

Lake Runner SA



By Logan Finley, Zaiden Espe, Nathan Nguyen,
Jenna-Luz Pura, Ian King, & Akhil Karri



Lake Runner

- A “Reverse platformer”
 - The Player controls the environment instead of a character
- The Surfer
 - Non Playable Character (NPC)
 - Runs in a constant direction with constant speed
 - On a mission to swim in the biggest lake of all (the Ocean)
- The Player
 - The user of the game
 - Draws platforms to help or protect the Surfer
 - Uses items to enhance the Surfer’s abilities
 - Main goal is to keep the Surfer from getting bummed out



Storyboard





[ACTION]

The main menu can initiate gaming, load the desired level, display controls, and be used to adjust settings.

[NOTES]

The player can choose to play or change some settings, load his favourite level from the menu screen. The HUD will show his health and other resources he has or has collected in real time during his gameplay.



[ACTION]

The surfer chooses the next lake to run to.

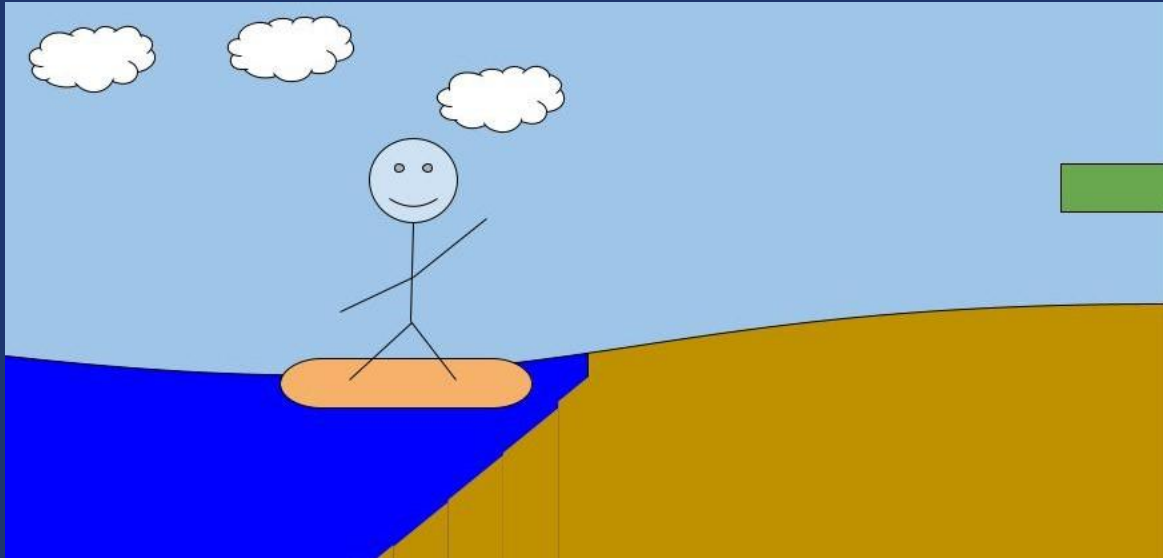
[NOTES]

There is only a single path the Surfer can run.



NetCredit

Storyboard 2

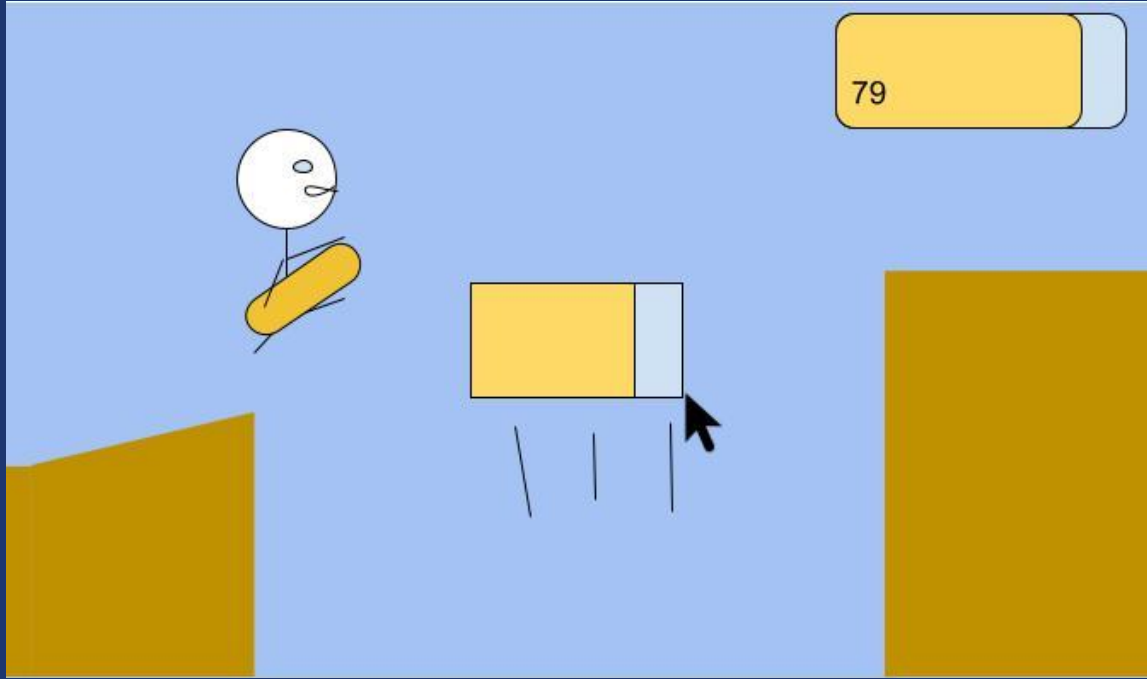


[ACTION]

The Surfer hits shore and must begin his run to the next body of water.

[NOTES]

Premade levels will be loaded ahead of time, Infinite Runner levels will be loaded constantly starting from this point.

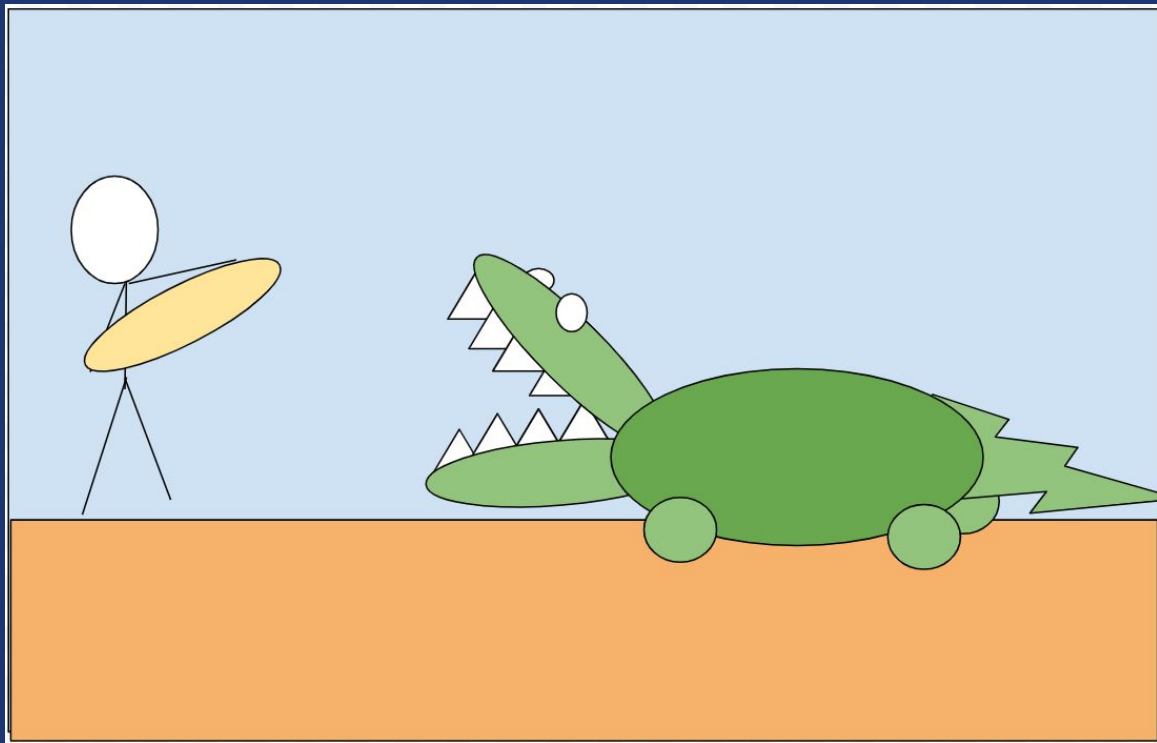


[ACTION]

The surfer jumps up towards a platform just drawn by the player.

