The Bouncing Beaver

By Mazen Abid & Shahzil Siddiqui

Agenda

1. Short Introduction
2. Video Showcase
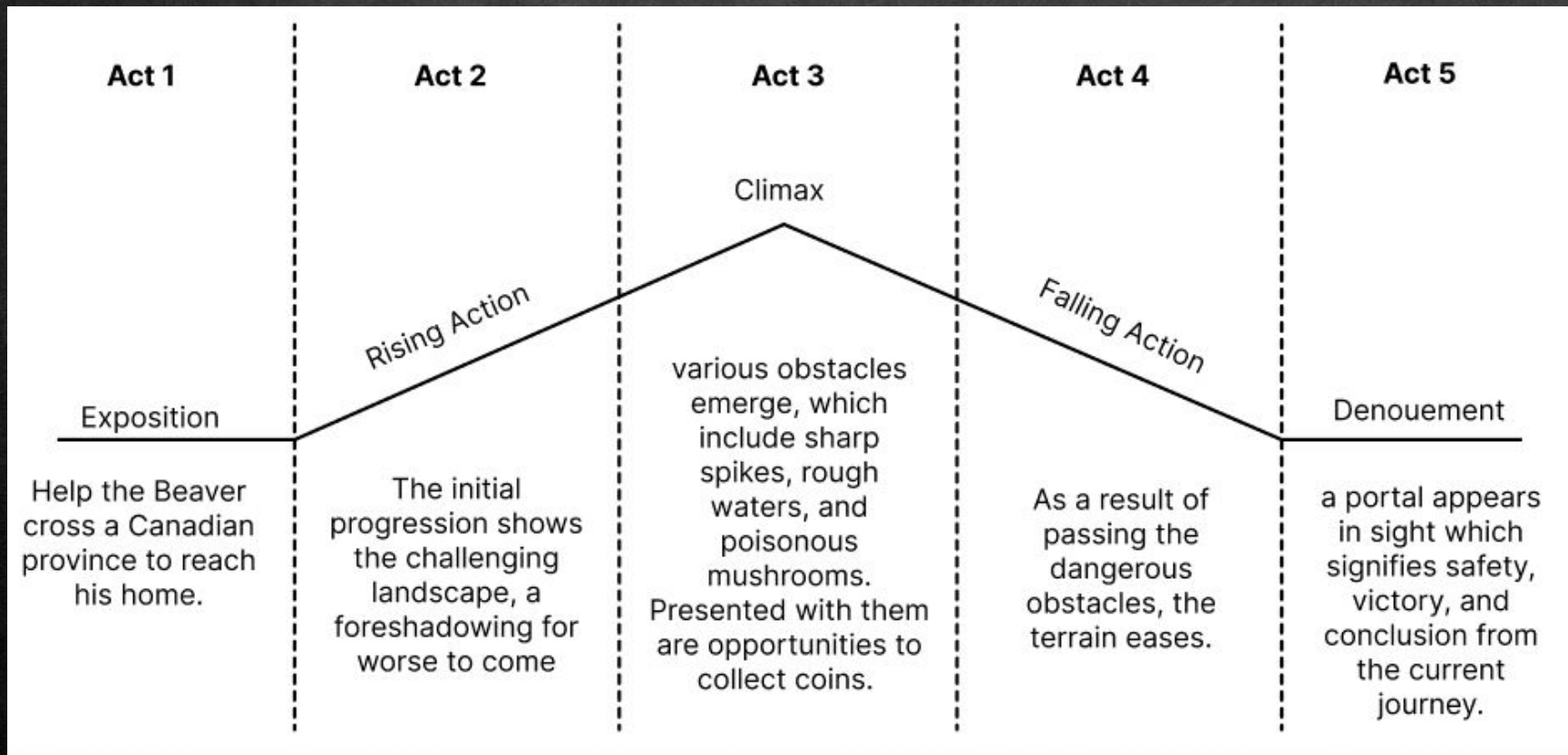- Includes everything from the slides: Description, Technology used, etc.
