Tiny Sims World by Jaler Sekar Maji
As a submission of LSW Programming Interview.

Firstly, I would like to say big thanks to Blue Gravity Studios for this greatest opportunity for my Game Development Career! I really appreciated 96 hours of precious time to boost my learning on both technical and non-technical skills!

Once I received this Interview Task, first I read it and understood what the task was about. I did not jump straight to Unity, but I started with pen and paper which are magical things in development life just begun. At first, I was really doubtful that I could do this kind of task, because it was really new to me, I never did it, it was like not every single tutorial I followed was the same as this task. I spent a day writing down the design of the game also with its story because it is helpful to experience from the user point of view, what happened in the game, and finally came with a bunch of lists that should be done. I would attach the photos because it was really memorable, but sorry if it is unnecessary and pardon my writing :). Besides, on that day I read and watched many references like youtube videos on how things get done. I also managed myself to keep sane by not overworking while doing the work efficiently (around 8 working hours per day).

Finally, turn my laptop on, plan a head on Trello with Kanban Template (here is the link). I would like to stay focused on what I wanted to do, so that's why I forced myself to jot down the lists from paper into Trello's tickets. Usually, I used Jira as my daily work basis and it really helped me a lot to stay focused while smashing a bunch of tasks.

At night I started a github repository (here is the link), and suddenly came the name “Tiny Sims World” as an imitation of Little Sim World. I am also setting up Github UI Tools (Fork) to help me out with the Git things faster and tidy. As the game development started, I labeled the tickets with MVP label as the Minimum Viable Product that the game must have. So it is just getting started on Unity. In that process, I often walk through some youtube videos and some forums.

Not as smooth as planned, many features that I wrote on the list are not happening in the real game, but I had another alternative to handle those. So I could make sure things worked as required.

I used pre-made art assets which are pixel arts for the characters and venue from OpenGameArt.org. I’m not using any pre-written code, instead I modified what I follow on some tutorials.

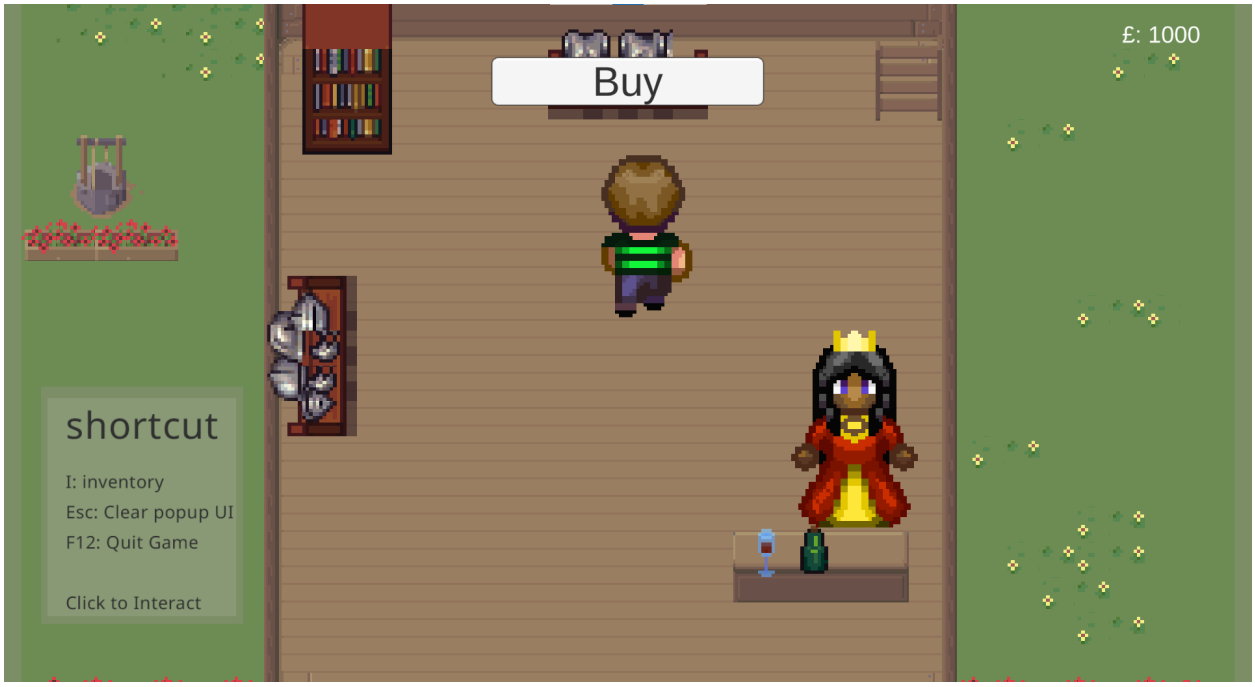
Finally, after the development process, I built the game with version 1.0.2. Tiny Sims World was just born, and I am really proud of it. I will be more confident if I have a senior or mentor for having discussion on the development process. Even what I made was not as I expected, but I gained a lot of knowledge and motivation to jump start my game development career. In this development process, I found a lot of tutorials and guides that I would like to follow :)

