

Misr International University

Course Code & Title: SWE211 - Object Oriented Programming

Semester: Fall 2024

OOP Project - Individual Tasks

#	Student ID	Student Full Name
1	2023/04145	Seif Mohamed Fouad Makled

Tasks:

In our *Plants vs. Zombies* project, I contributed to several key aspects of the game. I implemented the sun counter, sunflower functionality, and sun animations, ensuring a seamless and visually appealing in-game resource system. I designed and developed the game over and game win screens, creating engaging feedback for players upon completion or failure. Additionally, I worked on the card mechanics, ensuring smooth dragging and intuitive placement of plants, giving players a clear visual indicator of where plants could be deployed. My involvement extended to the overall logic of the yard, contributing heavily to its functionality and ensuring consistent gameplay mechanics. I also participated in the design and implementation of the main menu, enhancing the player's initial experience.

#	Student ID	Student Full Name
2	2023/01480	Ramy Ahmed Shawky Slait

Tasks:

In our *Plants vs. Zombies* project, I was responsible for implementing the generation and animation of zombies, ensuring their movement and behaviors added challenge and excitement to the game. I developed the shovel functionality, allowing players to remove plants strategically, and implemented the lawnmower mechanics and animations, adding a crucial defensive feature to the gameplay. Additionally, I worked on customizing the cursor for a more immersive experience and designed the game-winning condition, providing players with clear feedback when they achieved victory. These contributions enhanced both the functionality and overall player experience.

#	Student ID	Student Full Name
3	2023/01277	Omar Alaa Attia Dessouky

Tasks:

For our Plants vs. Zombies project, I took charge of the auditory experience, designing original soundtracks and sound effects that brought the game to life. This included crafting sounds for main menu buttons, unique audio cues for different plant actions, and distinctive zombie sounds. Additionally, I implemented the duration bar and wave mechanics. These contributions were essential in crafting a polished, engaging gameplay experience.

#	Student ID	Student Full Name
4	2023/00428	Mohamed Hisham Abdallah Elziat

Tasks:

In our Plants vs. Zombies project, I was responsible for the design and implementation of the card mechanics, plant interactions, and collision handling systems. I developed the card system that allowed players to strategically deploy plants, ensuring smooth integration with gameplay mechanics. For the plants, I programmed their unique behaviors and interactions, bringing diverse strategies to the game. Additionally, I handled collision detection, ensuring accurate responses between plants, zombies, and projectiles, which were crucial for maintaining balance and fairness in gameplay. These elements added depth and functionality to the overall experience.

#	Student ID	Student Full Name
5	2023/07891	Yehia Hany Mostafa Shorim

Tasks:

In our *Plants vs. Zombies* project, I contributed significantly to core systems and user interface design. I implemented file operations, including handling and loading player data to and from files, ensuring smooth user data management. I also designed and developed the main menu GUI, incorporating features such as game start, scene switching, backgrounds, button handling, and account management functionalities (Sign in, Sign up, Logout, and Delete account). Additionally, I implemented level selection and progression, level-ending sequences, and integrated the Dave character into the menu system. Furthermore, I was responsible for the UML implementation, creating detailed diagrams to structure and document the system's design comprehensively. These contributions were essential in creating a well-organized gameplay experience.

