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# Graphics 2024 Project

## Puzzle Adventure Game

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## A short overview of my scripts:

A sentence or two explaining their functionality.

Scripts	Levels 1-2
<b>AudioManager</b>	Controls when the sfx sounds play.
<b>CameraFollowPlayer</b>	Attaches the main camera to the player, follows him with LateUpdate, changes perspective with TAB.
<b>DialogueManager</b>	Controls the flow of the dialogue while keeping the dialogue index, which changes on certain events. Processes text chunks (DialogueData and DialogueElement) and portrait fading effect.
<b>GameInput</b>	Handles the keyboard input.
<b>GameManager</b>	Checks for winning or losing conditions. Also manages the boolean values needed to progress the game state.
<b>GameObjectPickable</b>	Any object of this class can belong to an owner, and therefore be picked up (obtained) by the player.
<b>IObjectOwner</b>	Interface that defines the function one needs to own a pickable object, whether it's the player or a pillar.
<b>NPCInteract</b>	Handles NPC dialogue initiation, and player tracking by rotating when the player is nearby.
<b>ObjectOwnerPillar</b>	Implements the ability to own a pickable object. Also defines a spawn/hold point with a transform.
<b>Player</b>	The main character. Can move, interact, speak with the NPC.
<b>PlayerAnimationController</b>	Controls player animations by playing the isWalking animation on movement.
<b>ObjectSpawner</b>	Spawns game elements and pickable objects procedurally using the positions given in the scriptable objects. The game objective stays the same but the locations of the NPC, rocks, pillars and chessboard change.
<b>TreasureChestOpen</b>	When the conditions are right, GameManager opens the final chest with a custom transform animation, allowing the player to win.
<b>Ulmanager</b>	Handles visibility and functionality of UI elements, except for dialogues
<b>DialogueElement</b>	Contains a chunk of Dialogue, along with a variable that says if the player is speaking and 2 character portrait indexes (unused, only 2 characters).
<b>DialogueData</b>	A list of Dialogue elements. The starting and finishing index of dialogue is defined by game progress.

Scripts	Level 3
<b>AudioManager</b>	Controls when the sfx sounds play
<b>BadMeat</b>	(Not a) booster. It cuts the player speed temporarily, making him vulnerable to attacks
<b>Heart</b>	Booster. It restores 1 heart of health (1 hit) uses apple 3d model.
<b>Meat</b>	Booster. Makes the player run faster temporarily, giving him the edge.
<b>CameraFollowPlayer</b>	Attaches the main camera to the player, follows him with LateUpdate, changes perspective with TAB.
<b>GameInput</b>	Handles the keyboard input.
<b>GameManager</b>	Checks for winning or losing conditions. When player dies it's game over, but if all the enemies die, its a win.
<b>HealthBarManager</b>	Updates the UI when the player takes damage or heals. Also handles the meat booster sprite.
<b>NPC</b>	More hostile in this Level. Will patrol using empty game objects as patrol path and when the player is nearby they will try to collide with him (to damage him).
<b>Player</b>	The main character. Can move, hit the NPC, or activate boosters.
<b>PlayerAnimationController</b>	Controls player animations by playing the isWalking animation on movement.
<b>UImanager</b>	Handles ui elements such as pause menu and game over.
Scripts	Main Menu
<b>Main Menu</b>	Controls scene loading and app exit