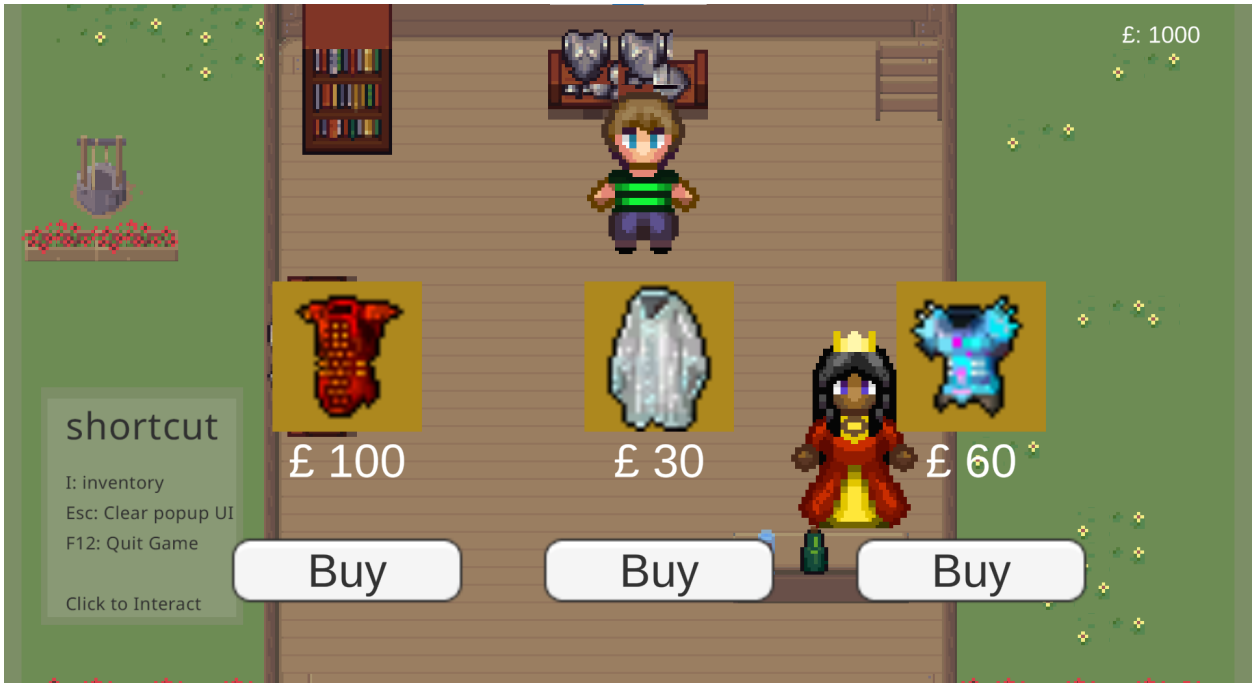
Tiny Sims World has a main character that can be controlled by directional buttons (W,A,S,D or left,right,up,down). There is NPC and racks that can be clicked. Game starts with money to buy some equipment/outfits. Open inventory by pressing the I button, use the outfit and character appearance will be changed.

Popup dialogue attached to the NPC, the text will appear as the specified dialogue string. Buy/selling system using the Scriptable Object data that consist id, name, icon, buy price, sell price, sprite, and color. Inventory, buy, sell items are loaded based on database list-based Scriptable Object. Customizable character created by attaching different GameObject inside the character, so the color can be changed without interrupting the character's animation and its body parts. Venue created with Tilemaps, which I used pre-made assets for the tile and designed the venue by myself.

