

CS4483 Prototype README

Built using Unity. An executable version is included in the project folder.

Controls:

A/D -> Movement left and right.

Space -> Jump, hold for higher jump.

Left Mouse -> Fire grapple hook.

1, 2, 3 numeric keys -> Select/Unselect an existing grapple.

Right Mouse -> When only one grapple is selected, holding allows you to connect it to a different surface.

Escape -> Open/Close start menu.

Q/E -> When one or more grapples are selected, increase and decrease length respectively.

R -> Delete any highlighted grapples.

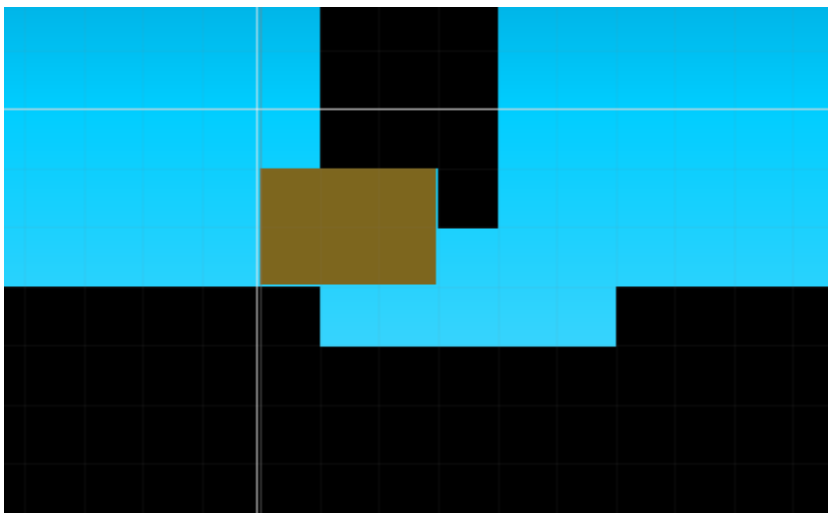
L -> Holding L for long enough resets the level and all objects.

Features:

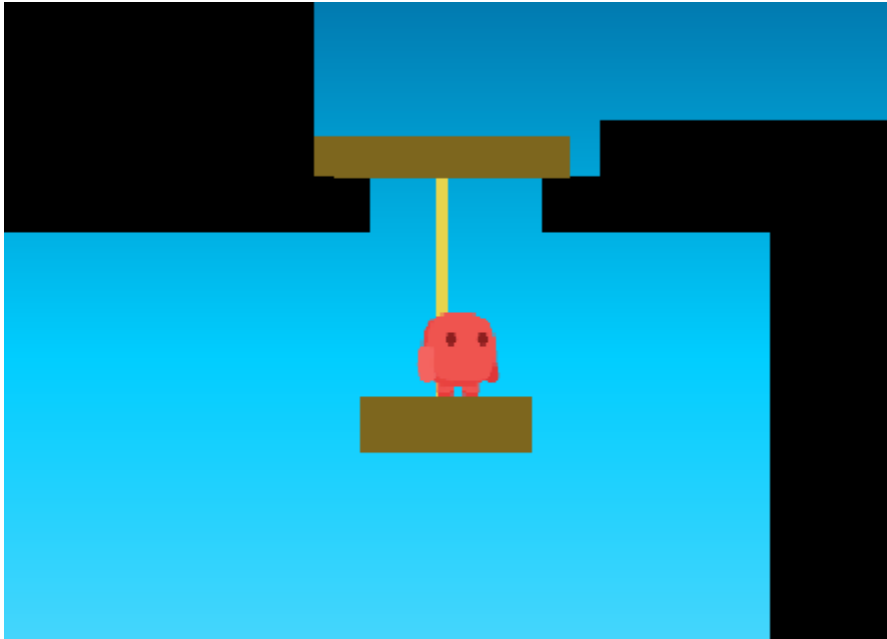
- Animated player character.
- Main Menu with Play and Quit Buttons
- Start Menu in-game to return to the main menu or resume.
- Grapple mechanic with rope-like feel.
- Toggle between active grapples and increasing/decreasing their length.
- Player can use these grapples to swing from the map and pull around objects found lying on the ground, or suspend them from the map.
- A few basic puzzles exist, described below.
- Level reset feature via holding the L key.
- Red blocks can't be grappled, but are part of some core level objectives.