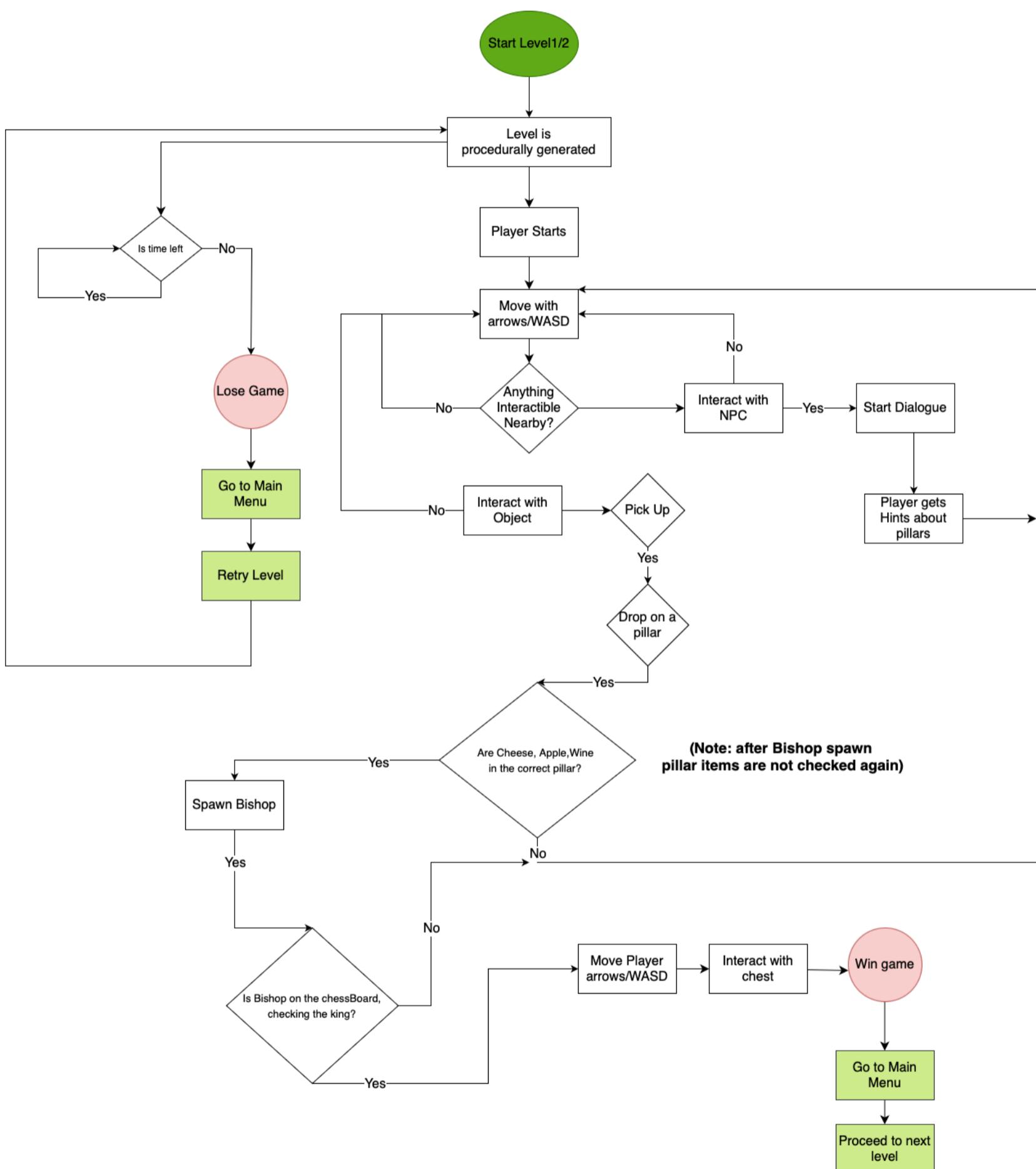
## Levels 1,2 Game:

- **Playable Character:** A goofy hero, looking for the script of light.. Or maybe just a random dude looking to make a profit posing as a hero..
- **Setting:** A fantasy setting in a remote village that changes on every run. You can see the village changes in the 2 seasons (Spring on level 1 and Winter on level 2).
- **Scenario:** Fulfil the requests given to you by the NPC, to get the desired item!

Elements	Levels 1-2
Playable Character	A goofy hero, looking for the script of light.. Or maybe just a random dude looking to make a profit posing as a hero..
NPC	A quirky character that teases the player, making him solve a puzzle to give him the scroll. He gives vague hints and makes bad puns
Pickable Objects	The keys to solving this puzzle, experiment with positioning them but ask the NPC for tips.
Pillars & Chessboard	Placing the right objects on these will allow you to progress in the game



