

# Prototype Proposal

Ryan Bujold 40250368

## Goal

I want to make a game where your goal is simple but requires complicated steps to achieve. I want the user to figure out what needs to be done like a puzzle. The user will have to use the mouse, keyboard and their hands in different unintuitive ways to figure out how to solve the puzzles in each stage.

## Tools

I would be using mainly hand pose from ml5 to accomplish this.

## Theme:

You enter a new job with some strange alien equipment. You must figure out how to accomplish these tasks using interfaces that were clearly not designed for a human. Your tasks may include construction, supply management, lab testing and more.

## Code structure:

(I'm going to start using my ai jam as a base for structuring the code)

- Index.html
- Loading scene for the ml5
- Title screen
- Main game
  - Scene manager (change between scripts/puzzles/scenes)
  - Pause screen?
  - Point system?
- Game objects
  - Collision detection
  - Hand object (turn the data into some kind of ui that interacts with the game)
  - Animations (if time permits)

## Technical Plan

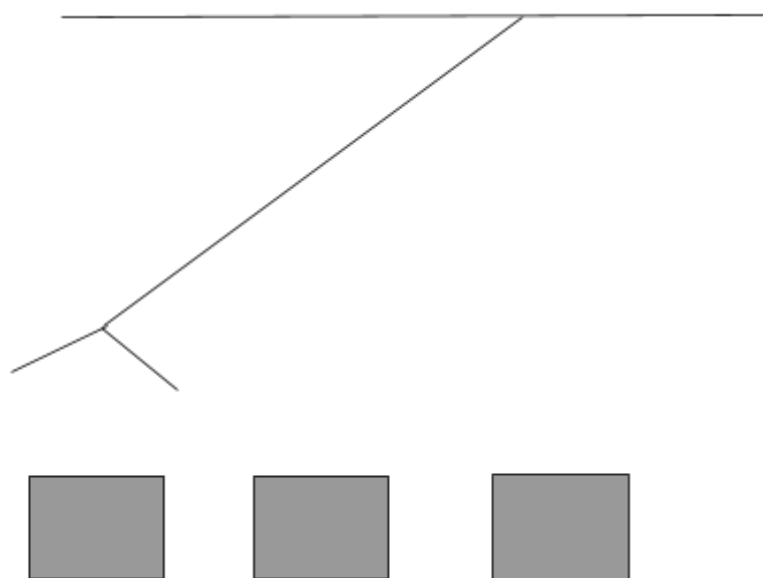
I will make sure that I start with very little visual detail and mostly rely on p5.js until I'm ready to add sprites, audio, etc. My game will ideally have many puzzles/levels so I will start with one strong one and go from there. I can start by just making a check for an order of inputs almost like a password. Then from there, I can develop ways to inform the user visually of what needs to be done.

## Challenges

I think that my main challenge will be in making interesting puzzles. I have multiple forms of input that I want to use in a variety of ways. Coming up with puzzles that are not too complicated and don't strain the player's physical abilities will be tough. Furthermore, each new part of the puzzle adds more complexity both for the user and for me to build the project. I want to make sure I strike a balance between things that are interesting and things that I can make in a reasonable amount of time. I also have no experience in making puzzles so that type of design will be completely new to me. Another important design aspect is I want to make the game have lots of visual feedback since I want trial and error across the keyboard, mouse and hand tracking. Everything needs to be clear and come together cohesively in order for all these things to work properly.

Example:

Mission:  
Stack the  
boxes



Gimmicks:

- Crane is controlled by mouse but you have to hold down the 'm','o','v','e' keys to allow the crane to be moved
- You need to make a hand gesture to close/open the crane hand

The gimmicks would not be told to the player and they must figure it out through trial and error. Doing all three of the gimmicks at the same time may be physically difficult to do. Therefore part of the challenge is to find a way around this.