[NOTES]

The platform resource bar is somewhat depleted by the action. A platform drawing and jump sound effect play.



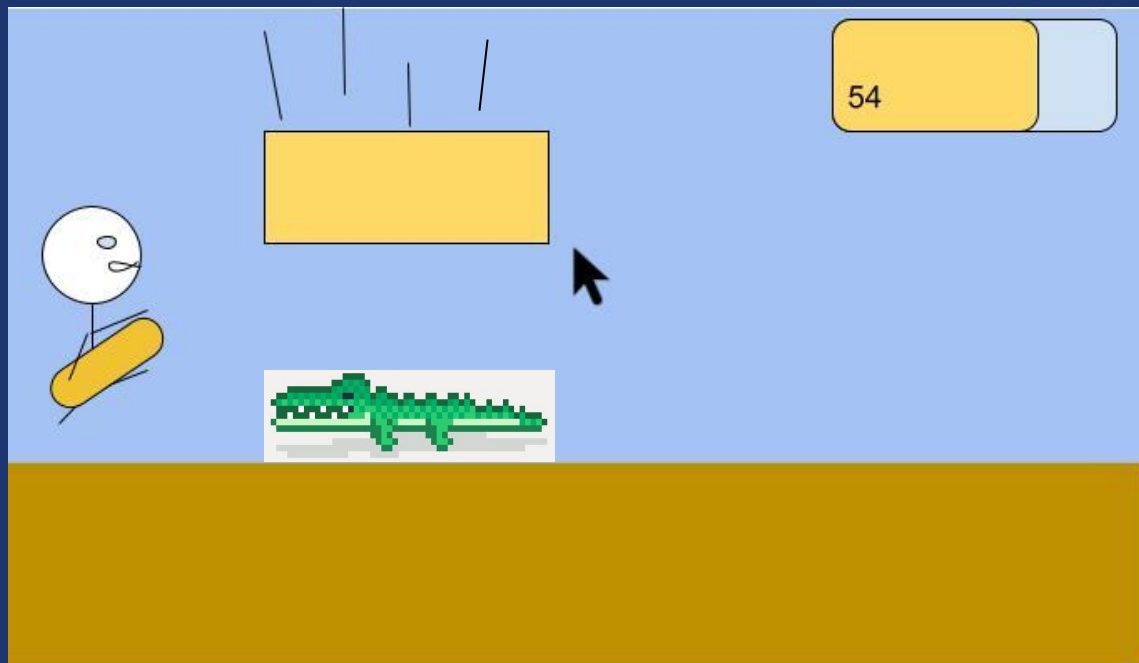
[ACTION]

The Crocodile approaches the surfer.

The player must find a way to protect the runner.

[NOTES]

The crocodile makes noises. If the runner runs into the crocodile, he will take damage.

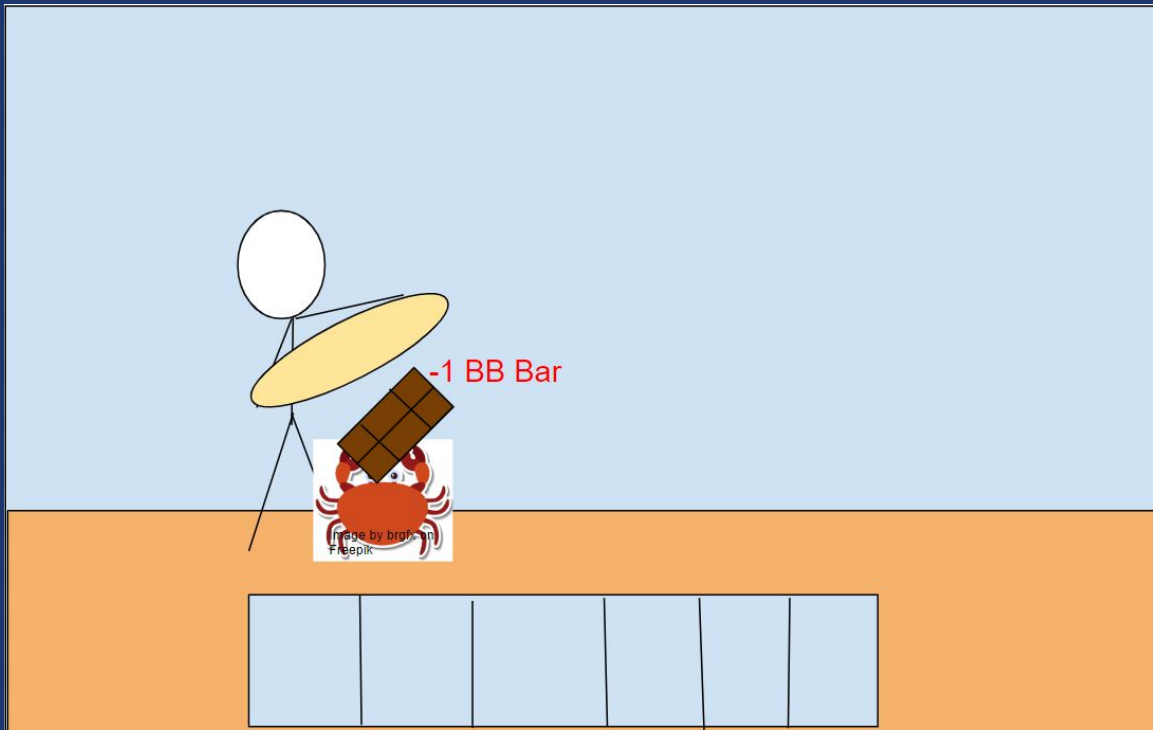


[ACTION]

The player draws a falling platform to crush the dangerous crocodile.

[NOTES]

A drawing sound, falling sound, and crushing sound are played. The resource bar is depleted more than the last platform because it is larger.

