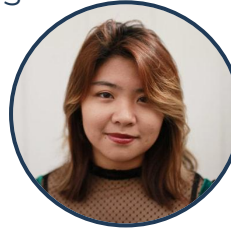# Team Members

Anlan Yang
Artist

Gillian Ryan
Producer/ Narrative Designer

Lyn Li
Artist

Chenguang Deng
Programmer/Producer

Xiao Han
Narrative Designer

Rohit Sharma
Programmer/Technical Designer

Our Client

Genevieve Johnson

Roblox Education, Instructional Design and Game Based Learning
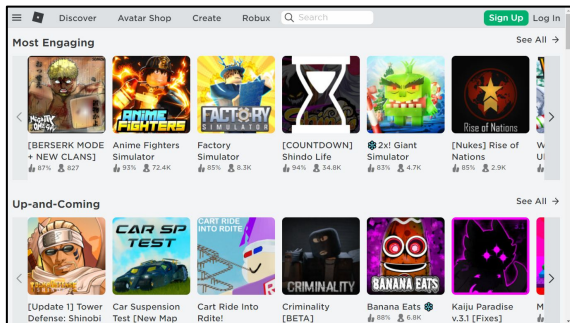
Design a **prototype** for a **narrative design** tool utilizing **Roblox Studio**
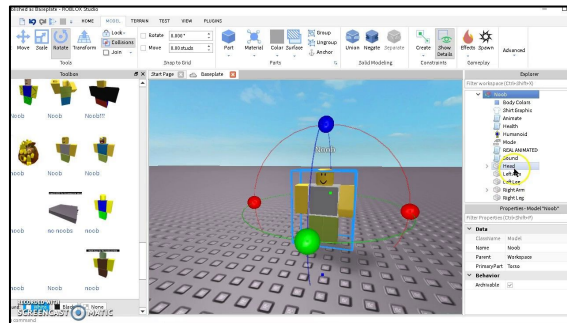
What is Roblox?

Roblox

- Platform for users to play and share experiences

- Popular among 7 - 18 year olds

Roblox Studio

- Editor to create experiences

- Directly connected to Roblox platform

- Contains asset library

- Uses Lua

Client's Wants

A learning tool that uses **branching narrative** to teach traditional **subjects**

Asset Placement
& 3D Art

Exclusive Sharing

In Roblox
& Cross Platform

Scalability Across
Subjects

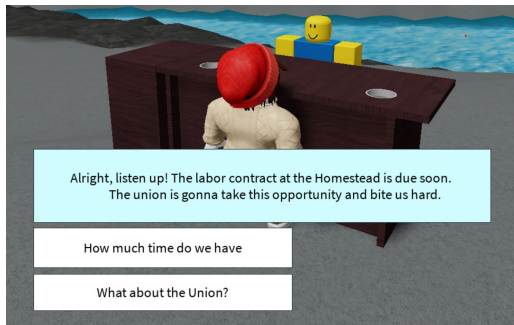# High School Students

13 - 18 Years Old

Roblox Educational Designers

Deliverables

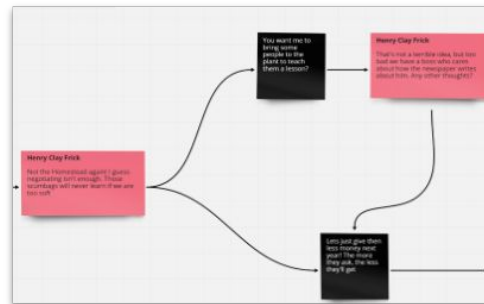
Narrative Playground Tool

Alright, listen up! The labor contract at the Homestead is due soon. The union is gonna take this opportunity and bite us hard.

