Game Proposal: Ascension*

CPSC 427 – Video Game Programming

Team: The Ascenders

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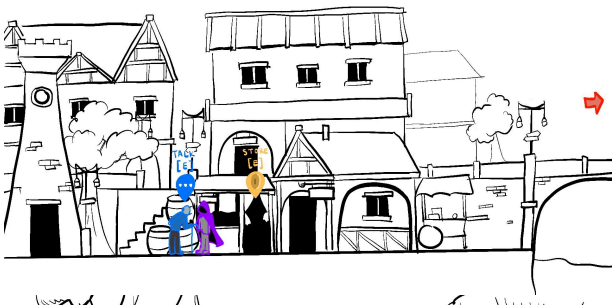
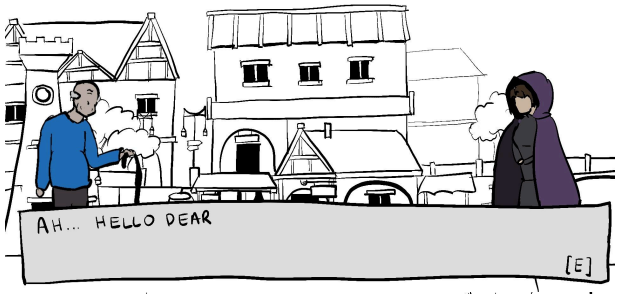
Story:

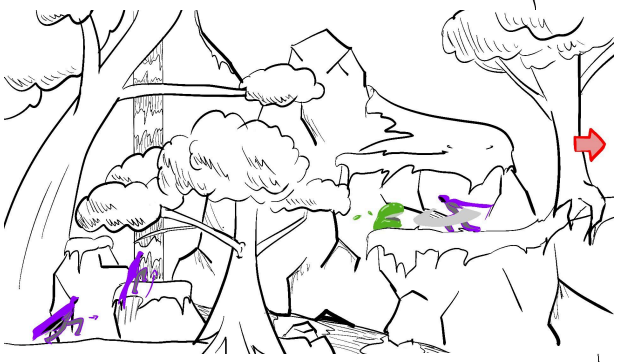
In Ascension, you play as Edelynn, one of two orphan sisters. Needing to make ends meet, you talk to a job merchant, who gives you quests to do around different parts of the kingdom, such as finding lost gems in the woods, stealing an heirloom from an aristocrat in the town, or assassinating a royal in the palace. Along the way, there will be enemies in your path such as wild animals, guards, and even civilians. You can choose whether to be passive and sneak past them or take an aggressive approach and defeat them all. However, make sure that Edelynn's health bar does not reach 0, otherwise you will fall unconscious, lose all the items collected in the level, and respawn at the start of that level/quest. As you are exploring the different areas, there will be boxes of coins scattered around that you can spend in the town shop for potions and weapons. At the end of the game, you go to the palace to face the king, where you'll learn a long time secret and make a crucial choice.

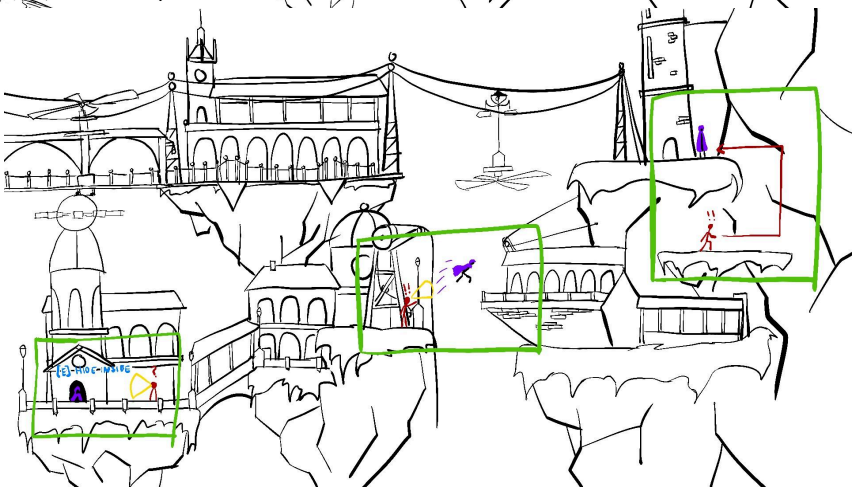
**Ascension: a double entendre implying the ascension of the kingdom as a platformer and the ascension to the throne if you choose to recognize your true heritage*

Scenes:









Top to bottom, left to right: 1 - The Ascension title screen, with a play button and a settings icon for settings adjustments; 2 - the pause menu, overlayed on a scene of the undercity; 3 - the town, with indicators to talk to an NPC, open the shop, or move to the next stage, and a health bar and inventory icon; 4 - a dialogue screen if you choose to talk to an NPC; 5 - the forest, showing the player platforming and fighting a slime mob; 6 - the quests bar in the skylands; 7 - stealth and

NPC interactions (left to right: the player hides in a building while an NPC patrols outside, the NPC spots the player, the NPC pathfinding up to find the player)

Technical Elements:

In Ascension, each scene will render in one foreground and two background layers, as well as the sprites for the protagonist Edelynn and other NPCs. Some scenes will also have additional platforms, interactable objects, and enemy sprites. Players will be able to interact with objects such as destructible boxes, to collect the coins needed for the shop, and open doors to new areas of the map. Using parallax scrolling, we aim to keep the end goal, the palace, in the second background to create a sense of 3D progression.

