

The background is a dark blue field with a subtle hexagonal grid pattern. It is decorated with various futuristic, neon-like elements. In the top left, there are glowing cyan and magenta geometric shapes. In the top right, three 'X' marks are arranged horizontally, each with a different cyan-to-magenta gradient. On the left side, three upward-pointing chevrons are stacked vertically, also featuring the same gradient. The bottom of the screen features more glowing geometric shapes and light trails, creating a sense of depth and movement.

Assignment 1

Game Development

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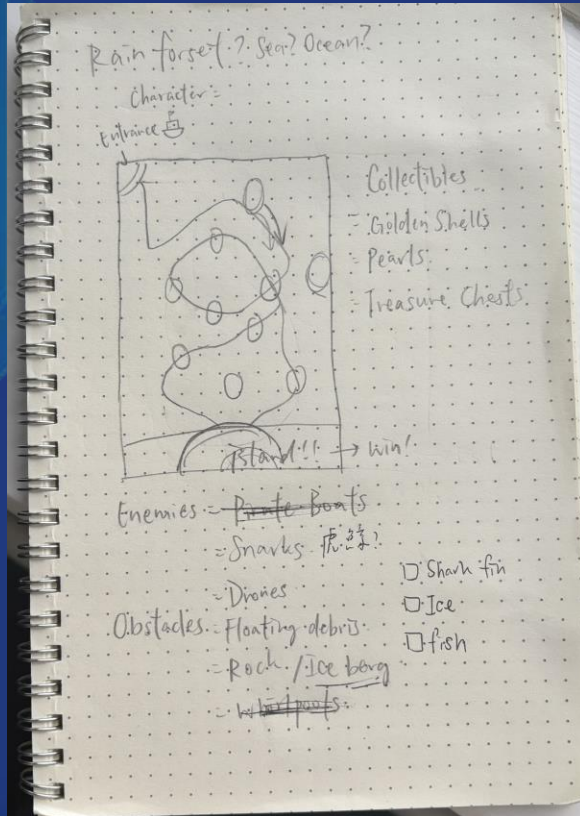
Genre & Game play

Our idea

We plan to develop a game similar to *Fall Guys*, in which players control a character who jumps around and collects coins.

After completing the basic features, we can introduce more game modes to make it more engaging.

Our idea is to incorporate elements like jumping over obstacles, in addition to coin collection, to add more challenges to the game.



Menu

- Basic and clean menu system
- Easy to navigate

Player avatar: Pingu

- Can move backwards, forwards, left, right and jump
- Play sound effects when Jump and Walk
- Play the blood explode animation when player drop into water
- Play animation when Walk