Attachment

Tiny Sims World


£: 1000
Buy
shortcut
I: inventory
Esc: Clear popup UI
F12: Quit Game
Click to Interact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£ 100
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£ 60
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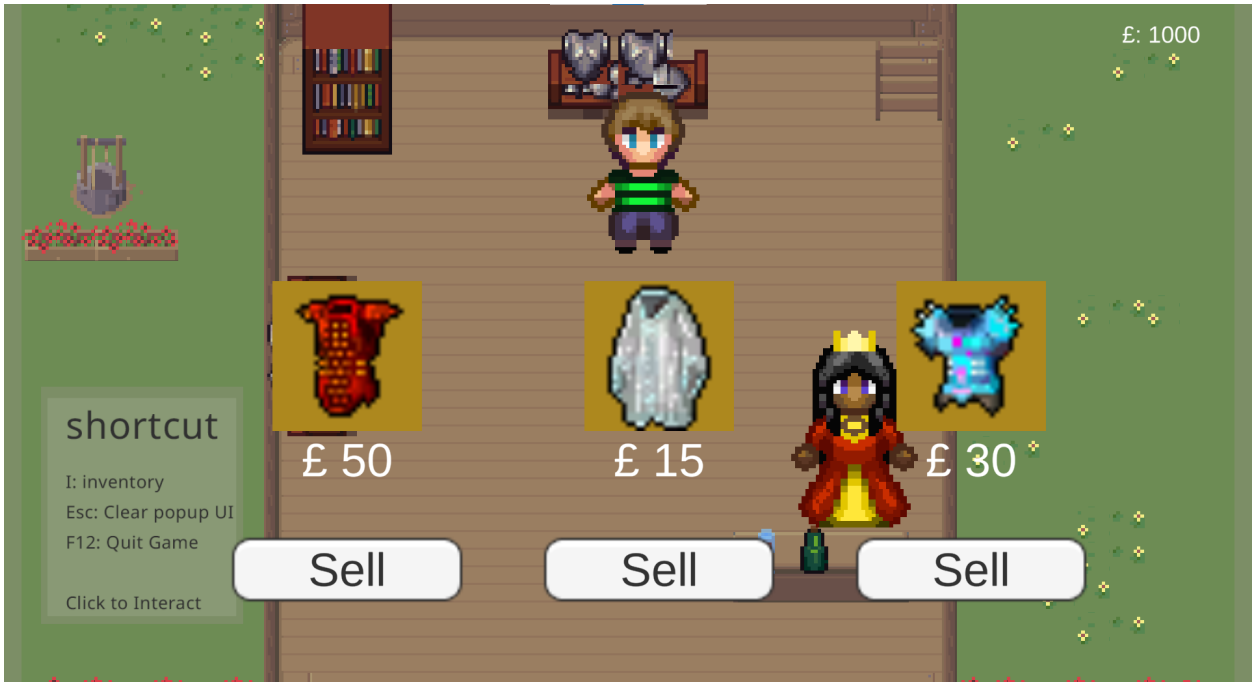
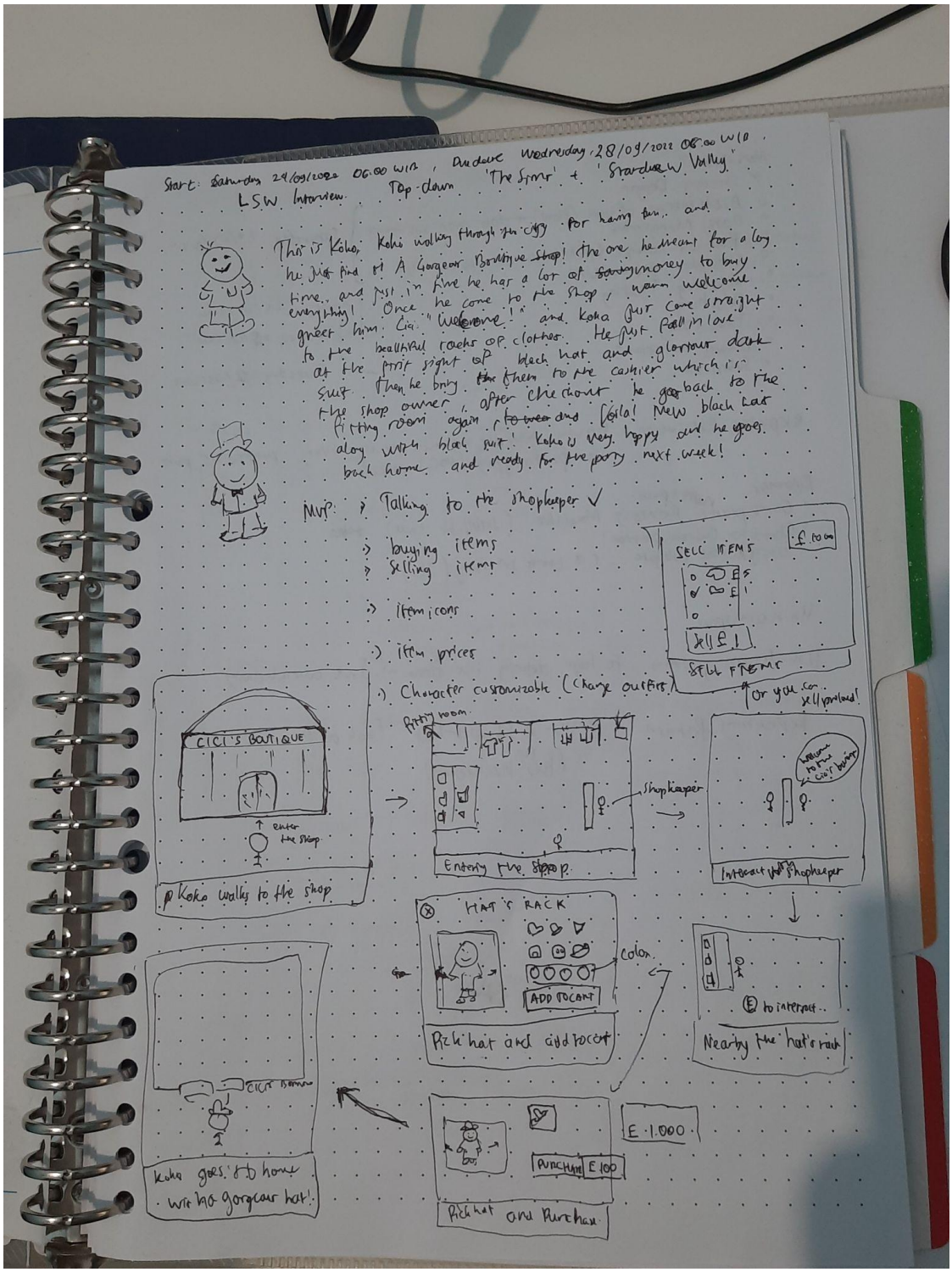
I: inventory
Esc: Clear popup UI
F12: Quit Game
Click to Interact