We will begin using public domain assets, but we plan on eventually designing custom sprites for all our characters. Ascension, as a side-scrolling platformer, will have movement animations and combat animations such as sword swings. We plan on implementing a dialogue system to convey the story to the player through conversing with NPCs, and each region will also have a single quest within the region that the player will aim to complete. We aim to compose our own background music for our game. Coming across interactable objects and NPCs will trigger a notification sound alerting the player.

Within each region, there will be platforming aspects such as collisions with blocks and obstacles, requiring the player to run and jump around the map. Players will often run into enemies, and generally have two methods of getting past them. The enemy can be attacked by the player, with the protagonist attacking them with a sword using the left mouse button. The second method of bypassing the enemy is to avoid them completely with stealth. Enemies have a vision cone which will be highlighted to the player while they are not alerted. Should the player enter this vision cone, the enemy will be alerted, and they will begin to attack and chase the player. Enemies in the vicinity will also be alerted, and will use pathfinding to search for the player in the area where the player was first found. To make stealth gameplay more immersive, we plan to include interactions with objects such as doors/pillars to hide behind to dodge the enemy. As the player enters new regions, enemies will gradually increase in difficulty, (in strength and attack power), requiring the player to generally interact with the shop system to increase their stats. The player can optionally choose to increase the difficulty by ignoring the system.

Ascension will be played using the keyboard as a controller, with WASD or the arrow buttons for movement and other keys to interact/attack. The player will interact with the shop system using the mouse, and any items the player purchases will be maintained throughout the game within their inventory. Within the shop system, players can purchase weapons, armor, and potions. The weapons and armor will be simple stat increases, and there won't be any animation changes. Potions range from health to speed potions that the player can use to heal or gain a temporary increase in speed.

Advanced Technical Elements:

Custom assets, such as sprites, animations, cutscenes, and music

- Adds originality and aesthetics
- Alternative: use public assets and music

- Impact if skipped: Game loses some originality

Inventory system

- Allows for the inclusion of more items which can enhance gameplay (allowing the player to switch between different weapons, hold a variety of potions, possibility of crafting)
- Alternative: No inventory system, player only defaults to one weapon, buying potions from the shop directly add to your health
- Impact if skipped: Prevents the ability to collect interesting items throughout the map

Advanced quests / Complex goals

- Immersive game experience, can incorporate different endings/paths of the game so that the user can define which path they want to go through
- Alternative: simple, linear quests and goals
- Impact if skipped: does not allow for as much freedom during gameplay which may not be as enjoyable depending on the user

2D dynamic shadows

- Better aesthetics/realism
- Alternative: define a fixed point of light and draw the shadows in as a part of the asset file
- Impact if skipped: Game may not look as appealing

Swarm behavior - for select locations (monsters in forest, palace guards)

- Allows for more realism/challenge, enemies can't just all overlap with each other on one tile, they'll have to be spread out which can making escaping a certain area of a level harder
- Alternative: Enemies' positions don't affect the other, will not look as sophisticated but functionality will be there, or only one enemy can approach you at a time
- Impact if skipped: Enemy swarms may not look as realistic

Devices:

Inputs: Keyboard and mouse

We'll be using the keyboard WASD or arrow keys for player movement and platforming. Navigating to the game menu or choosing shop items will be done using the mouse. To attack, players will left-click their mouse to attack in the direction Edelynn is facing. Interactions with other entities, (quest NPCs, boxes, doors and stealth elements) will be done with the E button on the keyboard. The player can also press ESC to pause the game and choose to save and exit.

Tools:

We will be using the following tools throughout the development of our game:

- Procreate, Photoshop, and LibreSprite to design our assets as some of our team members already have these applications downloaded.
- Audacity to create sound effects since it is a free-to-use application and provides a wide variety of sound editing tools.
- MuseScore for custom background music applications since it is also free-to-use and a popular application for music composition

Team management:

Throughout the development of Ascension, we will follow an Agile approach with daily stand ups. During these stand ups, each member will update the rest of the team on what was being worked on in the past week, what has been completed, and any problems that occurred which prevented the completion of a task. By informing the rest of the team of any difficulties, we can redistribute tasks accordingly so that team members that currently have a lighter workload can help out.

To track tasks, we will use the "Projects" feature built into GitHub which provides us a Kanban board with columns for different statuses. Once we have decided on what tasks to have for a given milestone, we will create a card for it in the "To do" column. Afterwards, when tasks have been distributed, the task owner will assign themselves to that task and will be responsible for the lifecycle of that task such as moving the card to the appropriate column and giving updates.

Development Plan:

Milestone 1: Skeletal Game

Week 1

- Comprehensive list of all mobs, entities, general descriptions of regions, and progression

- List of quests and their objectives
- Early level design for all zones
- Draft of the ECS complete, working from command line
- Basic renderer

Week 2

- Mouse/keyboard control
- Collision detection
- Gravity system
- Main character sprite, background and tileset for one area
- Basic enemy sprite
- Smooth movement
- Suggested features: camera follows player, parallax background for one area

Milestone 2: Minimal Playability

Week 1

- One draft level for each region
- Level loading and transitions
- Combat and health system
- Stealth system (hiding spots)

Week 2

- Currency system
- Inventory system
- Shop interface and buffs

Milestone 3: Playability

Week 1

- Implement more zones and their quests
- Level design of other zones
- Save feature

Week 2

- Enemy AI and sightlines
- Questing system
- Breakable objects

Milestone 4: Final Game

Week 1

- Audio effects/background music
- 2D Shaders
- Improvement to assets (switching from public assets to self-drawn if time permits)

Week 2

- Final bug testing
- Side quests to make more currency (pick berries, other fetch quests)