## Level 1,2 Logic:



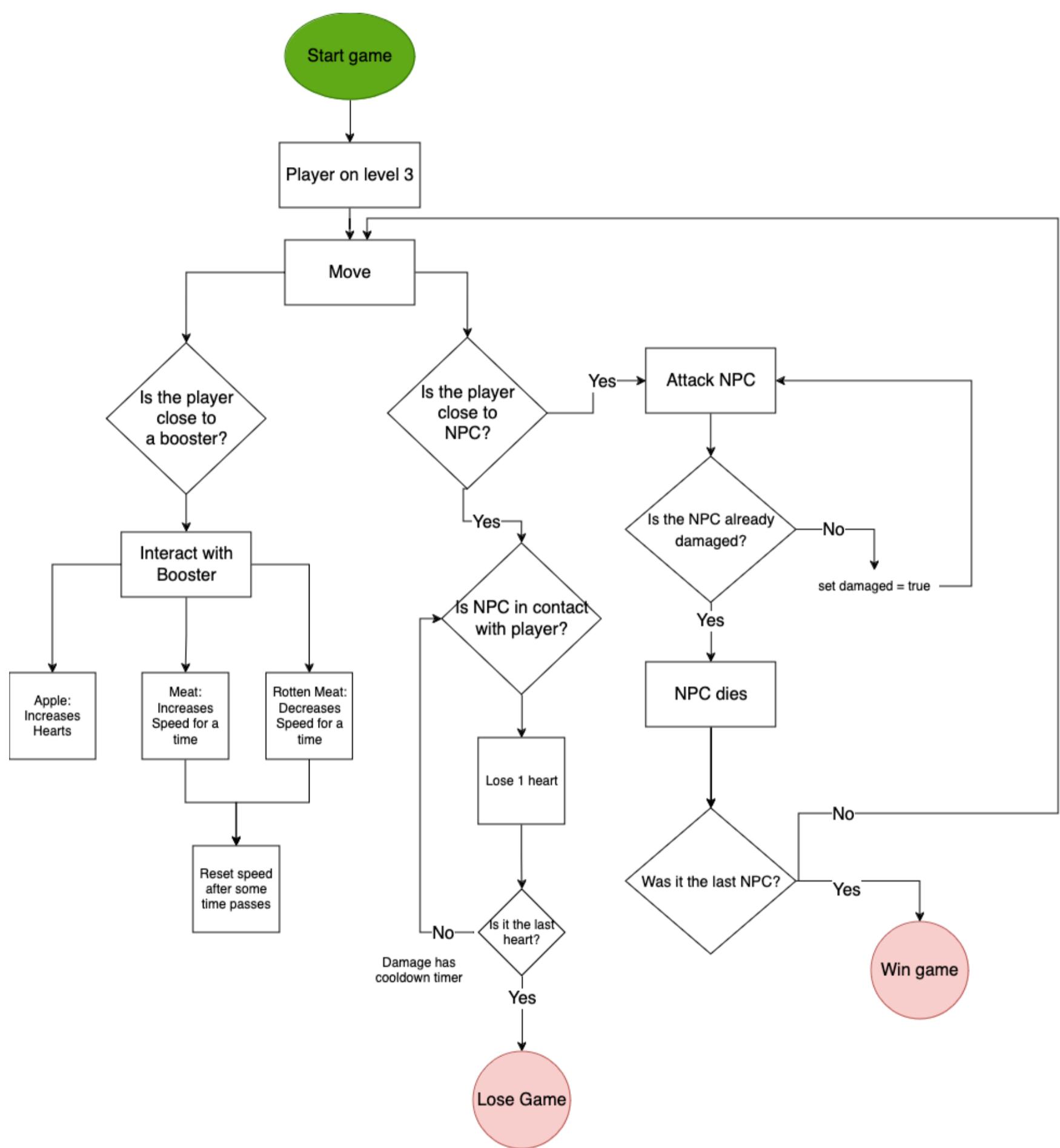
## Level 3 Game:

- **Playable Character:** The same hero, in a messy situation
- **Setting:** A fantasy setting, he just appeared on top of a chessboard! A voice tells him to fight all the chess pieces and only then he can escape.
- **Scenario:** Fight every chess piece that appears, you can hear the "ouch" when you manage to hit them. Use the boosters that appear in the level to survive, but avoid rotten meat.