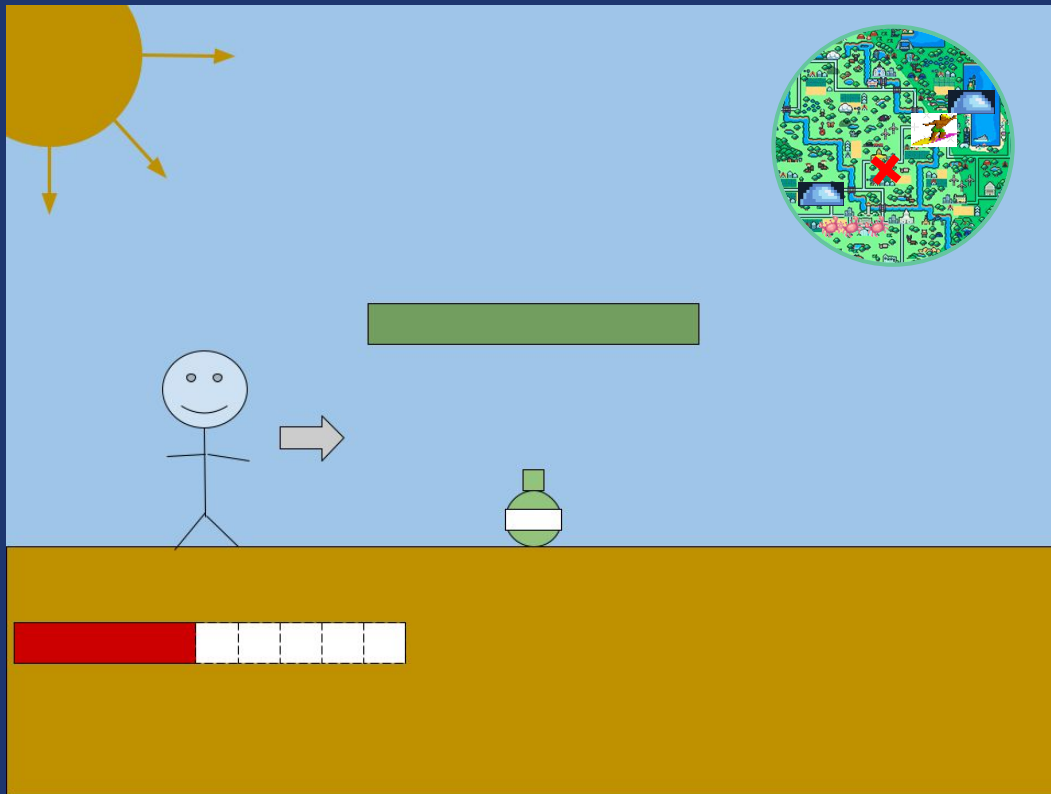


[ACTION]

The runner runs into a crab, and the crab steals a random item from the inventory.

[NOTES]

The crab makes sounds, and then the runner makes a sound signifying a loss of item, the item pops out of the player and appears on the crab.

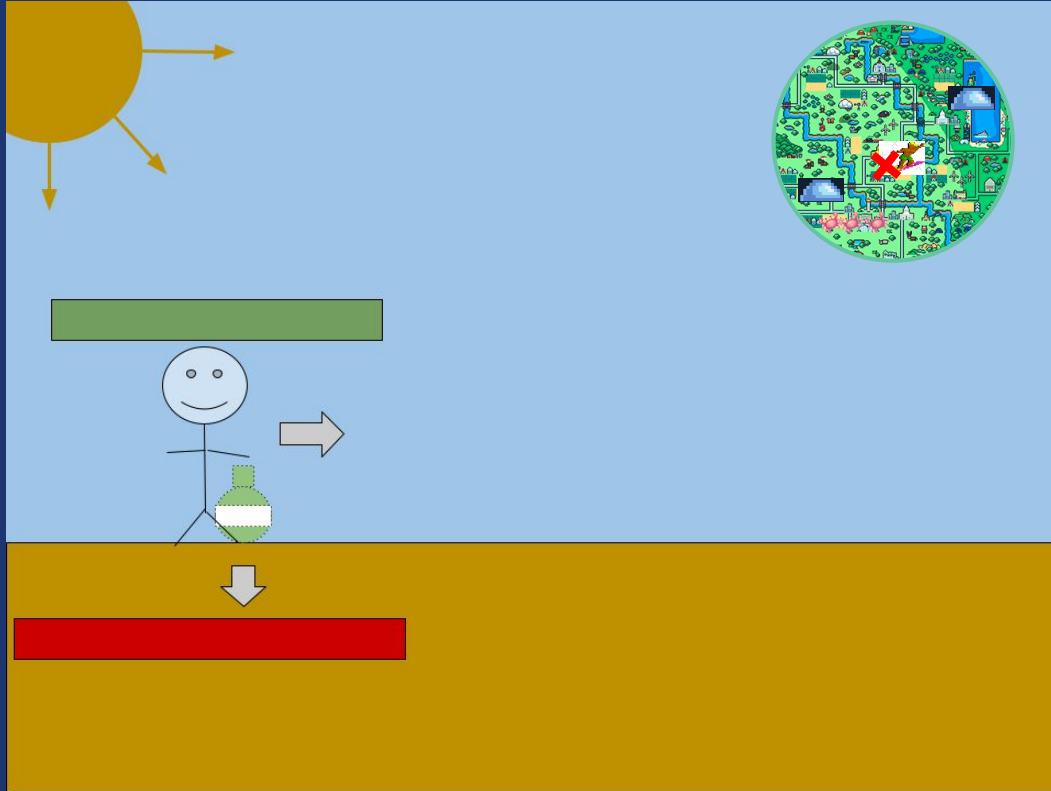


[ACTION]

The Surfer is running toward an Aloe Vera jar. The sun is lowering his health. An 'X' mark appears on the map

[NOTES]

A fire sound effect will play while the character is taking sun damage.

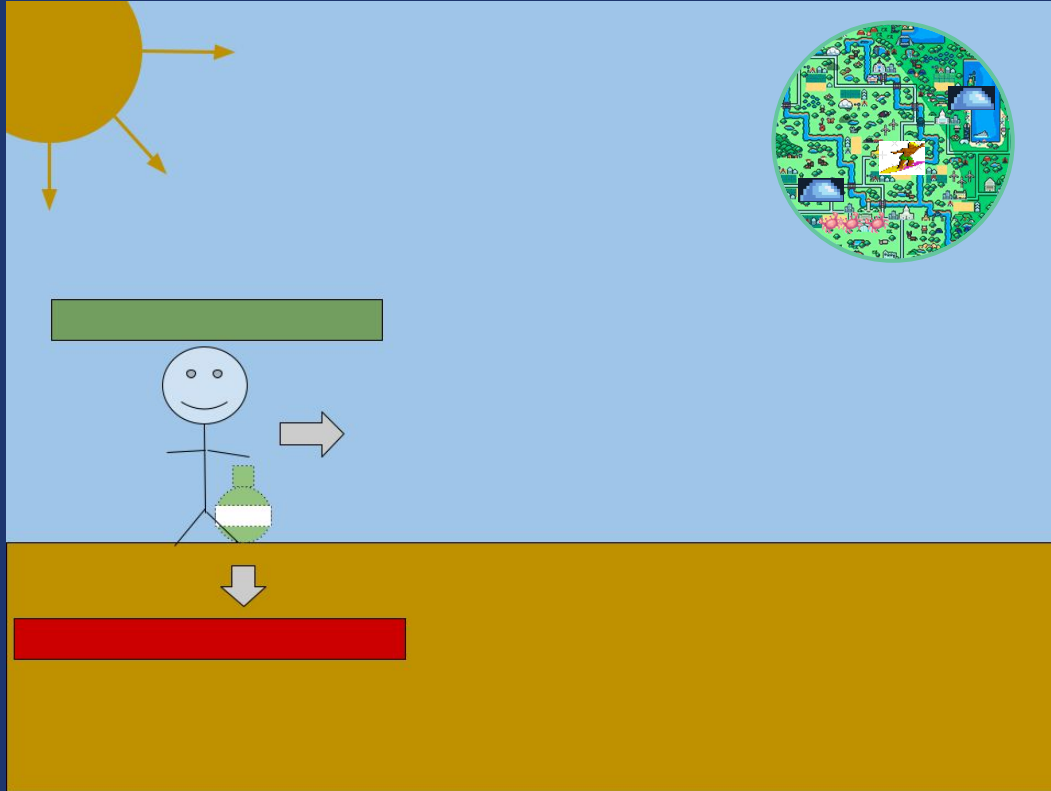


[ACTION]

The Surfer has picked up the Aloe Vera and gained health.

[NOTES]

A unique sound effect will play on item pick up.



