

# Progress Check 3

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Schepens 1st

1/27/21

## Current thoughts:

Right now, the basic aspects of player movement have been completed. We will now be working on the gameplay aspects, including physics, terrain mechanics, and scoring. After this is implemented, work will be done on the sound engine as well as improvements to the basic mechanics of the game. The creative element, while important, is not the highest priority, and the specifics will likely change for that in the coming days. The way we will approach the whole game will be in three phases: Travel (when the lander is flying and above a certain height from the terrain); Landing (camera zooms in and the lander is within a certain distance from terrain); and Lift-off (when the lander launches from the terrain again).

## Current progress:

- Basic main menu
- Basic slow gravity
- Basic thrust
- Basic rotation/turning
- Basic space background
- 1 level complete
- Control inputs (primary/secondary/directional) implemented
- Landing and crash landing sequences in place

## Things that need to be implemented:

Below are the major things that need to be implemented as well as the current idea for how it will be done.

- Creative element
  - When taking off again, player must do a short minigame (faster completion means more points)
- Velocity indicator
  - Could potentially do a UI lerp with a danger indicator
  - Text in addition to AI
- Crashing
  - On trigger enter if the velocity is above a certain speed, crash
- Fuel
  - UI with lerp to make things pretty
  - Just enough where the player will have to be generally careful
- Better art in general
- Sounds
  - CC licensed sounds + a sound engine (planned to be positional)

- Less rotation drift
  - Initial thoughts - this should be able to be easily implemented with turning up the drag
  - The rotation in particular may have to be shifted from physics to directly rotating the sprite if the changing the drag cannot fix the issue
- Level generation/designs
  - Making sure that the levels being made fit the style of the original game and have similar properties (dangerous except for the flat landing sites)
- Camera
  - At a certain height above terrain, zoom in towards player (like original)
- Scoring
  - Multipliers for landing sites as well as storing scores of other players