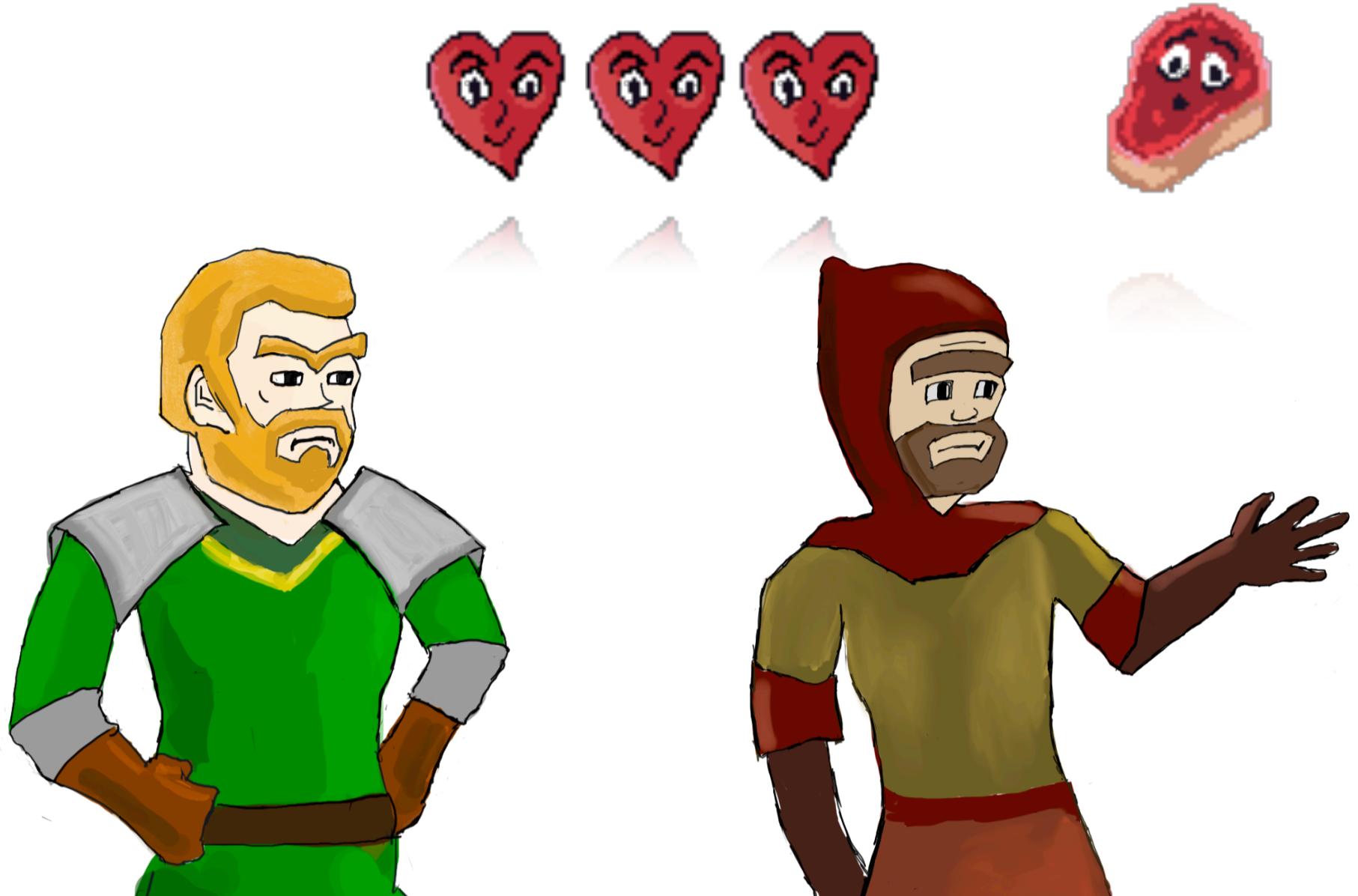
Elements	Level 3
Playable Character	A goofy hero, trying to survive
NPCs	Weird moving chess pieces that are patrolling and trying to attack the player when they sense him!
Boosters	Consume apples to replenish hearts and read meat to move faster, giving you the edge. Avoid rotten meat, because it slows you down.



