A wide-angle photograph of an Arctic landscape. In the foreground, dark, jagged, and wet-looking rocks line a body of water. In the middle ground, several large, white icebergs float in the water. The background shows a vast, flat expanse of ice under a sky filled with soft, yellowish-orange clouds, suggesting a sunrise or sunset. A semi-transparent black rectangular box is overlaid on the right side of the image, containing the title and author information.

ARCTIC SHIFT

By: The Purple Team

WHAT IS OUR PROJECT ABOUT?

- Raising awareness towards the new generation (Early high school students)
- Using realistic data to portrait the life of a polar bear past and present
- Scavenging and survival simulation to induce empathy to user
- Teaching facts in a fun and interactive way





- Unique and memorable approach that stands out to users



- People tend to resonate with animals and showing struggling wildlife will leave an impact on users



- Polar bears are an iconic symbol of climate change making the emotional impact greater



- well studied part of climate change providing accurate data for our simulation

WHY WE CHOOSE THIS IDEA: EMPATHIZE

DESIGN PROCESS: DEFINE

- Split up into 2 scenarios showing the contrast between the arctic in the past and the arctic now (highlights the urgency of the situation)
- Simulation will focus on the increasingly difficult survival situation from each scene.
- More fatigued
- Less wildlife
- Much less hunting space





FEED-BACK CHANGES: IDEATE

- Change time of past scenario from pre-industrial to a more recent date
- Limiting number of features to insure completion on time
- Adequate guidance for players understanding



DESIGN PROCESS: PROTOTYPE

TESTING DONE FOR THE PROTOTYPE

- The water invisible for the player to see.
- The hunger bar was going up instead of going down.
- Camera level so that when the player puts on VR goggles it is properly set.
- Turning down the brightness
- Making the polar bear move at a realistic speed



KEY CONCEPTS INTEGRATED INTO THE SIMULATION



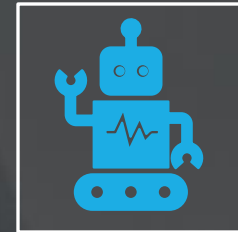
Hunger system and stamina system that will be replenished as you consume wildlife



Interactive facts (Popups visual and audio)



Past and Present teleportation



NPC AI (Simulate real life hunting scenarios)

SHORT VIDEO



Explaining the scenery of where the player will be placed



A short overview of the problem that polar bears are facing

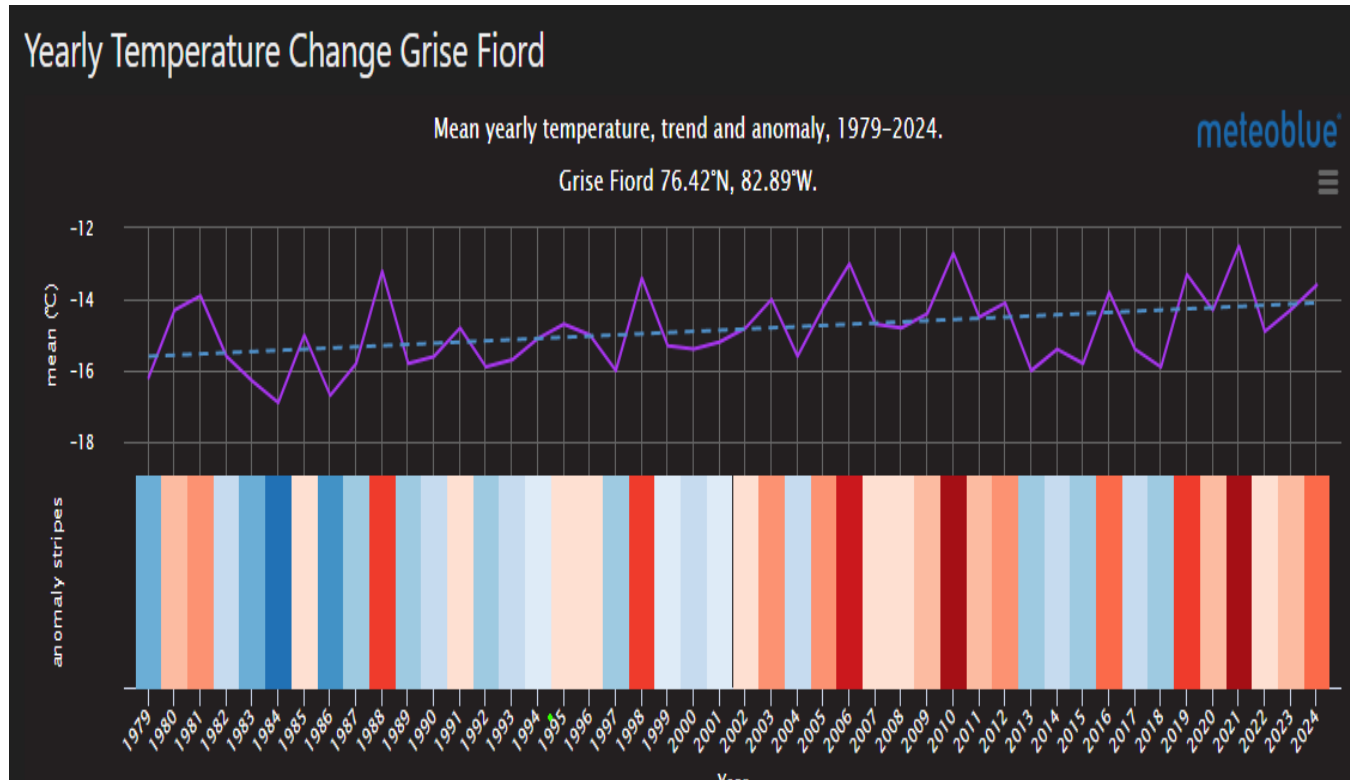


There will be a voice talking over the video (AI generated to make it sound like National Geographic to further enhance the experience)

RESEARCH

Ice lost 54.9% estimation
(NASA.GOV)

(1979) 16.2°C || (2025)
13.6°C





Making the scene one of the map switch into the second scene of the map



Add in voice lines for the polar bear



Adding in the movement of the animals that the polar bear will hunt



Adding in text and subtitles



Swimming for the polar bear



Making sure that the simulation fits the time restriction (3 minutes)

FUTURE WORK

LESSONS LEARNED

It may not look the same on a laptop screen
as in the VR goggles

Learning to write in C#

Learning how to navigate the Software engine
unity

Learning how to incorporate aspects of a
simulation/game

Learning how to compile different aspects of
the project from multiple devices onto one

Q&A SESSION

Any questions?