Sturcture



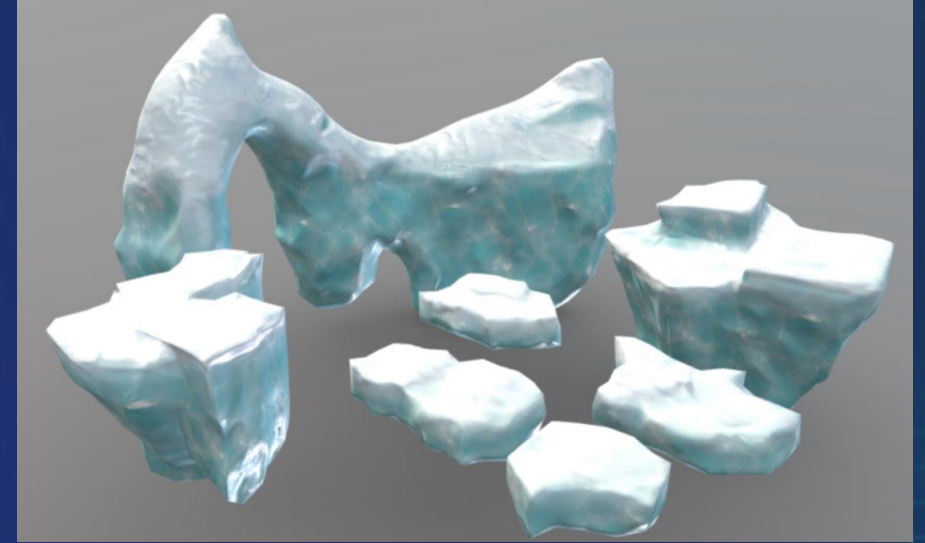
Structure

Obstacles: Iceberg

- Different models from each other

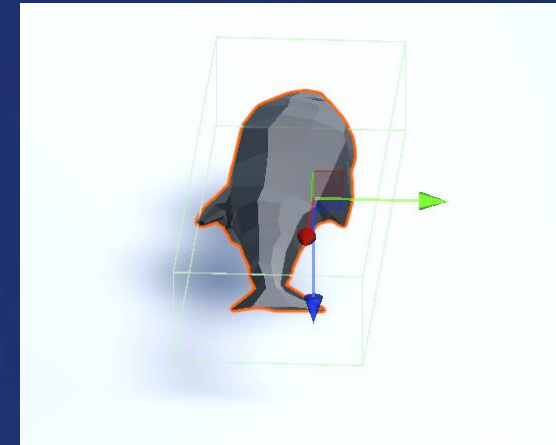
Movable obstacles: Iceberg

- An object that moves independently in x and z axis
- Catch timing and jump on in
- Drop in water>>>Player loses lives

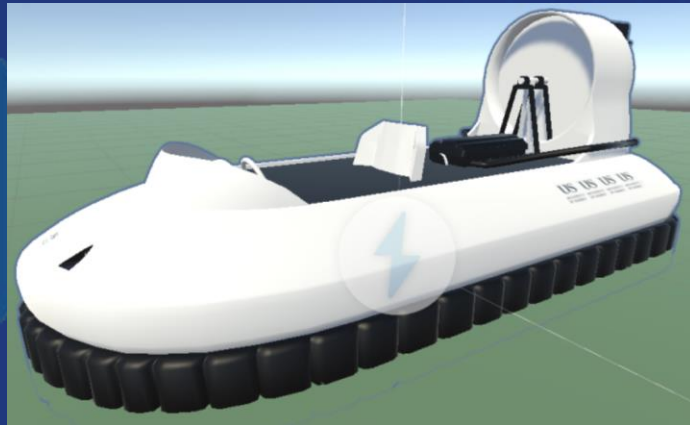


Collectable game objects: fish

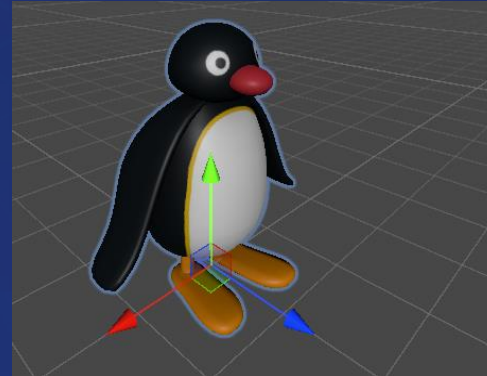
- Gain points when the player collect it