## Level 3 Logic:



## My art:

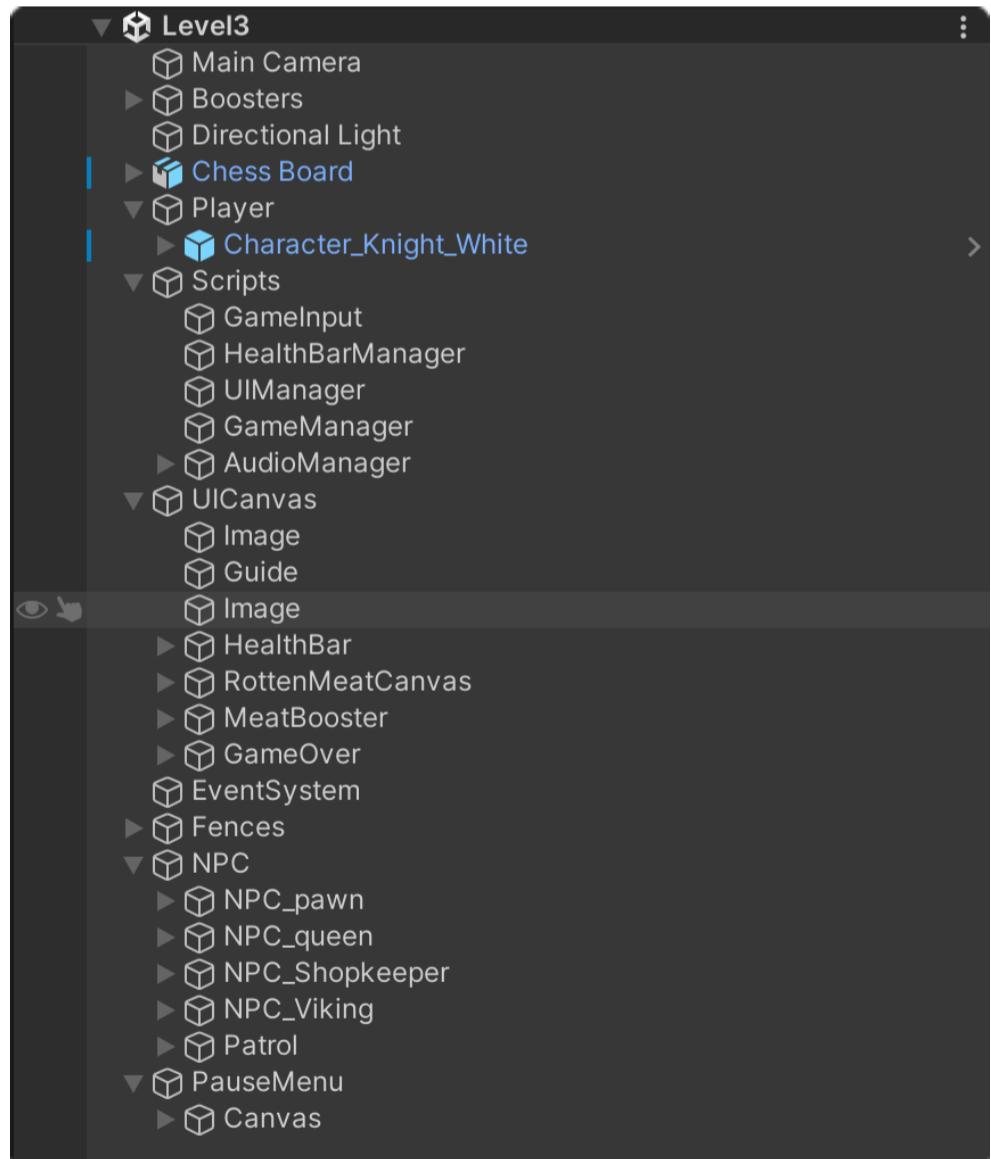