3. Additional Software/Programs Used
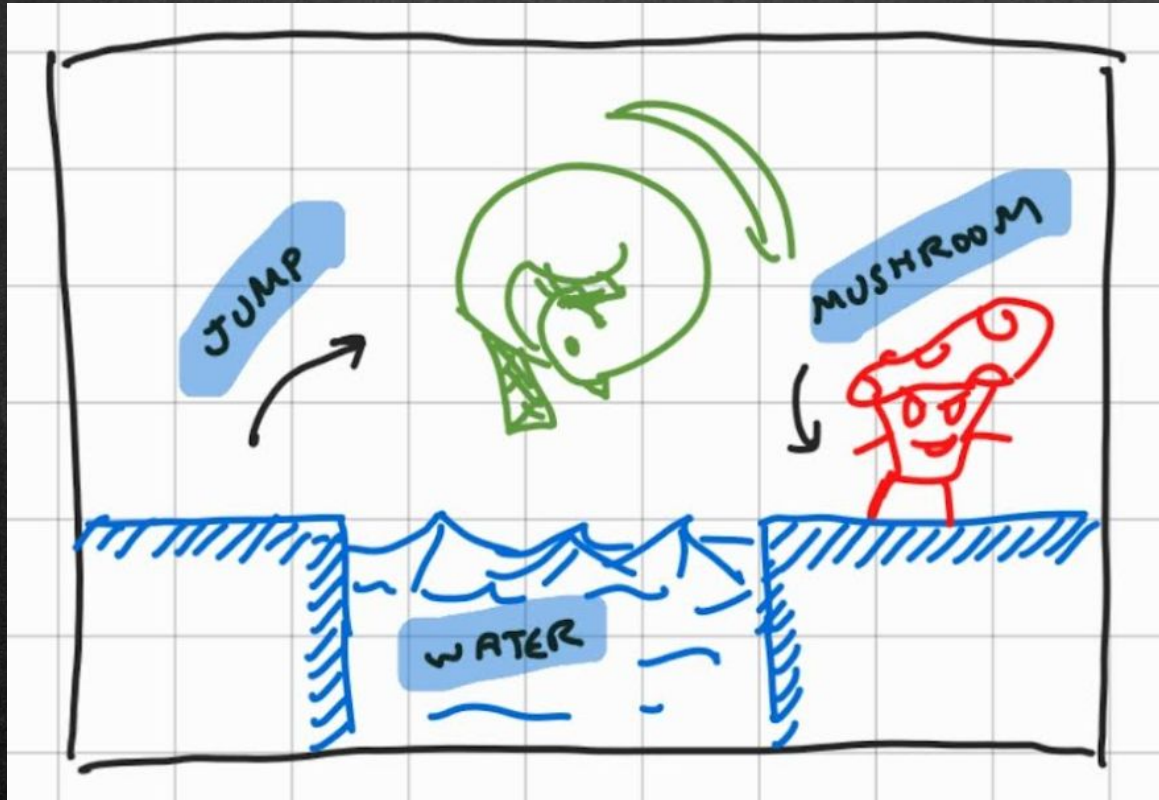4. Cover Art
5. Credits
- Acknowledgement to all graphic designers and contributors, recognizing their hard work and creativity throughout the whole game.