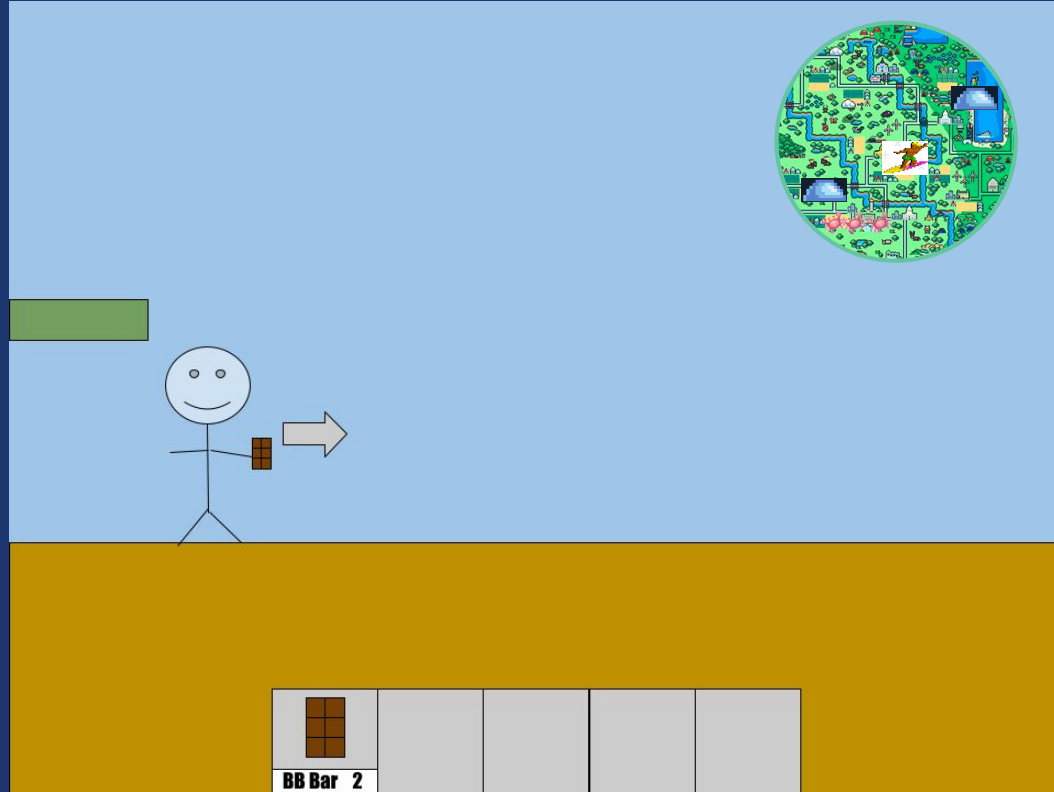
[ACTION]

The Surfer has picked up the Aloe Vera and gained health. The 'X' mark has disappeared.

[NOTES]

A unique sound effect will play on item pick up.



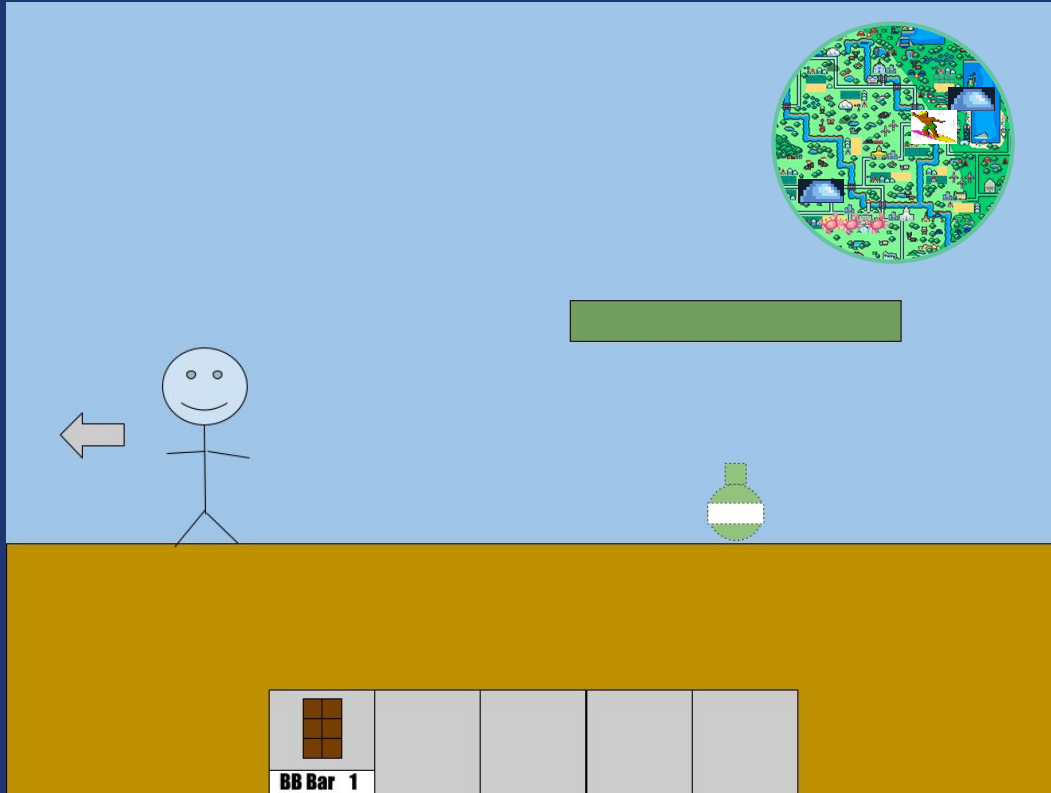


[ACTION]

The surfer has two Brain Blast Bars and is about to eat one.

[NOTES]

An eating sound effect will play on consumption of a BB Bar.



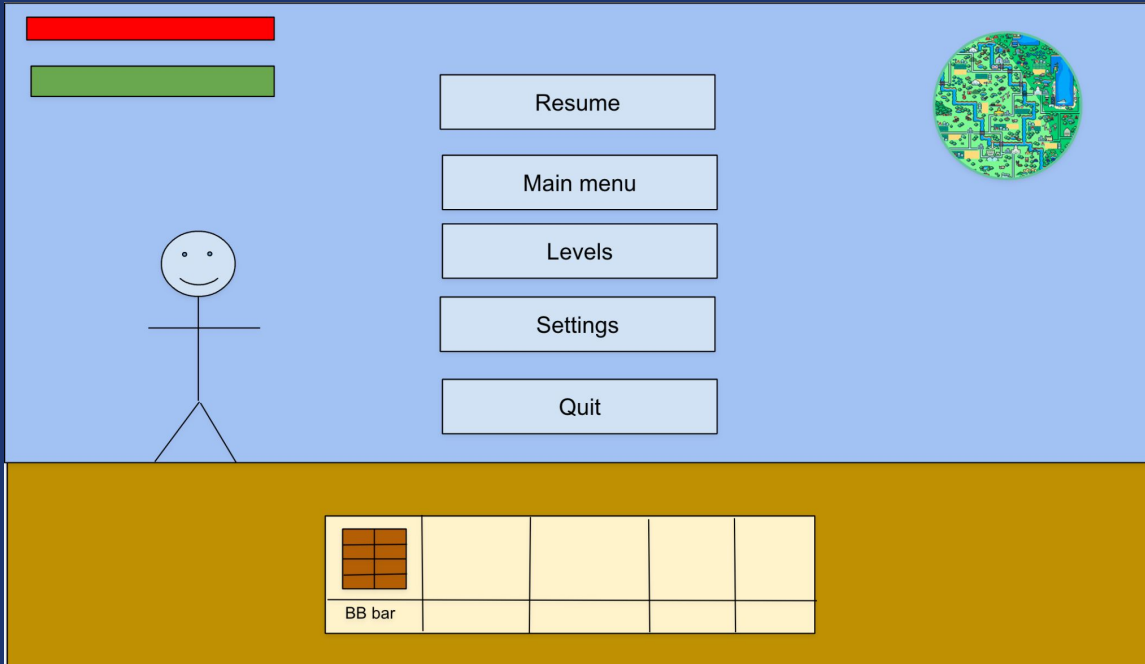
[ACTION]

The surfer has eaten a BB Bar and his direction has now reversed.

[NOTES]

The game music will be played in reverse while The Surfer is running backward.





