

## 1) Thought process:

The task was essentially interpreted as a Game Jam with some mandatory features. So, initially, a simple game was conceived with the mechanics of cutting trees and using the obtained items to sell and buy clothes. To achieve this, requirements were collected by analyzing the document provided by the interviewer.

After this, the construction of the game began in phases divided by important functions necessary for the game. The first phase was dedicated to creating the basic movement of the character with the tree-cutting mechanic. The second phase introduced items, buying and selling, and, finally, a skin system.

I find it interesting to talk a bit more about the item system, as I designed it to be expandable and easy to add content. I consider it an important step to produce code that allows for this type of future change, as it facilitates modifications in the case of new additions or changes required by the team.

In this way, everything is kept in a simple table: you just have to fill it in and place the sprites in the correct folder. This makes it easy for non-developers to add items effortlessly. Animations also use an automatic system and do not require additional configurations beyond the sprites.

id	name	description	itemType	sprite	value	animation
1	Wood Log		misc	woodLog	10	
2	Brown Hat		Headgear	brownHat	50	BrownHat
3	Cowboy Hat		Headgear	cowboyHat	50	CowboyHat
4	Hat		Headgear	hat	50	Hat
5	Overalls		Armor	overalls	50	Overalls
6	Shirt		Armor	shirt	50	Shirt
7	Shirt 2		Armor	shirt2	50	Shirt2
8	Wizard Hat		Headgear	wizardHat	50	WizardHat
9	Wizard Robe		Armor	wizardRobe	50	WizardRobe
10	Better Wood Log		misc	woodLog2	20	
11	Even Better Wood Log		misc	woodLog3	40	

It's also possible to create various different shops by simply modifying the table.

shopId	itemsId
1	3,4,5,6,7,8,9

## **2) Personal Assessment:**

I believe that my experience participating in Game Jams, where deadlines are typically short and themes are well-defined, aided in structuring and programming the code, estimating time, and making the task not only functional but enjoyable. Due to this previous experience, it was easy to identify the requirements and organize the stages in which I would begin the construction of the game.

Of course, like any prototype, there are parts of the code that can and should be improved in future iterations. Upon completion, I can see areas where enhancements can be made. For instance, there are places where logic is being directly handled in the interface, and in a subsequent round, this would be avoided/corrected.

I find it important to mention that the required Unity version for the production of this prototype was downloaded but was not selected during production due to my mistake (the project was done in version 2022). Therefore, it was necessary to downgrade to the required version, resulting in minor adjustments.

I am proud of the result, and even though I spent too much time on the gameplay, the main requirements were fulfilled: the items, the shop, and the skins, delivering a solid project with the aim of selling the prototype idea to the interviewer.

## **3) Credits and info:**

I used the CSVReader script, responsible for converting the spreadsheet into strings.

The art and main character used were created by Cup Nooble [<https://cupnooble.itch.io/>], and the other clothing and accessory sprites were made by me in Photoshop. The game's music and sounds were generated by the AI Aiva [<https://creators.aiva.ai/>]. The game was also built to run on Windows and iOS systems.

To serve as a guide for the user, small texts were added to indicate the tasks to be performed or functions within the game, done in a simple manner as they were not a priority.