How much time do we have

What about the Union?
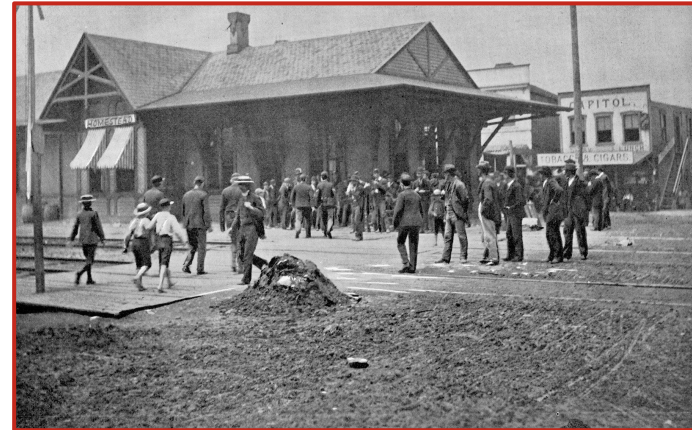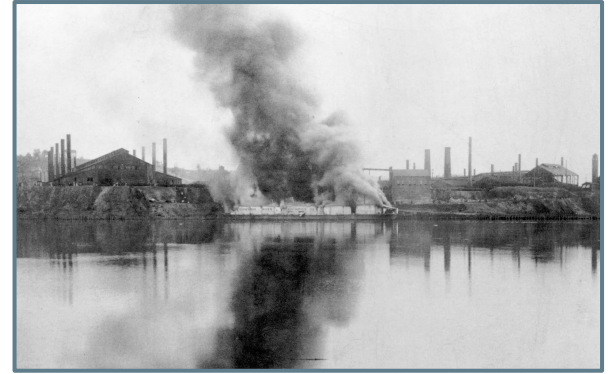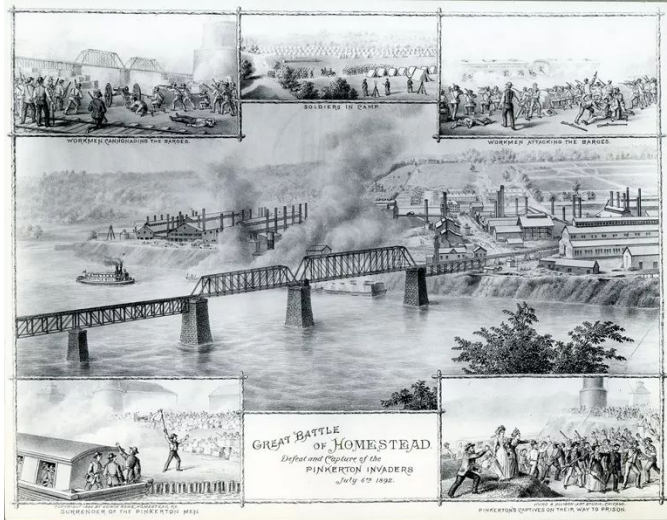
Test Story

Documentation

Test Story Topic

- Topic Goals
  - ❏ History or Literature
  - ❏ Taught in high schools
  - ❏ Multiple perspectives

- Homestead Strike (1892)
  - ✓ History
  - ✓ Taught in 10th or 11th grade
  - ✓ Multiple perspectives
  - + Local
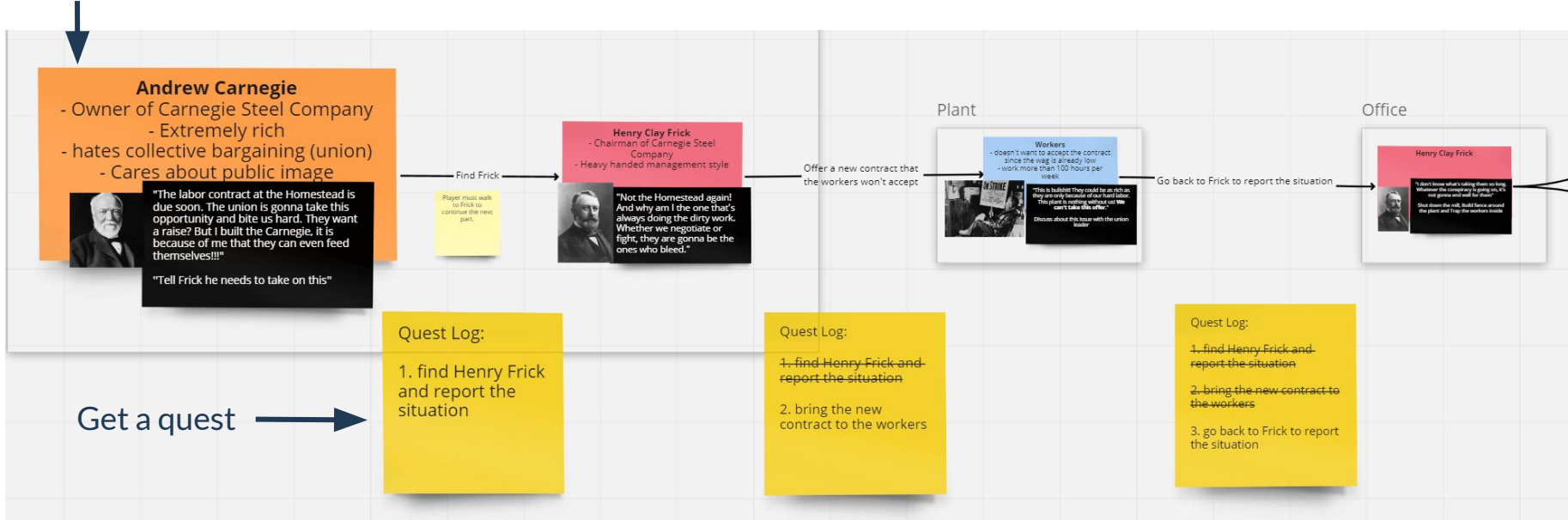 - + Relevant to current economic climate