Background – Story Arc Sketch

Act 1	Act 2	Act 3	Act 4	Act 5

Climax

Rising Action

Falling Action

Exposition

Denouement

Help the Beaver cross a Canadian province to reach his home.

The initial progression shows the challenging landscape, a foreshadowing for worse to come

various obstacles emerge, which include sharp spikes, rough waters, and poisonous mushrooms. Presented with them are opportunities to collect coins.

As a result of passing the dangerous obstacles, the terrain eases.

a portal appears in sight which signifies safety, victory, and conclusion from the current journey.
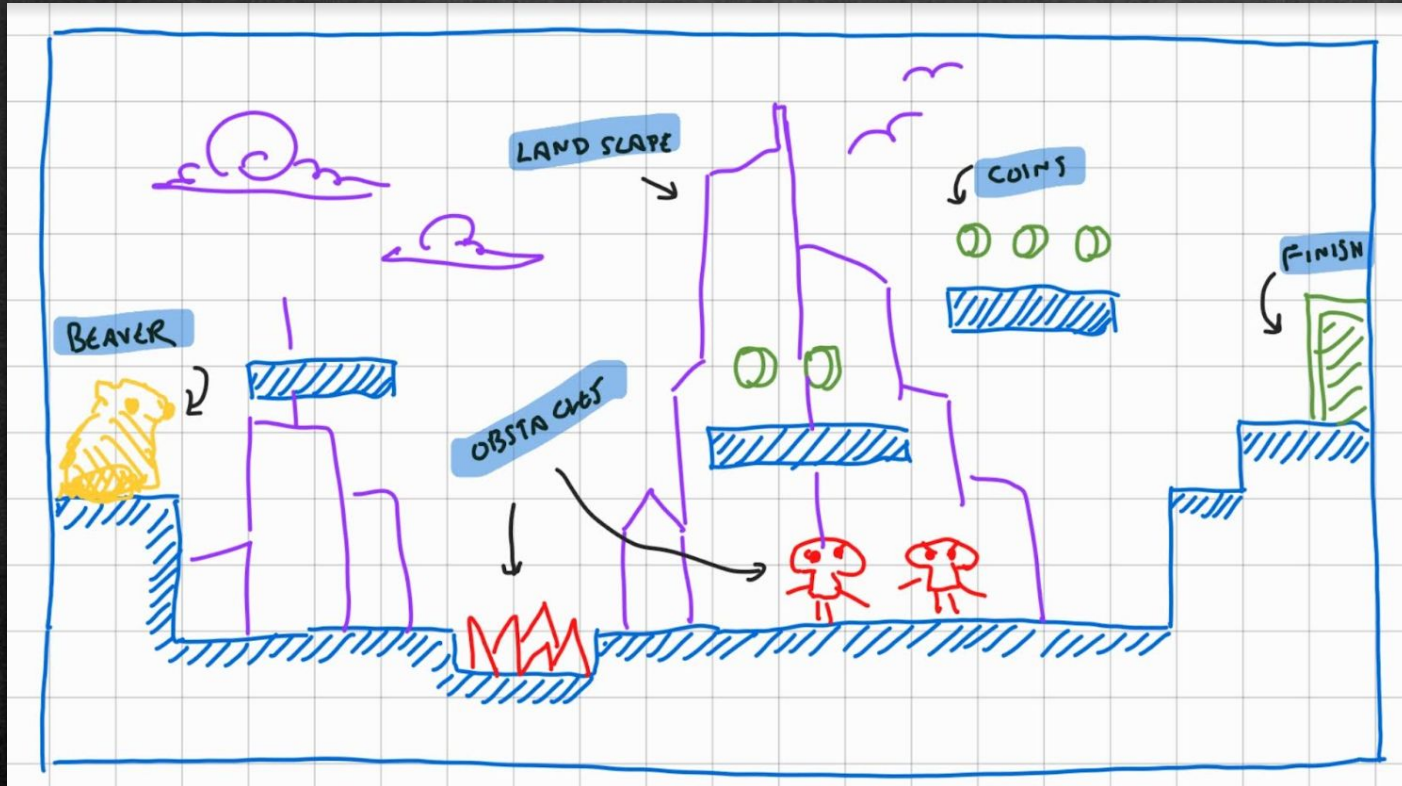
Character Design

Low-Fidelity Prototype

High-Fidelity Prototype

Motivations for Video

- Embed into github for future project presentation and reviews
- Easier for future students to digest progress
- Personal challenges
  - A more professional approach to product demonstration and iterative designing
  - An attempt to a more engaging and fun presentation

YouTube Video

https://youtu.be/mlvhgll4LJ4?si=McFImg22z_I-QXqO

1. Description

Game Title: Bouncing Beaver

Genre: 2D Platformer

Motivation: Inspired by Mario-styled games, and aimed to educate players about Canada's unique and recognizable landscapes and architecture!

2.1 Mechanics

Inscribed Layer:

- Gaming controls (jumping, moving left, moving right).
- Health bar and especially how health is affected by our various obstacles.
- Every new level presents increased difficulty.

2.2 Mechanics

Dynamic Layer:

- Player's unique interaction with each obstacles (spikes, water, mushrooms).
- Health adjustments based on player actions. (good and bad playing behaviours)

Cultural Layer:

- Players have the ability to create their own levels or mods.
- Possibility of adding side quests or additional obstacles.

