

Forman Christian College

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COMP 111 (A)

Documentation for pygame:

1. I imported the necessary modules, initialized Pygame, and set up the game window.
2. I loaded the images for different game elements such as the player's spaceship, enemy ships, lasers, asteroids, and the background.
3. I defined a **Laser** class to represent the lasers shot by the player and enemies. The class handles laser movement, collision detection, and drawing.
4. I defined a **Ship** class as a base class for the player and enemy ships. It contains common attributes and methods such as health, cooldown, shooting, and collision detection.
5. I defined a **Player** class that inherits from the **Ship** class. It represents the player's spaceship and includes additional features such as score tracking, drawing the health bar, and movement control.
6. I defines an **Asteroid** class to represent asteroids in the game. It includes methods for movement, collision detection, and drawing.
7. I defined an **Enemy** class that inherits from the **Ship** class. It represents enemy ships and includes specific attributes and shooting behavior.
8. I defined a **PowerUp** class to represent power-ups in the game. It includes methods for movement, collision detection, and drawing.
9. The **main** function is the main game loop where the game logic is executed. It handles player input, updates the game state, and redraws the window.
10. There is a **main\_menu** function that displays a simple main menu and starts the game when the player clicks.
11. Finally, you can call the **main\_menu** function to start the game.