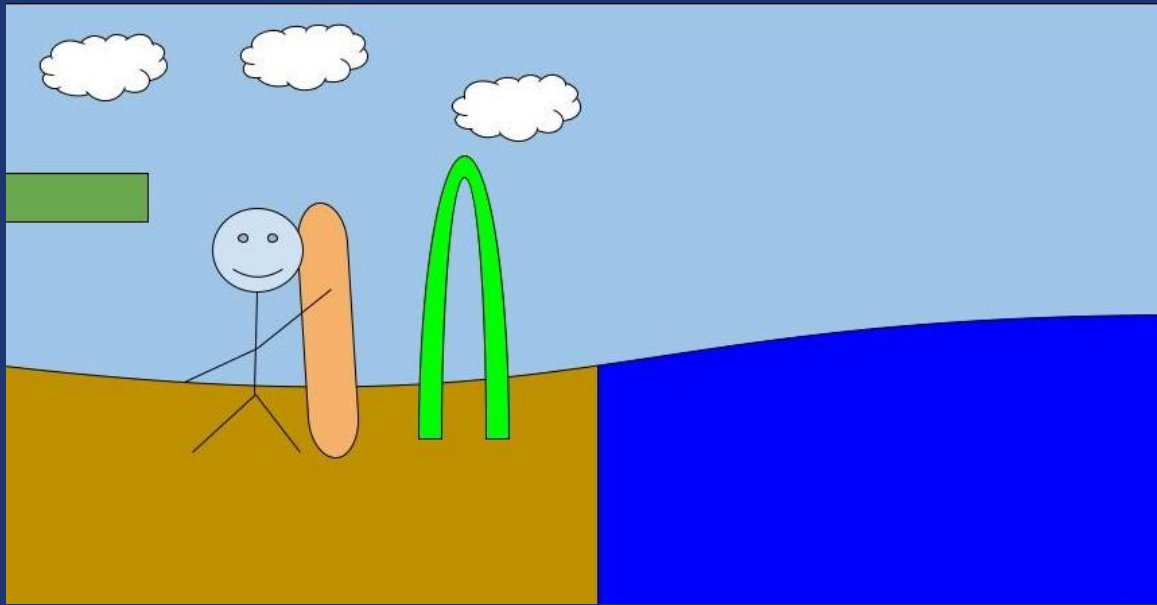
[ACTION]

In the midst of the game, the pause menu displays the same options as the main menu.

[NOTES]

The pause menu allows the player to restart, load a certain level, or modify settings, as well as see his health and other resources more clearly.





[ACTION]

The Surfer passes the finish line and surfs on the body of water until it's time to start the next level!

[NOTES]

No finish line will be generated in Infinite Runner mode.



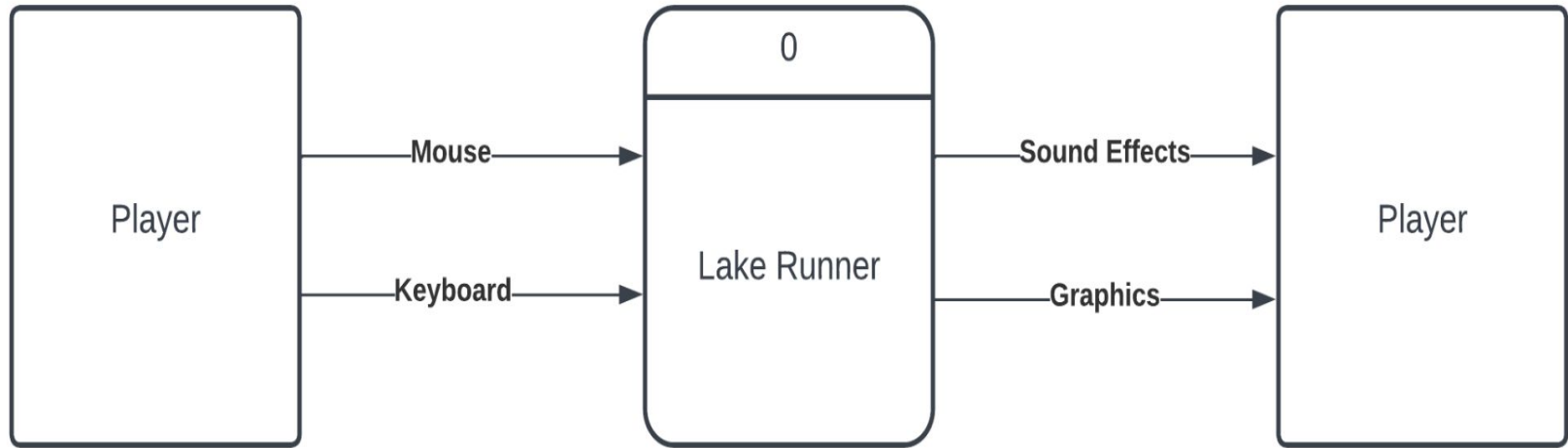


[ACTION]

The Surfer arrives at his long-desired destination: Malibu Surfrider Beach, California