Puzzles

This one is simple, just shoot a grapple at it and pull it out of the path.

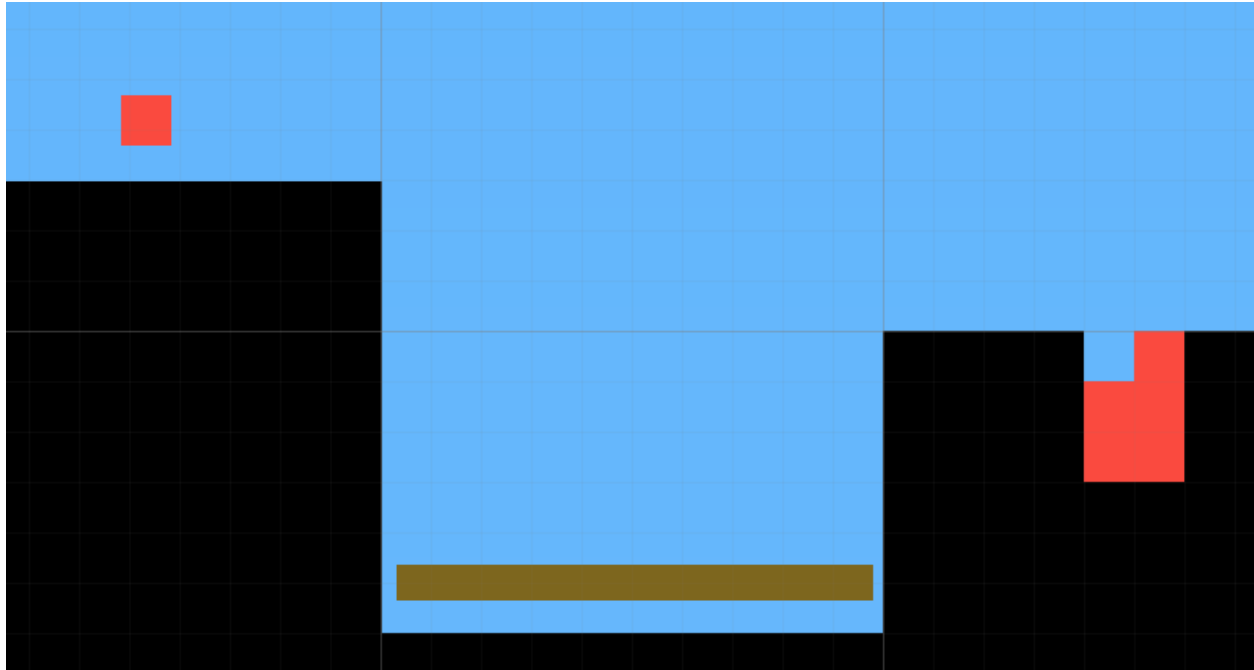


For this one, you have to attach the block on the ground up to the plank blocking the way up. Decrease the grapple length with E (after highlighting) to get closer from on top of the box. At this point, you need to quickly delete the rope (R key) and jump up into the plank to push it out of the way and get up.



Red objects represent objectives and can't be grappled. The goal here is to get the box into the hole where it belongs. It can't fall in the pit between or it will respawn. Shooting a grapple down at the plank and connecting it to the roof (offscreen in that picture) is how you go about raising it (with E after connecting it to the roof). Then push the box across. **The grapple and object masses aren't perfectly tuned, and so some weird behaviour can happen when "reeling in" a rope, and it comes off as being delayed a bit. This can be mitigated by just extending the rope bit by bit until it's the right length.**

The plank and red box normally fall to the ground when the scene runs.



The final sequence is just to swing around with the grapple.

I purposely didn't have the level quit back to the main menu on reaching the end so the player can continue messing around in the prototype.

The main menu Level Select button was left non-functional on purpose, but would be present in the full game.