Homestead Strike

Player's Perspective:
Assistant of Henry Frick

Conflict:
Disagreement on labor wages between
the Union and Carnegie Steel

Player's Goal:
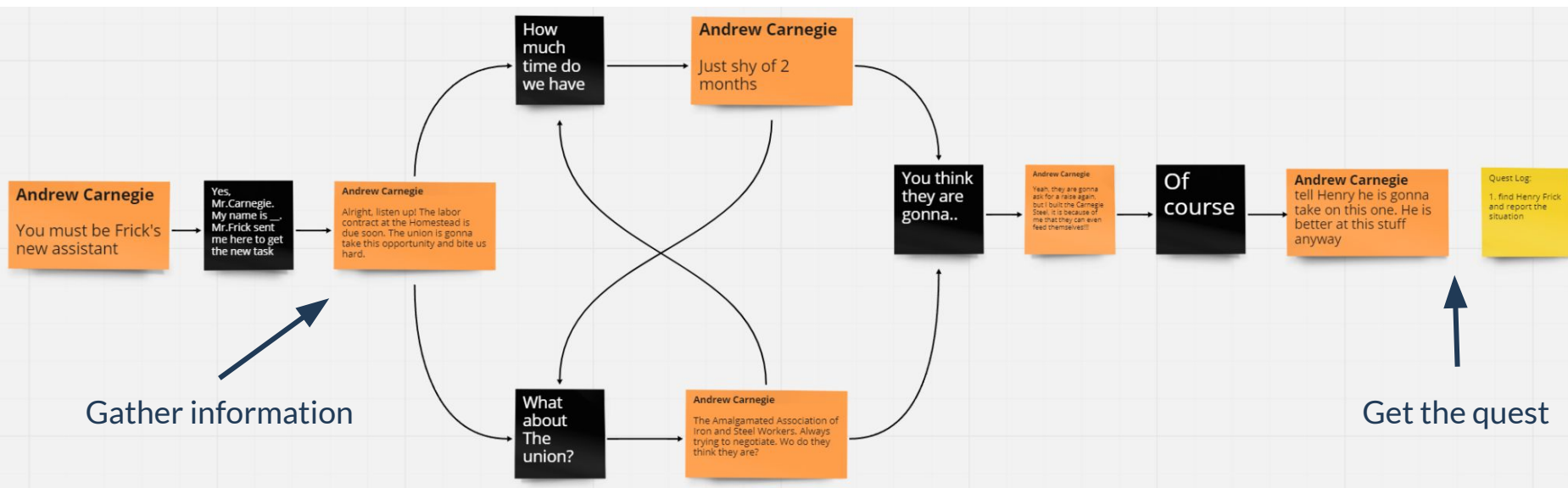Help Frick to prevent increasing labor wages

How to implement?

Talk to NPCs

Andrew Carnegie
- Owner of Carnegie Steel Company
- Extremely rich
- hates collective bargaining (union)
- Cares about public image

"The labor contract at the Homestead is due soon. The union is gonna take this opportunity and bite us hard. They want a raise? But I built the Carnegie, it is because of me that they can even feed themselves!!!"

"Tell Frick he needs to take on this"

Player must walk to Frick to continue the next part.

Find Frick

Henry Clay Frick
- Chairman of Carnegie Steel Company
- Heavy handed management style

"Not the Homestead again! And why am I the one that's always doing the dirty work. Whether we negotiate or fight, they are gonna be the ones who bleed."

Offer a new contract that the workers won't accept

Plant

Workers
- doesn't want to accept the contract since the wag is already low
- work more than 100 hours per week

"This is bullshit! They could be as rich as they are only because of our hard labor. This plant is nothing without us! We can't take this offer."