Context Diagram





The Vision

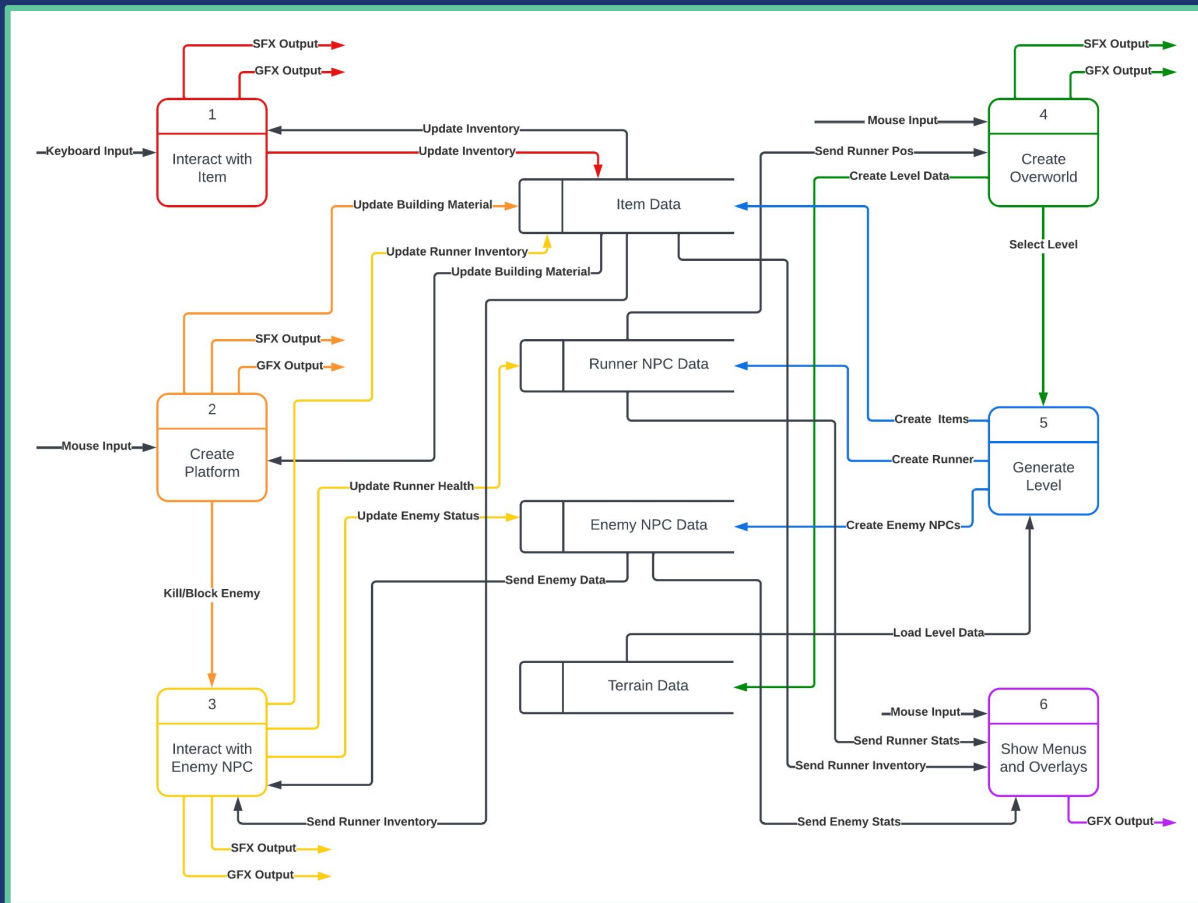




Diagram 0



1. Logan
2. Zaiden
3. Nathan
4. Jenna
5. Ian
6. Akhil



Global Use Case Diagram



Player



Logan

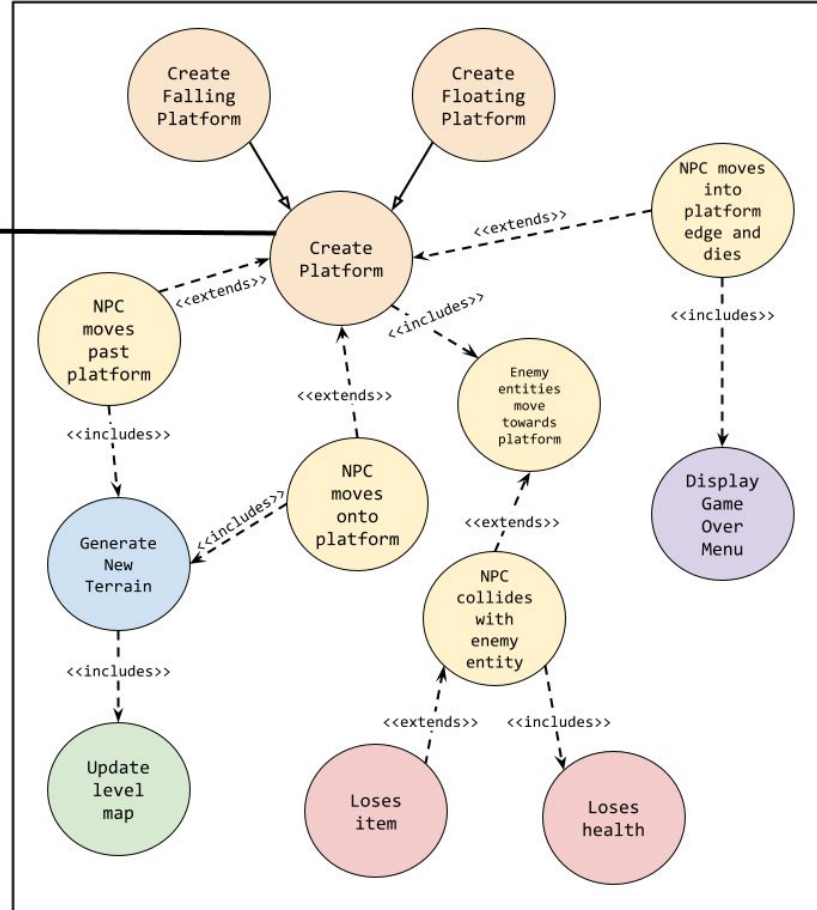
Zaiden

Nathan

Jenna

Ian

Akhil





CLEAR LAKE STUDIOS

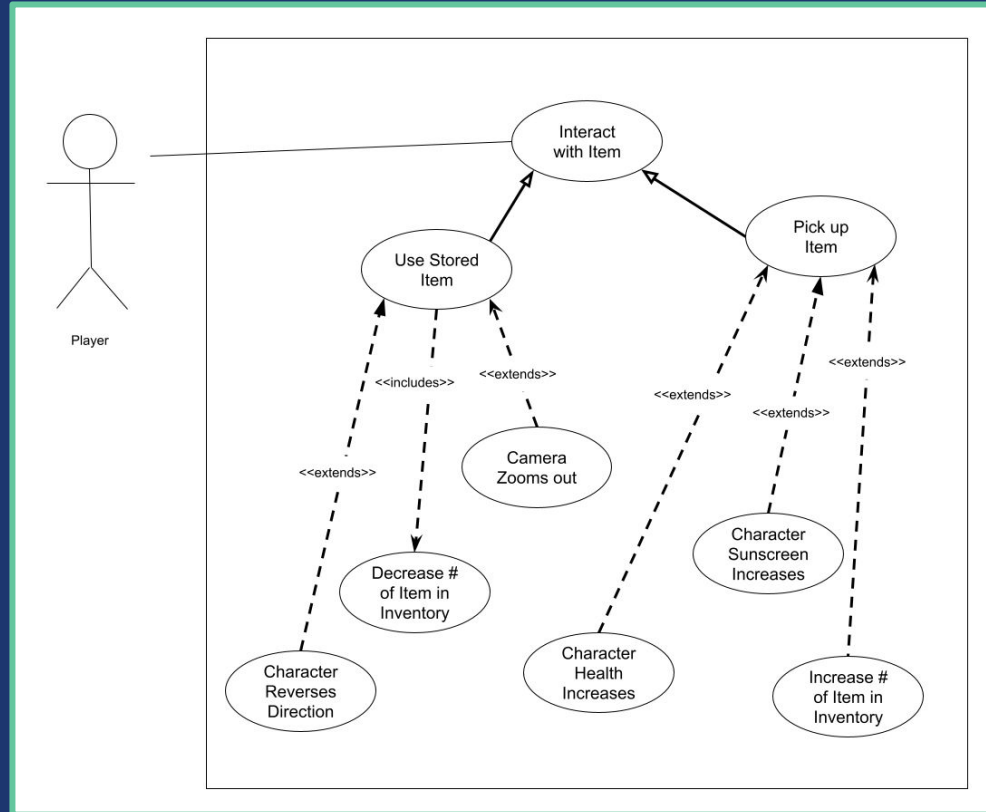


LOGAN

Feature: Items, Collectibles

- Brain Blast Bar
 - Reverses the direction of the runner for a period of time
- Sunglasses
 - Zooms the camera out so more of the map is visible
 - Gives the player unlimited building material
- High priority
 - May be too difficult without
- Medium complexity
 - Lots of interactions with other features (UI, Runner NPC, etc)

Use Case Diagram



Questions?