Main Character



Hovercraft
Can't
Jump

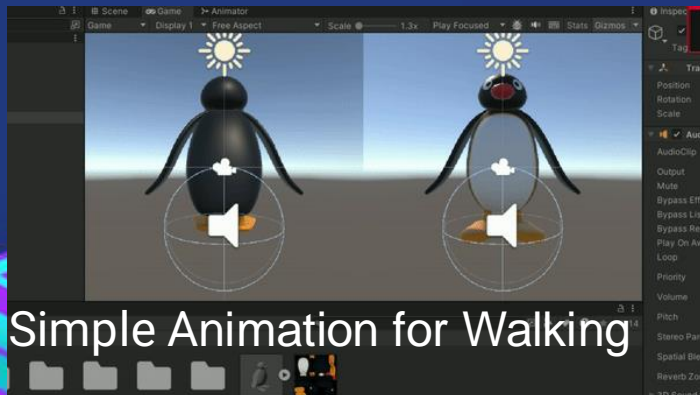


Pingu is cute, and can Jump
And free to Download

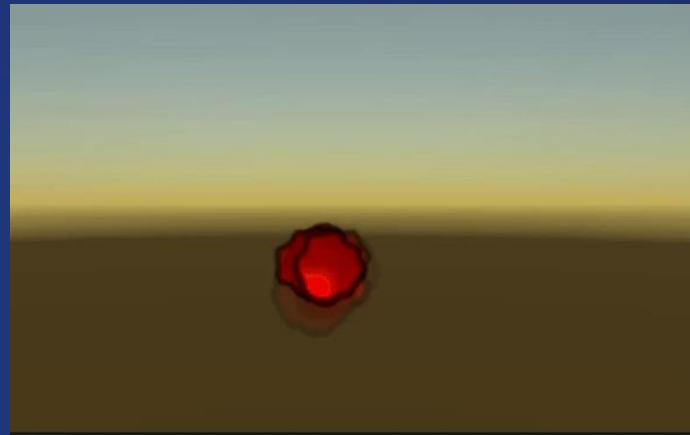


What to expect

First Idea- Hovercraft
Can run either a sea or land scene

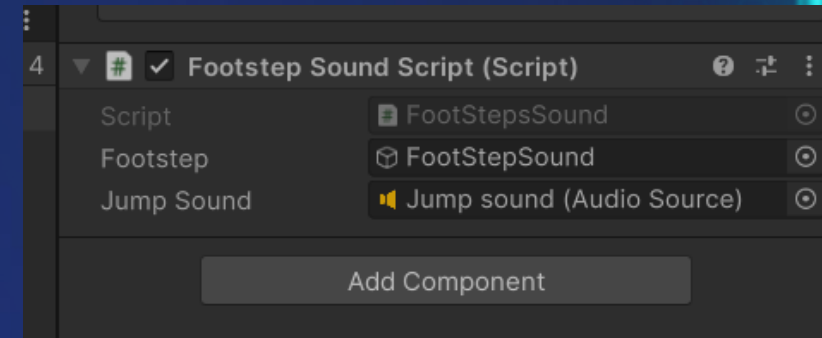


Simple Animation for Walking

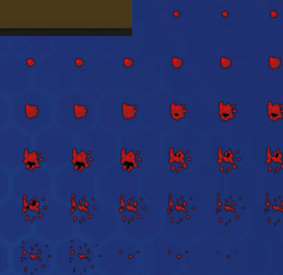


Blood Explode Animation

PNG for the Blood Explode->



Sound Script When Jump
and Walk



Scene



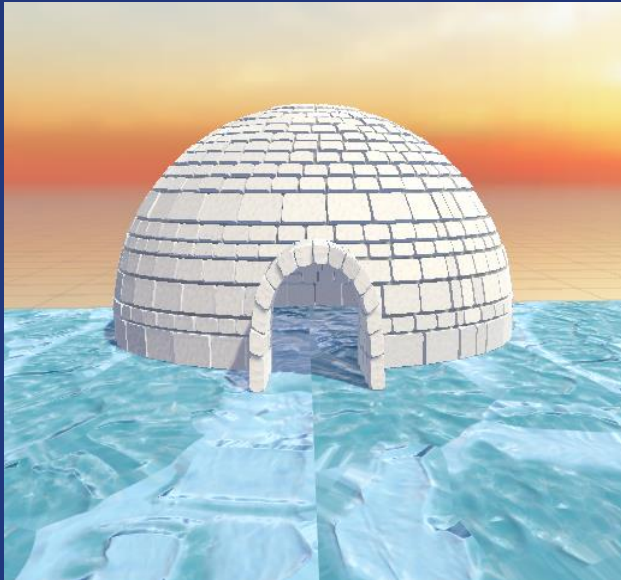
Adding skybox to make
a 360 environment
- To create surrounding
sky

