

Project Overview

Our team developed a **Roblox-based interactive** game focused on player engagement and progression. The goal was to **design a functional gameplay loop** supported by scalable systems.

Roblox provides a powerful platform that combines **Lua scripting** with a built-in game engine. This allowed us to focus on both game design and technical implementation.

Project Goals

- Build a playable game prototype and core gameplay mechanics
- Develop scalable scripting systems
- Design an engaging player progression system



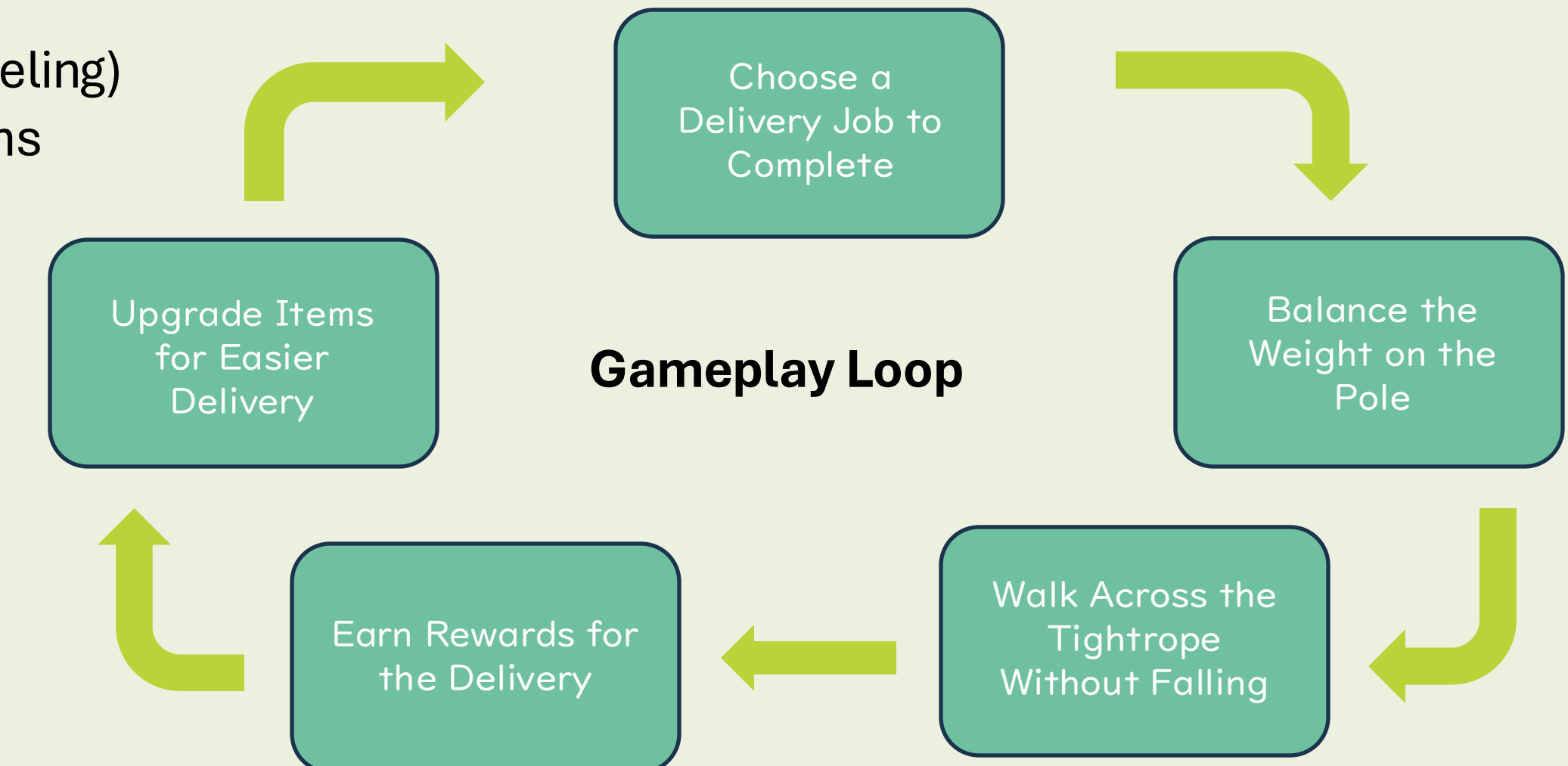
Play the Game!



GAME SYSTEM / MECHANICS

Key Mechanics

- Player progression system (EXP and leveling)
- Currency rewards for completing actions
- Shop system for upgrades and items
- Interactive gameplay mechanics
- GUI systems for player feedback



TECHNICAL IMPLEMENTATION

Main Functions and Goals

One of the main goals of this semester has been cleaning up and **improving** older systems. Including ...

- Inventory menu system
- Tightrope travel mechanics
- Rewards and system updates after delivery

Future:

In the future, some additional technical improvements that will be added include ...

- Implementing immunity to hazards due to items
- A rebirth system to improve **replayability**



ACKNOWLEDGMENTS

The team would like to show our gratitude to our TA, John Park, our Corporate Mentor, Ciaran Warren, and Fall 2025 students Brenden Wood, Jaitra Shah, Kloe Wang, Ryan Brown, Caden Roberts, and Sam Allen.

RESULTS / FUTURE WORK

Current and Future Developments

Our current and future plans include improving and adding points of intrigue to the game.

Future development plans include adding points of **interest** that cater towards players at different points of **progression** of the game.

Plans towards this goal include . . .

- Pets
- Equippable tools and items
- Unlockable Areas

Introduction/Background/Motivation

- We recommend looking back at the project description and materials shared during the first weeks of the fall semester. This will be a great resource to find introduction and background material and wording.

Research Methodology

- The “how” of your research

Conclusions

- What are your big picture findings?

Future Goals

- What are next steps if you had more time to continue?

References & Acknowledgements

- Thank your company Mentors, any faculty, and others that helped on the project.
- List students from the fall semester that did not continue into the spring semester but contributed work.
- Broadly thank The Data Mine, but highlight any specific individuals that were helpful (like specific Data Science staff, or technical specialist).
- Cite your sources! There may be too many to include, but list a few **key** sources.

Figures

- Make sure to include relevant visuals

Layout & Design

- Keep font and colors consistent.
- Make sure it is visually appealing. Zoom out and make the entire poster shows on your screen. What do you notice about it? Is it full of text? Too much