CLEAR LAKE STUDIOS



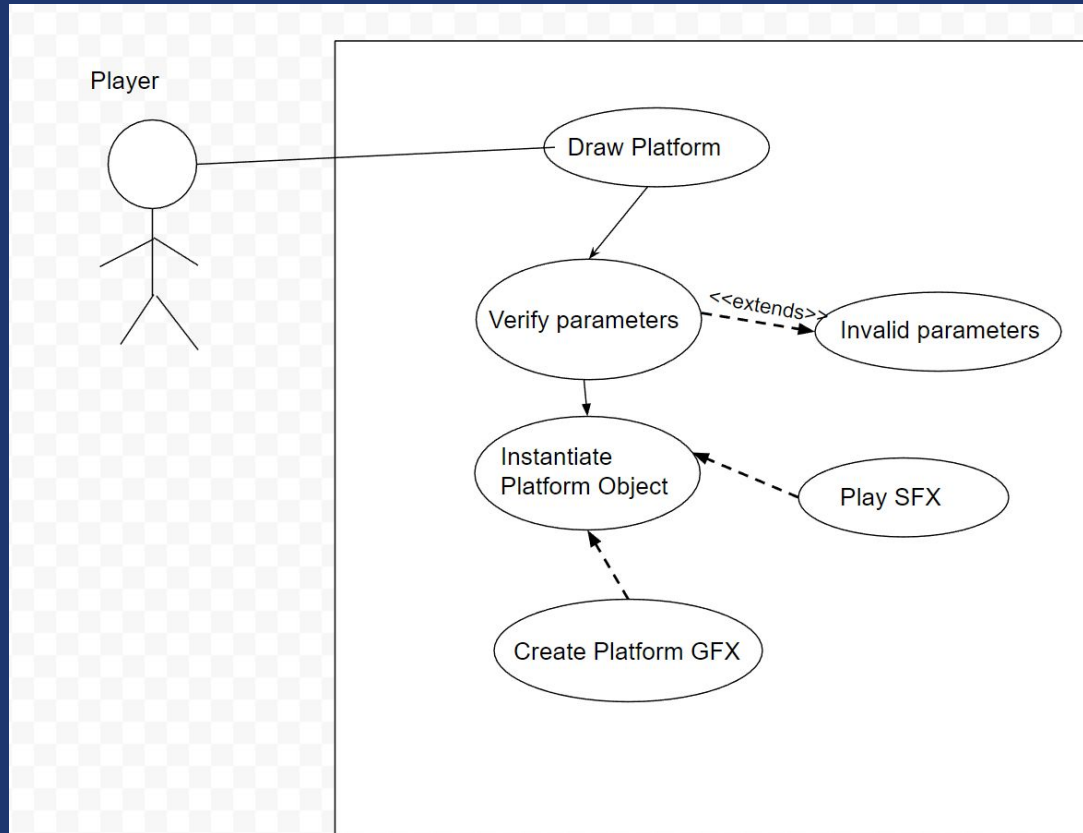
ZAIDEN

Feature: Platform Drawing

- Platform drawing system
 - Draw rectangles on screen that actualize as platforms
 - Must check validity of each platform drawing (overlap, size, position)
 - Track resource to draw platform by area
- Floating platform
 - Float in sky. useful for crossing empty or dangerous terrain, blocking out sun
- Falling platform
 - Fall down. can crush enemies, other interesting mechanics possible

High priority system. Is main mechanic for user interaction with game. Is necessary to perfect to create interesting, difficult, and strategic game.

Use Case Diagram



Questions?



CLEAR LAKE STUDIOS

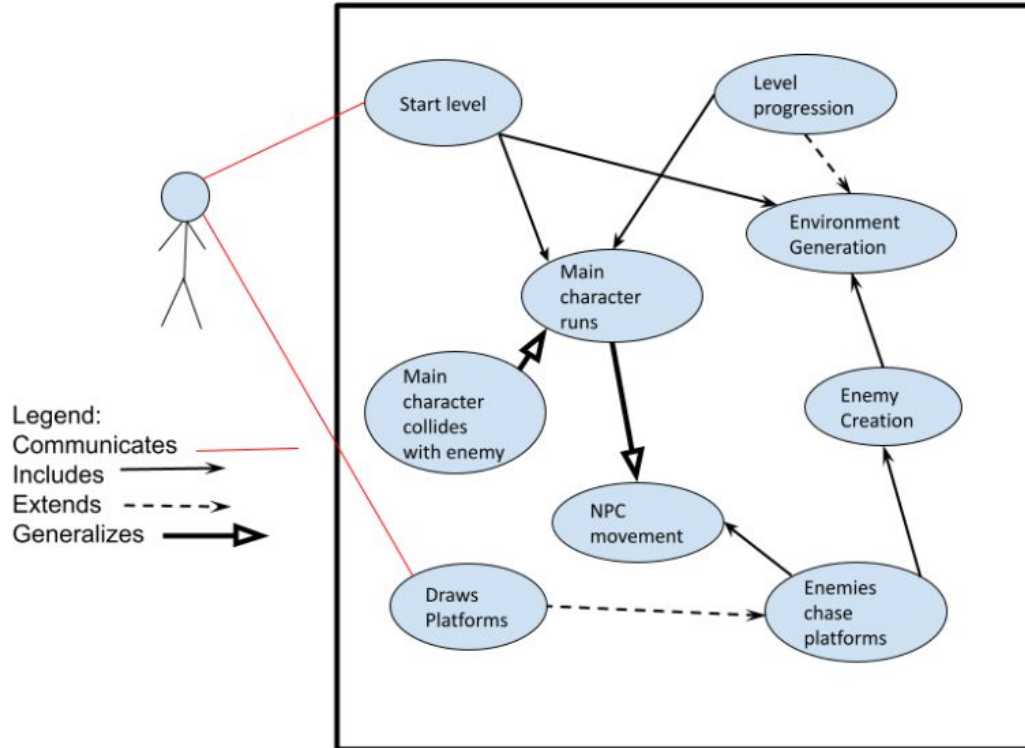


NATHAN

Feature description: NPCs

- This feature covers NPC animations, behavior and interactions. This includes Enemies as well as the main runner and his actions as he traverses the level.
- This is a high priority feature for the runner, and medium priority feature for the other enemy NPCs
- This feature has a medium complexity compared to the other features. The enemy AI and runner behavior may have some complex coding solutions.

Use Case Diagram



Questions?



CLEAR LAKE STUDIOS

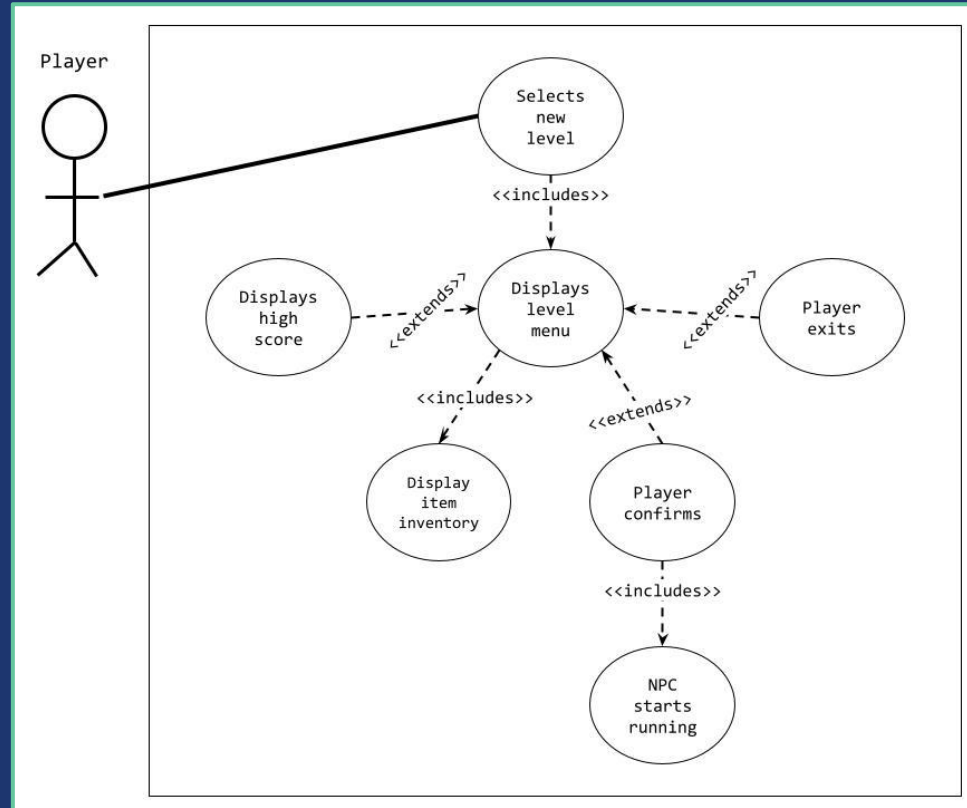


JENNA

Feature: Overworld & Inter-level Map

- Overworld Mapping System
 - Overview of all levels
 - Outlines the order of levels
 - Displays high score (if any)
 - Displays current inventory
- High priority
 - A comprehensive way to advance between levels
- Low complexity
 - Loads each level
 - Fetches and displays high score and inventory
- Inter-level Mapping System
 - Start & end lake
 - Item locations
 - Enemy locations
 - Last died location
- Low priority
 - Game is functional without
 - Can make it more interesting
- Medium complexity
 - Tracks the location of NPC
 - Has to know item & enemy location

Use Case Diagram



Questions?

A stylized mountain range logo consisting of three green triangular peaks of varying heights, with the tallest peak in the center.

