CS 111 Final Project  
Self Assessment

Your group should fill out one copy of this form and include it with your assignment when you turn it in.

# Academic integrity statement

By turning in this assignment, you certify that:

* The information below, including the listing of who did what, is accurate so far as you understand it
* You have not included any code you did not write yourselves, other than the code handed out as part of the original assignment, or examples used in class
* If you used example code from class, you did not count it in your methods, procedures, types, etc., below.
* You have not shared your code with anyone not in your group

# Group

*Who’s in your group?*

1. Jason Lu
2. Ray Hanson
3. Hunter Cordes

# Goals

*As a team, we wanted to create a Minecraft inspired escape room game. The game would incorporate a linear system of finding materials in order to craft an item to help the player move on to each new area until they reach the end of the game. In the process of designing this game, we aimed to include a variety of types, fields, and procedures to receive an exceptional grade on the project.*

# Lessons learned

*What went right?*

Logistics – Our troupe was able to find an efficient way to work on the project together in real time using VS Code, a Racket extension, and live sharing capabilities.

Communication – Communication didn’t present an issue throughout the process of working on the project. We were able to use discord to effectively communicate our ideas and each member responded promptly.

*What went wrong?*

The code – Our team took a while to understand the purpose and syntax of each part within the code base. We sometimes struggled to fix minor bugs but ended up ironing out most of it.

Scheduling - There were minor time conflicts within our group that lead to slightly unproductive days.

*What do you wish you knew when you started?*

As a team, we wished that we knew that the self-assessment document contained an annoying grading bookkeeping section so we could have documented each new addition as we worked on the project.

# Annoying grading bookkeeping

## Types

*What are the types you added, and what are they for?*

1. Pickaxe – thing used to mine barricades
2. Chest – thing used to store other things
3. The Home Depot – chest that stores wood
4. Ender Chest – chest with explosive capabilities
5. Stick – a thing used to craft a pickaxe
6. Tree – a thing that dispenses sticks
7. Barricade - a door that requires a pickaxe to break it down
8. Element – a thing that is used for crafting
9. Wood – an element used to craft a pickaxe
10. Diamond – a special element used to craft a pickaxe
11. Ingot – a special type of element with shiny properties
12. Iron – an ingot used to craft a pickaxe
13. Gold – an ingot used to craft a pickaxe
14. Obsidian – an element used to craft a pickaxe
15. Paper – a thing to display the winning message

## Fields

*What are the fields you added, what types did you add them to, and what are they for?*

1. Material – tracks what barricades and pickaxes are made of
2. Durability – tracks the number of uses left for tree and pickaxe
3. open? – Boolean for weather a chest is open
4. Trapped? – Boolean for weather an enderchest is explosive
5. Weakness – tracks a barricade’s vulnerability
6. Blocked? – Boolean to see if a barricade is open
7. Craftability – Boolean for weather a thing can be used for crafting
8. Matter – tracks the type of an element
9. Luster – Boolean for weather an ingot is shiny
10. Health – tracks the player’s health

## Procedures

*What are the procedures you added or significantly modified from their original form, and what are they for?*

1. New-pickaxe – makes a new pickaxe
2. New-chest – makes a new chest
3. New-homedepot – makes a new home depot
4. New-enderchest – makes a new enderchest
5. New-stick – makes a new stick
6. New-tree – makes a new tree
7. New-barricade – makes a new barricade
8. New-wood – makes a new wood
9. New-diamond – makes a new diamond
10. New-ironingot – makes a new iron ingot
11. New-goldingot – makes a new gold ingot
12. New-obsidian – makes a new obsidian
13. New-paper – makes a new paper
14. Mine – destroys a barricade
15. Hp – checks your player health
16. Craft-pickaxe – creates a new pickaxe from a material and a stick
17. Thisisaverylongandhardtotypecommandbecausewewantyoutoworktoseeifthechestistrapped – checks to see if an enderchest is trapped
18. Vulnerability – checks what type of pickaxe a barricade is weak to
19. Obstructed? – checks to see if a barricade is blocked
20. Alchemy??? – upgrades a pickaxe to a new material

## Methods

*What are the methods you added or significantly modified from their original form, what types were they added to, and what are they for? Note that if you have three different methods for the same generic procedure, list each one separately.*

1. Check-durability – checks the durability of a pickaxe
2. Open (chest) – opens a chest
3. Close (chest) – closes a chest
4. Container-accessible-contents (chest) – checks to see if a chest is open and displays the contents if so
5. examine-contents - an alternative to (within) to check the contents of a chest
6. open (enderchest) – opens an enderchest and determines if an explosion happens based on trapped? boolean. Checks to see if player health is below 0, if it is , the game restarts.
7. punch – takes 1 durability off the tree and dispenses a stick
8. go (barricade) – checks to see if a barricade is blocked and if not, moves the player into the other room
9. examine (ingot) – checks if an ingot has luster, and if so, displays a message “shiny!”
10. read – displays the congratulatory text for winning the game from reading the paper.

## Total stuff we built

*54 Items*

# Who did what

For each person in your group, list the types, procedures, and methods that they implemented, and anything else they did as part of the project.

Ray:

Items: Pickaxe, The Home Depot, Ingot, ironingot, material, durability, luster, check-durability, examine-contents, examine(ingot), punch, read

Responsibilities: General Troubleshooting/Debugging, Adding items to the game world

Jason:

Items: Tree, Barricade, Element, Wood, Diamond, goldingot, obsidian, trapped?, weakness, blocked?, health, Mine, hp, thisisaverylongandhardtotypecommandbecausewewantyoutoworktoseeifthechestistrapped, vulnerability, obstructed?, alchemy???, go(barricade)

Responsibilities: Bookkeeping items, Self-Assessment document, Game planning

Hunter:

Items: Chest, Ender Chest, Stick, open?, craftability, matter, craft-pickaxe, open(chest), close(chest), container-accessible-contents(chest), punch, paper, new-paper

Responsibilities: General Troubleshooting/Debugging, Walkthrough