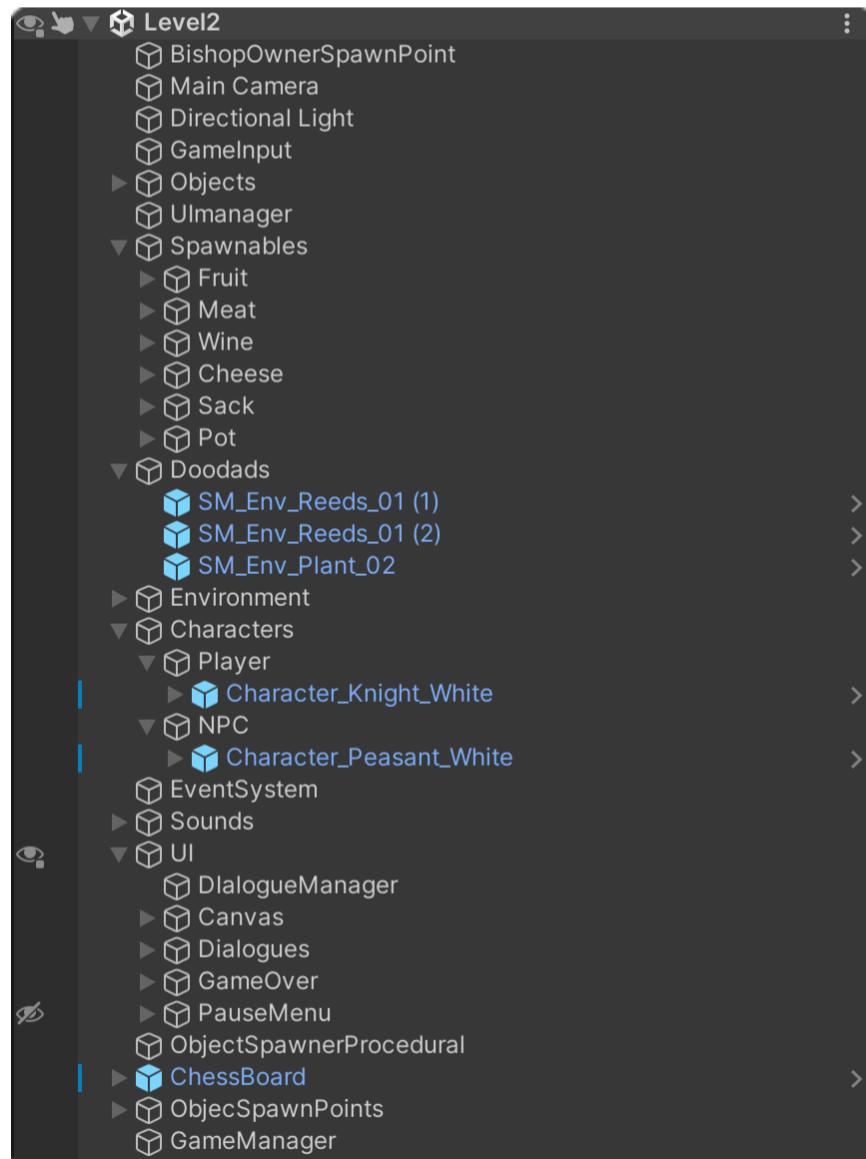
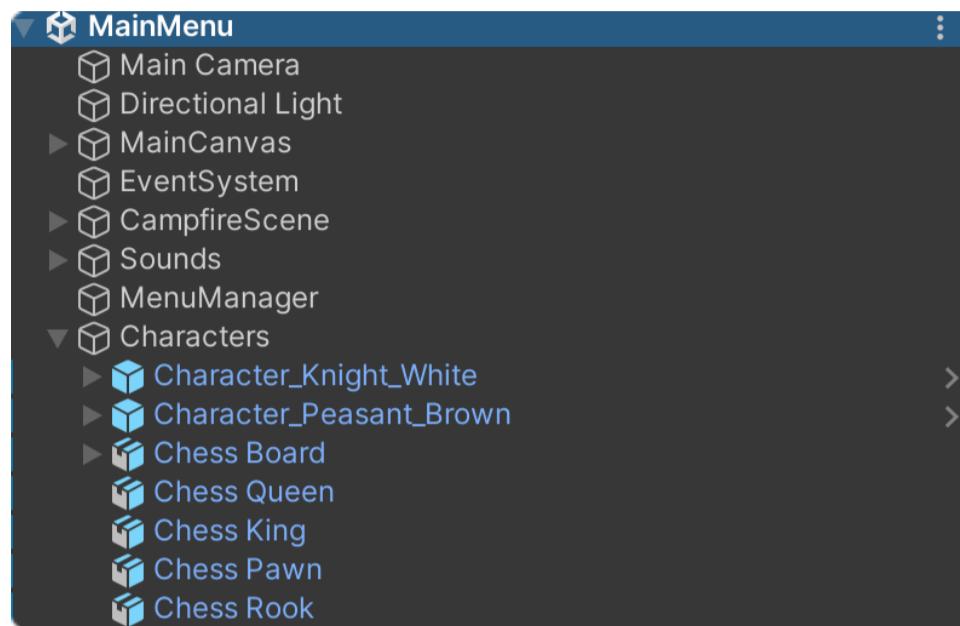