3.1 Aesthetics

Inscribed Layer:

- Visually styled as a 2D platformer with sprites used to represent Canadian landscapes.
- Includes interesting character design (the beaver).
- Backgrounds specific to Canadian provinces.
  - Ex: CN tower in Ontario level
  - Ex: Scotty T-Rex in Saskatchewan level

3.2 Aesthetics

Dynamic Layer:

- The changes in the aesthetics with respect to the player incremental progress:
  - health bar changes (increase or decrease)
  - level transitions (unlocking new locations)
- Visual feedback for actions:
  - collecting coins (the coins counter increases)
  - taking damage (represented by decrease in health)

3.3 Aesthetics

Cultural Layer:

A possible Fanfiction (outside game), where a mad scientist must track down a bouncing beaver in the provinces that has been trampling his mutated poisonous mushrooms experimentations.

A possible Narrative Mod (In-Game), is such that the Beaver is a treasure hunter, who, after having explored the vast Canadian landscapes and architecture, chose to settle down. During the journey, the beaver would have collected treasures from each province, while navigating through dangerous obstacles and traps in each province.

4.1 Technology

Inscribed Layer:

We developed our game using GameMaker, which is a powerful game engine that mostly supports 2D game development. We made effective use of an existing template with embedded physics to make our the game. We added our own unique character, changed some of the logic such as adding the hidden tiles. All of which was very well-suited for our overall game development and iterative game design.

4.2 Technology

Dynamic Layer:

The dynamic technology layer incorporates elements such as collision detection and the physics engine, which allows for a smooth interactions between the player and the game. This further adds to the interactivity between the beaver and tiles, rough water, spikes, mushrooms, and also hidden tiles. Sound effects and music were additionally integrated inside the template to enhance the entire experience, especially to add the element of comfort for the gaming experience.

4.3 Technology

Cultural Layer:

With respect to the community contributions, we envision that fans might use engines like Godot or download our game from GitHub and use our files to add on to the game. This allows for the creation of new stories within the Bouncing Beaver universe! Godot and GameMaker's flexibility and physics supported templates make it an excellent choice for fan-driven content creation. Fans are also able to publish their own versions to GX Games, which GameMaker supports.

5.1 Software Used

Game Engine: GameMaker

GameMaker was chosen for its specific and targeted capabilities in making the best 2D game development, or so our research concluded anyway. Not only are there pre-existing templates but also a built-in asset store. Lastly, with respect to the short time frame available for the development, it was a decisive choice.

5.2 Technology

Prototyping: Figma

We used Figma for prototyping our game's user interface and designing/planning initial sketches.

Art Tools: Photoshop, Illustrator, MS Word

Adobe Photoshop and Illustrator were used to create and edit high-quality assets and textures for the game levels. Microsoft Word was used to remove the backgrounds for some of the assets used in as the level background.

5.3 Technology

Version Control: GitHub

GitHub was an essential tool for our version controlling, as it allowed us to manage our project and manage updates efficiently.

Assets: Asset Store and Custom Assets (itch.io)

We were able to sourced some assets from itch.io, while others were custom-made to fit our game's theme. The game levels are designed in a unique fashion that blends types of assets both quite well.

5.3 Technology cont.

Notion:

- To further manage tasks efficiently, we used "Notion," which is a great project tracking and managing tool. Through it we were able to apply the requirements for each deliverable and keep up to date with tasks due for future iterations.

Link to our Notion Page:

https://mazenn.notion.site/a32cadb506ff469082299fa6788c5fc4?v=c7050134 c56f46c6bf2cf36c0a727c2a&pvs=4

Notion

Cover Art

Story Behind the Cover Art

- The cover art is complied in a simple yet unique fashion.
- It features several of Canada's famous attractions and landscapes.
- Although we were given the opportunity to use AI to generate a cover art, we instead wanted to give more credit to the people who work hard on making these graphics and reward them for their skills and creativity rather than use an AI.
- With respect to this ideology, the platforms used include the likes of iStock and Vecteezy, which accepts payments to creators, thereby rewarding them for their unique hard work.

Credits and References

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Credits and References

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Thank you!