£: 1000
shortcut
I: inventory
Esc: Clear popup UI
F12: Quit Game
Click to Interact
£ 50
£ 15
£ 30
Sell
Sell
Sell


£: 1000
shortcut
I: inventory
Esc: Clear popup UI
F12: Quit Game
Click to Interact
Equip
Equip
Equip

Design and plan.



Work flow:

- ✓ Sketching Design
- Architecture of game (flow) ~~+ data management~~ } Saturday, 24/09/2022
- Data Management
- Proof of concept (placeholder and functionality)
- Simulation structure
- ~~Polishing~~ Testing } Sunday, 25/09/2022
- Polishing } Monday, 26/09/2022
- Final testing
- Documentation? → Tuesday, 27/09/2022
- Submission

expected execution: having internet reference on every particular part.
→ for prototyping (POC) process

References:

- Game plan: namespace: Refactoring Monolithic (Infallible Code) ~~Video~~
- Character Customization
- ~~User~~ Event delegate: C# Events in Unity (IC)

Ux namespace

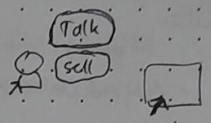
Ux design patterns to help defining the flow → just don't overwhelming

Repository Pattern: player & shop & that look alike (has) e.g. inventory

~~Entering the Shop~~ Design flow

- click to interact
- player able to move (horizontal - vertical)
- Shopkeeper can be interacted by click, pop up appear

- Clothing rack can be interacted by click, pop up appear



- Ideally camera follow the player, and move if the player not in the center.
- Interactable object can be hovered, and appear outlined with the name (name, interaction's name)
- Talking npc: popup dialogue, click to continue.
- press I to open inventory
- Inventory comes with box panel UI, icons, and hovering description.
- Sell to npc: stop player to move
  - UI with icon and selection, and sell.
  - click sell and items are being transfered to NPC. simply destroy?
  - and add some amount of money.
- Money system, can be added, can be substracted.
- Clothing Rack's try and buy feature
  - UI panel shows icon & description + item's name
  - click to try it
  - Pick the ~~color~~ ~~with~~ from available color
  - rotate player's look
  - close button
  - Purchase ~~to get the~~ → item get transfered to inventory, substract some amount of money
- In Inventory:
  - ~~Click~~ to ~~equip~~ hover to see description.

Data

- Clothing ~~Scriptable~~ Object
  - Name
  - Description
  - Icon
  - Texture (wear)
  - Buying price
  - Selling price
  - Owned?
  - Color

Interface

- Interactable Object
  - ~~NPC~~
  - options
  - Name
  - ~~if no options~~
  - ~~then do action~~
  - ~~if option = 1~~
  - → ~~do~~ don't ~~pop up~~ option ~~and do~~

Purpose

- NPC
  - Shopkeeper (e.g.)
  - Name
- NPC
  - interactions (options)
  - Name
- Rocker

Interface?

- OPtion
  - ~~option~~ name
  - action

PlayerData

- movespeed

Branches

- main
- ~~develop~~
- ~~side loop~~
- release
- feature/

Release Semantic version

[Major build number] . [Minor build number] . [revision] . [Package]

0.0.0.1 → 0.0.0.2

0.0.1.0