is recorded correctly. |
| 6 | Validate if the number of lives is reduced by one after Pacman gets caught by a ghost. |
| 7 | Validate if the game is over after Pacman loses all his lives. |
| 8 | Validate if the game app provides options to restart or exit |

1. **System Specifications**
2. **Hardware**

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| --- | --- |
| Operating System | MacOS Monterey |
| Processor | 1.6 GHz Dual-Core Intel Core i5 |
| Memory | 8GB |

1. **Software**

Latest version will be updated through a repository at GitHub. Link to the project is:

1. **Development Responsibilities**

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| --- | --- | --- | --- |
| **Task Contribution** | **Start Date** | **End Date** | **Member Name** |
| Project Plans and Specification   1. Requirement Specifications 2. Test Scenarios 3. System Specifications 4. Development Responsibilities | 01/20/2023 | 01/24/2023 | Oanh  Oanh |
| User’s Guide and Test Plan | 01/25/2023 | 01/31/2023 |  |
| Design | 02/01/2023 | 02/07/2023 |  |
| Phase I | 02/08/2023 | 02/14/2023 |  |
| Phase II | 02/15/2023 | 02/21/2023 |  |
| Phase III | 02/22/2023 | 02/28/2023 |  |
| Final Report | 03/01/2023 | 03/07/2023 |  |