Olentangy Rapids
Design Document

Location:
Browning Amphitheater

(By Mirror Lake on OSU Campus)

Narrative:

There was a large storm that led river voyagers down treacherous Olentangy white water rapids, which caused them to wreck their boat on a small island in the middle of the river. As the storm progresses, the water quickly rushes towards the players while bringing pieces of their wrecked boat. Thankfully they are on relatively high ground, but the water is rising. They need to build a raft before the water floods their little island!

Objective:

Players on the stage work together to keep the water from "flooding" the stage by gaining a set number of points (by collecting items) before the water floods the stage. They must avoid obstacles and spillage and collect desirable objects/key items for points to slow the rising water.

Mechanics

Beginning of game

Players check in at a kiosk located on the side of the stage where they read instructions then press 'start' button when they're ready to play

Progression of environment

- Water is slowly rising and filling up the stage
- Helpful objects (wood) pop up around them on land
- As players collect points, their "boat" becomes more complete

End of game

The game ends either when the water fills the stage or when the stage players collect enough points to finish building their ship, whichever occurs first. Players win if they complete their boat before the water fills the stage.

Players and respective actions

Stage Players:

Stage players are working together collaboratively to collect items that will reduce/slow the spread of the water onto stage space, while also accumulating points before the water overtakes the stage in order to build their boat and win the game.

- Players collect an item and gain points by stepping on it on projection
    - Key items accumulate points which represent the collection of boat parts to rebuild boat (building the boat before the water fills the stage is how stage players win)
    - Other items slow the spread of the water on the stage (buys more time)
- Players are 'injured' when hit by hindering objects
    - objects they pick up are worth less points
    - OR Are immobile for x amount of time
- Players are 'injured' when they step on water
    - Red flashing circle appears around the players if they touch water
    - Have to 'recharge' at life vest at back (north) for x time
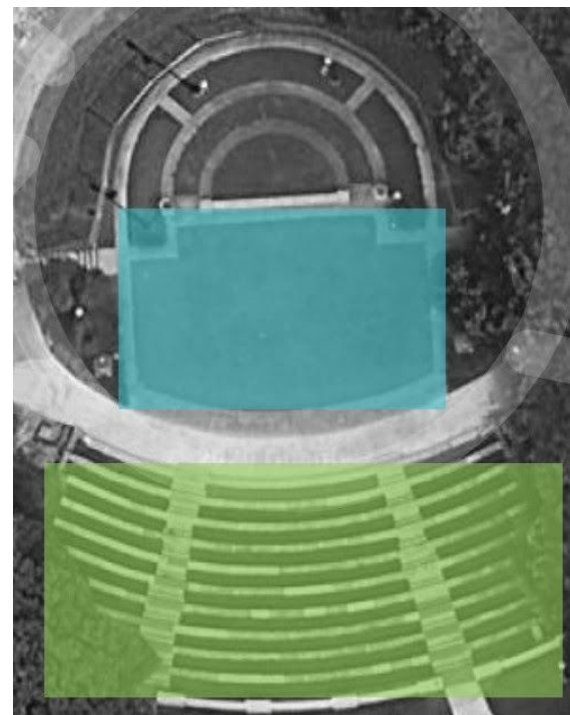
Stair Players:

Bystanders in the stands can passively and/or actively participate in the game. Stair players' objective is to **make it more difficult** for stage players to win. Stair players can "throw" obstacles down the stairs at stage players.

- Stair players make certain motions/actions to "throw" obstacles down towards stage players

Objects and Obstacles:

Key Items:

Key items are generated onto the stage area by the game, and must be collected to win the game
- Collecting key items advance the rebuilding of the ship and each have a set point value
- In order to win, stage player must collect enough points (completing the ship) before water fills the entire stage

Desirable Items:

Desirable items are generated onto the stage area by the game or thrown by stair players, and can be acquired to slow the spread of the water on the stage/ enhance efficiency of stage players

Obstacles:

Obstacles are "thrown" onto stage by stair players when they make a specific pose (ex. Arms in star pose), and hinder the abilities of stage players if they come into contact
- If stage players come into contact with obstacles, they will be 'injured'
- Obstacles will be projected as 'falling' down stairs/ 'rapids' onto stage

Water:

Water spills down from stairs onto the stage area, slowing filling it completely (think spreading or a tide coming up the beach, not depth). Stage players must avoid the water, once the water overtakes the whole stage, the game is over
- Water serves as the time mechanic in the game
- Water will be projected onto actual stairs (like a waterfall) and will seep onto stage
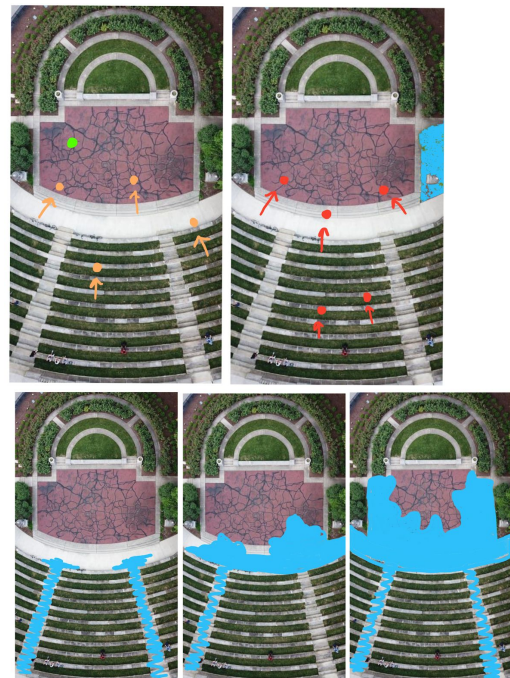
- The expansion of the water can be slowed/reduced when stage players collect desirable items, but never stopped completely or reversed

Aesthetics

Aesthetic inspiration

Environment

watery, rapids, debris, wreckage, life buoy

Stairs: Waterfalls/rapids flowing down onto stage
Stage: Elevated dry land/rocky land area

Key Items

KEY ITEMS	ITEM INSPIRATION IMAGES
Wooden planks for boat	
DESIRABLE ITEMS	
Buckets for lowering water level	
Jewels	
Coins	
OBSTACLES TO AVOID	
Dynamite	
Squid	

Audio component?

Technology

This technology is a primary constraint of the game. Cost and feasibility has been instructed to be ignored.
- Players' locations on stage are tracked through an overhead depth sensor.
- Projection Mapping technology for stage and stairs area (optimal usage at night).
- Motion sensors for stairs area to detect involvement.

Scalability

Max amount of stage players determined by social distancing guidelines.

Potential Features to add

- Difficulty levels
- Different themes
- App or kiosk at which you begin game, can see high scores for best times

Obesity:

Our game engages players through different levels of physical activity. Stage players must stay constantly active to move from place-to-pace to avoid obstacles and collect objects. Stair players have more freedom in choosing how active they want to be. Certain motions will trigger the falling of specific obstacles.

Overall - players can decide how physically active they want to be. Additionally, we want our game to encourage players to come back and play again to motivate them to continue being active

Link to Miro Board:

https://miro.com/app/board/o9J_IYsIF8U=/