CLEAR LAKE STUDIOS

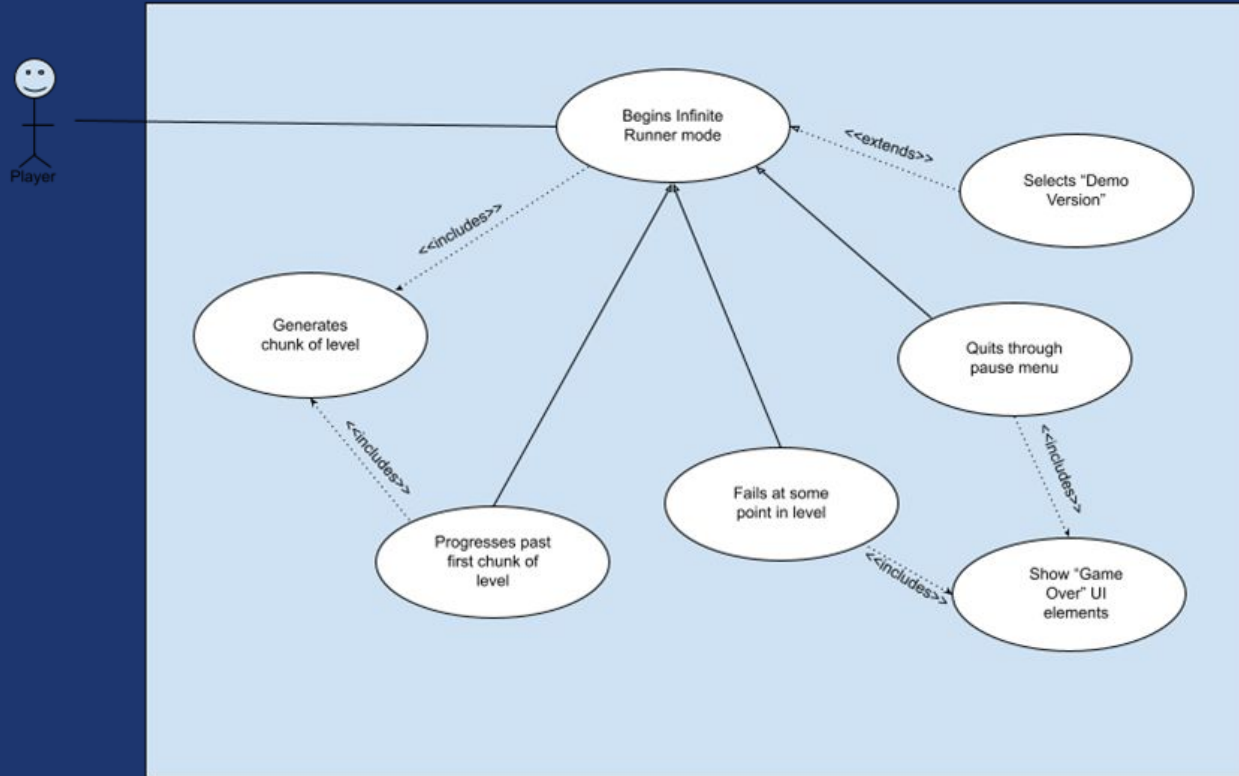
Two thick, green, wavy horizontal lines representing water or a lake, positioned below the text.

IAN

Feature: Infinite Runner Mode

- Random World Generation
 - The level is continually generated from a list of possible platform combinations.
 - Items and enemies are added to this level in areas accessible to the player.
- Item and Enemy Control
 - Specific item and enemy quantities are monitored to keep the player from being flooded with the same contents.
- Medium Priority
 - Not necessary to play the game, but adds replayability.
- Medium complexity
 - Monitoring object spawns and placing them in the correct locations can get complicated.

Use Case Diagram



Questions?



CLEAR LAKE STUDIOS

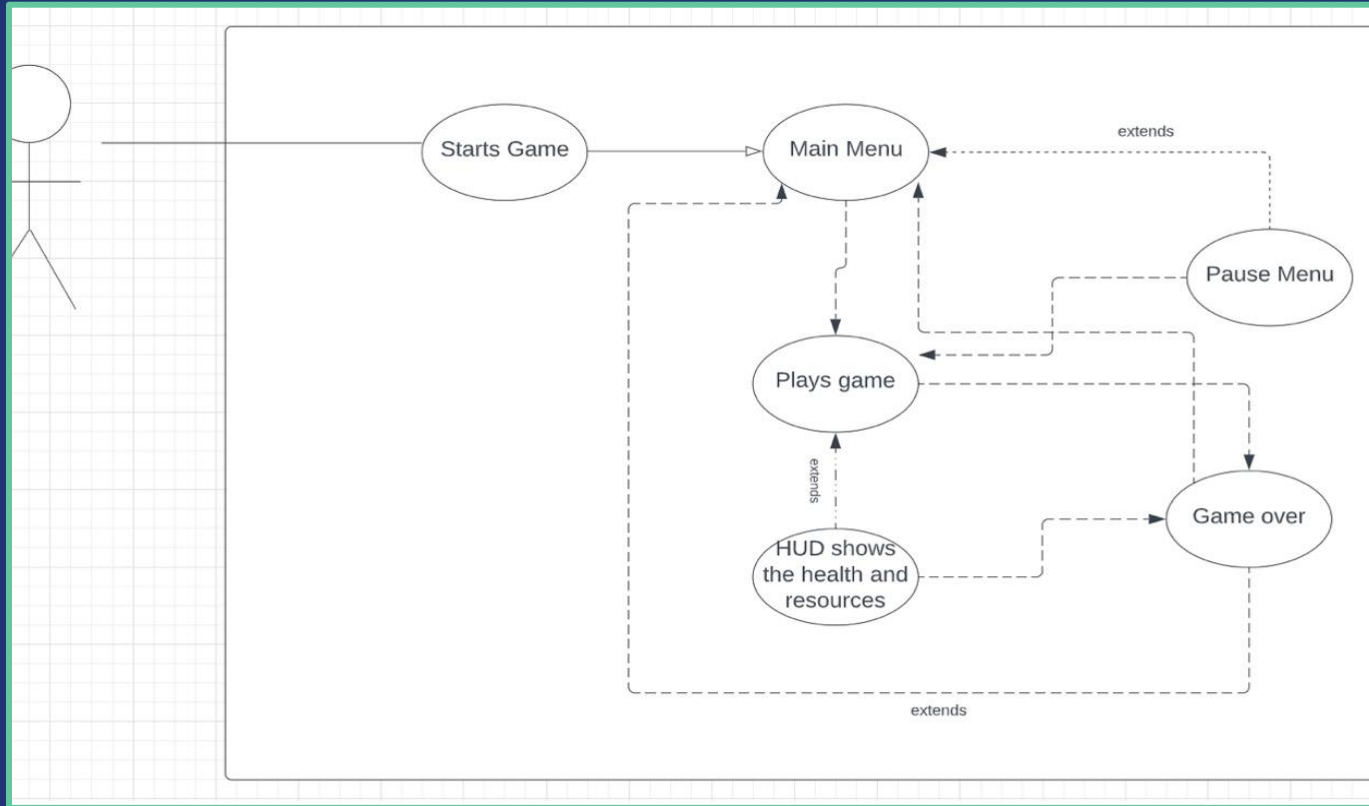


AKHIL

Features: UI, HUD, Inventory

- Main menu, Pause menu, Gameover screen
 - The main menu comes once the game is started to give the player the options to select to change the settings, to see the controls or to play the game. And he can select the level he wants to play.
- HUD/inventory
 - The player will be shown the health and resources he is having while playing the game.
- High priority
 - The hud is important for the player to use the items and to know his health to so that the player can play more consciously. Since, this game mostly depends on resources the player collects. The menu is useful for player to play his favourite level.
- Low complexity
 - Need to fetch the stats of every item and health and monitor the resources if they are used.

Use Case Diagram



Questions?

More
Questions?

