

Requirements

SSON Requirements

- The game works
- Single Player game

User Requirements

ID	Description	Priority
UR_UNIQUE_BOATS	In all the different boats, they must all be unique in their own ways. Acceleration, Speed, Maneuverability and Robustness. Create boats based on these. Each boat also has its own "Stamina" for team, which reduces over time	High
UR_LANE	Stay in your lane, or you get a penalty of X seconds for the amount of time you spend out of it	High
UR_MAP	The map through which players race includes obstacles	High
UR_DAMAGE	Colliding with obstacles damages the boat	High
UR_DIFFICULTY	Each leg of the race becomes harder	High
UR_BOAT_CONTROLS	The boat responds to the controls inputted by the user in a comfortable way	High
UR_MARKET	Game appeals to prospective students of the University	Medium
UR_UI	Have a clear UI that is easy to understand and see what corresponds to what	High
UR_MENU	The game has a main menu screen	High

System Requirements

FR Table

ID	Description	User Requirements
FR_STAMINA	Each team gets tired and slower as the race progresses	UR_UNIQUE_BOATS
FR_STATS	Define each stat and how they impact the boat and each other	UR_UNIQUE_BOATS

FR_ASPECT	Each boat has a different aspect	UR_UNIQUE_BOATS
FR_OBSTACLES	Have the different obstacles appear on the course randomly. Each obstacle has their own damage property to the boat	UR_MAP UR_DAMAGE
FR_PENALTY	Get a penalty for time spent outside your lane	UR_LANE
FR_LANE	Determine if a boat crosses out of it's lane	UR_LANE
FR_COLLISION	Detect a collision between a boat and an obstacle	UR_DAMAGE
FR_HEALTHBAR	Each boat has a health bar that decreases when obstacles are hit	UR_DAMAGE UR_UI
FR_MINIMAP	The player can see a minimap in one of the corners of the screen	UR_MAP UR_UI
FR_CONTROLS	The player's movement should be based on the mouse position on the screen	UR_BOAT_CONTROLS
FR_VARIABLE_CONTROLS	The players ability to turn, as well as its speed is based on stamina	UR_BOAT_CONTROLS

NFR Table

ID	Description	User Requirement	Fit Criteria
NFR_FAST_CONTROLS	When inputting the direction, response from the game should be instant	UR_BOAT_CONTROLS	In <0.5 seconds response to an input, if not lower