What to expect:
Penguin habitats that
include ocean, sea ice

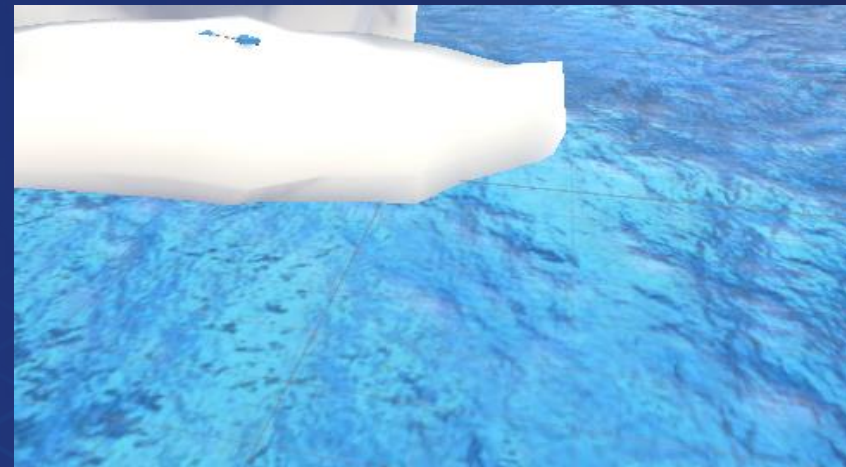
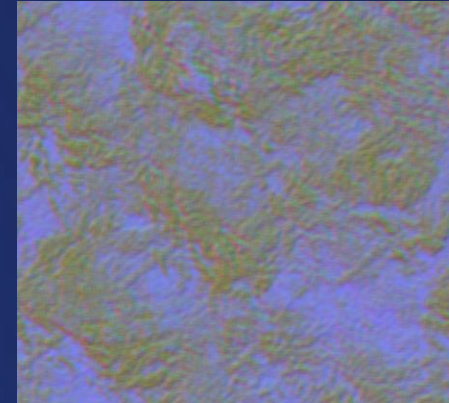


Scene

Applying normal map to enhance the texture



Igloo for success check point



Resources

3D models:

- <https://assetstore.unity.com/packages/3d/environments/landscapes/free-snow-mountain-63002>
- <https://assetstore.unity.com/packages/3d/environments/landscapes/snow-mountain-24690>
- <https://sketchfab.com/3d-models/igloo-download-626ff9d6095b4579b7e741b23fad521c>
- <https://sketchfab.com/3d-models/seal-0616281841b44983b1c113b578c0f0ce>
- <https://sketchfab.com/3d-models/shark-fin-from-poly-by-google-0891eed09d7e4a3796a0aada05680e9f>
- <https://sketchfab.com/3d-models/ice-glacier-933b3c2ee51c48bb958d06655d1ff8bd>
- <https://sketchfab.com/3d-models/low-poly-tuna-fish-175f2e6f81ca4e12827eef9d80db54aa>
- <https://sketchfab.com/3d-models/pingu-34d6e003b6654f428855d3c1c79e7f67%E2%80%8B>
- Blood effect PNG: <https://assetstore.unity.com/packages/vfx/particles/spells/100-best-effects-pack-25634>

Reference:

- **Separate prefab into separate pieces – Unity** <https://www.youtube.com/watch?v=YvdABrp0zHw>
- **create animations** <https://gamedevacademy.org/how-to-create-animations-from-models-and-sprites-within-unity/>
- **Assign the Animator Controller to the Prefab** <https://learn.unity.com/tutorial/the-player-character-part-1?uv=2020.3&projectId=5caf65ddedbc2a08d53c7acb#5caf95e5edbc2a0c0aee4cd5>
- **Add multiple sounds** https://www.youtube.com/watch?v=mvaUho_a-q4&list=LL&index=3&pp=gAQBiAQB
- **2D background in a 3D game** <https://www.youtube.com/watch?v=Bv1foWFahM4&t=664s>
- **Retargeting Humanoid Animations in Unity** <https://www.youtube.com/watch?v=0o7SzYSsR-o&t=178s>

Thanks!



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