The portraits were drawn using procreate and the sprites using Pixaki 3, on iPad. I also made the terrains, scenes and ground materials and UI buttons and placement (using codmonkey's bg sprite).



## Scenes:

A bit unorganised due to time constraints...



# Credits:

## Assets from Asset Store:

Character 3D models and environments - Adventure Pack - Synty POLYGON - Stylized low poly art:  
<https://assetstore.unity.com/packages/3d/environments/fantasy/adventure-pack-synty-polygon-stylized-low-poly-art-80585>

Pixel Fonts:  
<https://assetstore.unity.com/packages/2d/fonts/pixel-fonts-113588>

Chess Set (Board and chess piece models):  
<https://assetstore.unity.com/packages/3d/props/chess-set-38661>

Skyboxes - FREE Skybox Extended Shader:  
<https://assetstore.unity.com/packages/vfx/shaders/free-skybox-extended-shader-107400>

Some Assets/Inspiration:  
<https://assetstore.unity.com/packages/3d/environments/lowpoly-environment-nature-free-medieval-fantasy-series-187052>

Codemonkey's button ui element from KitchenProject:  
<https://unitycodemonkey.teachable.com/>

## Assets I made:

Dialogues  
2 Materials for ground  
2D portraits drawn using Procreate for iPad:  
<https://procreate.com/>

Heart, Meat Sprites drawn using Pixaki:  
<https://pixaki.com/>

Audacity used to mix audio for Level1:  
<https://www.audacityteam.org/>

## Music:

Nona by Biiansu mixed with wales birdsong-by DraperSFX - Level 1:  
<https://www.zapsplat.com/music/nona-warm-and-simple-sustained-bass-notes-with-overlapping-airy-textures/>

November Snow - cynicmusic - Level 2:  
<https://opengameart.org/content/november-snow>

The Adventure Begins - bart - Main Menu:  
<https://opengameart.org/content/adventure-begins>

Ding - Pixabay SFX:  
<https://pixabay.com/sound-effects/ding-36029/>

Error - UNIVERSFIELD SFX:  
<https://pixabay.com/sound-effects/error-10-206498/>

## Animations:

StandardWalk, Idle, Looking from Mixamo  
<https://www.mixamo.com>

## Video Tutorials:

Codemonkey Learn C# BASICS in 10 MINUTES:  
[https://www.youtube.com/watch?v=IFayQioG71A&list=PLzDRvYVwl53t2GGC4rV\\_AmH7vSvSqjVmz](https://www.youtube.com/watch?v=IFayQioG71A&list=PLzDRvYVwl53t2GGC4rV_AmH7vSvSqjVmz)

Codemonkey Learn Unity Beginner/Intermediate 2024:  
<https://www.youtube.com/watch?v=AmGSEH7QcDg&t=9779s>

Udemy Complete C# Unity Game Developer 3D:  
<https://www.udemy.com/course/unitycourse2/>

Codemonkey - Raycasts:  
<https://www.youtube.com/watch?v=LdolmzaY6M4>

Codemonkey - Animation State Machine:  
<https://www.youtube.com/watch?v=LEwYmFT3xDk>

Importing Animations from Mixamo:  
[https://www.youtube.com/watch?v=Vsj\\_UpnLFF8](https://www.youtube.com/watch?v=Vsj_UpnLFF8)

UI tutorial:  
<https://www.youtube.com/watch?v=luuKUaZQiSU>