Discuss about this issue with the union leader

Go back to Frick to report the situation

Office

Henry Clay Frick

"I don't know what's taking them so long. Whatever the conspiracy is going on, it's not gonna end well for them"

Shut down the mill, Build fence around the plant and Trap the workers inside

Get a quest

Quest Log:

1. find Henry Frick and report the situation

Quest Log:

1. find Henry Frick and report the situation

2. bring the new contract to the workers

Quest Log:

1. find Henry Frick and report the situation

2. bring the new contract to the workers
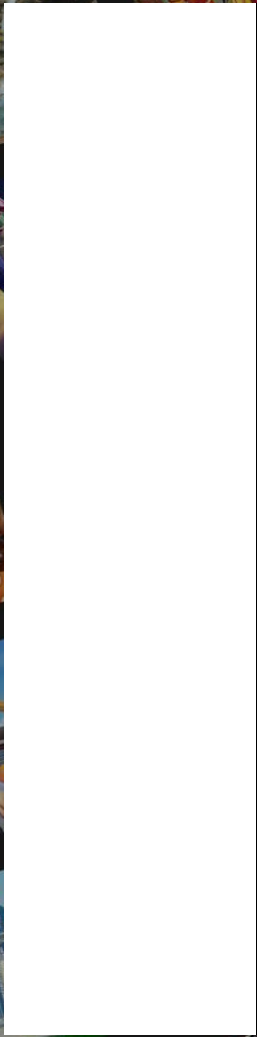
3. go back to Frick to report the situation

Quest based main storyline

How to implement?
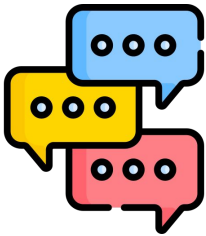

Choice based interactive dialogue system

Prototyping for Inspiration

Assignment: Create an interactive story about the Homestead Strike

- Twine
- Miro
- PowerPoint
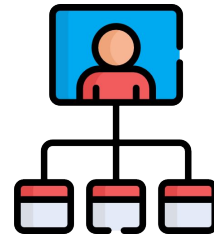- MadLibs
- Spore Galactic Adventure
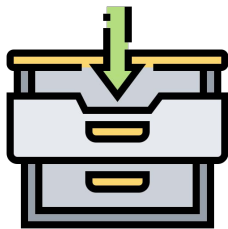- Roblox

Key Features

Dialogue System

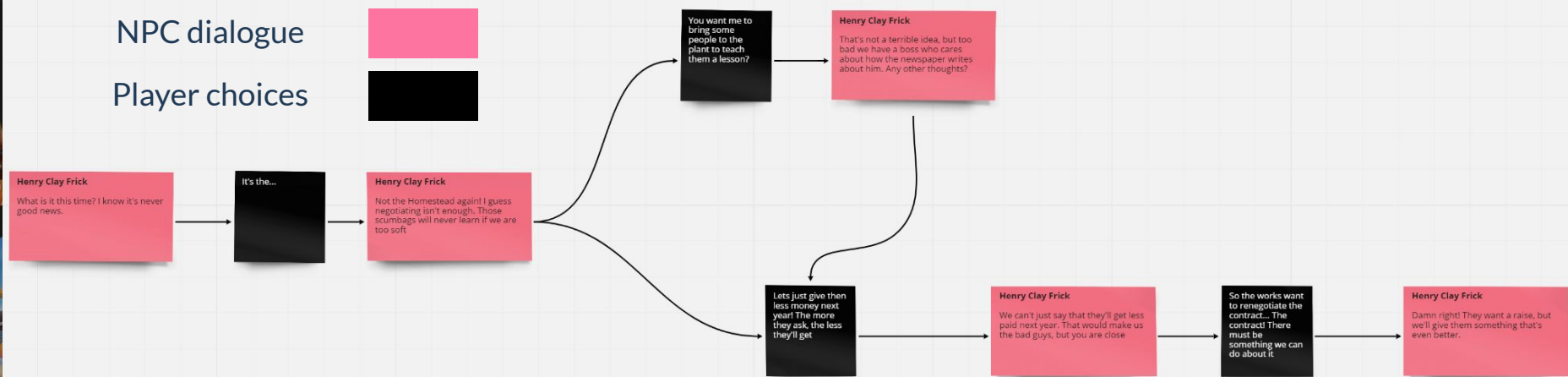Global Status Tracking

Exclusive Sharing

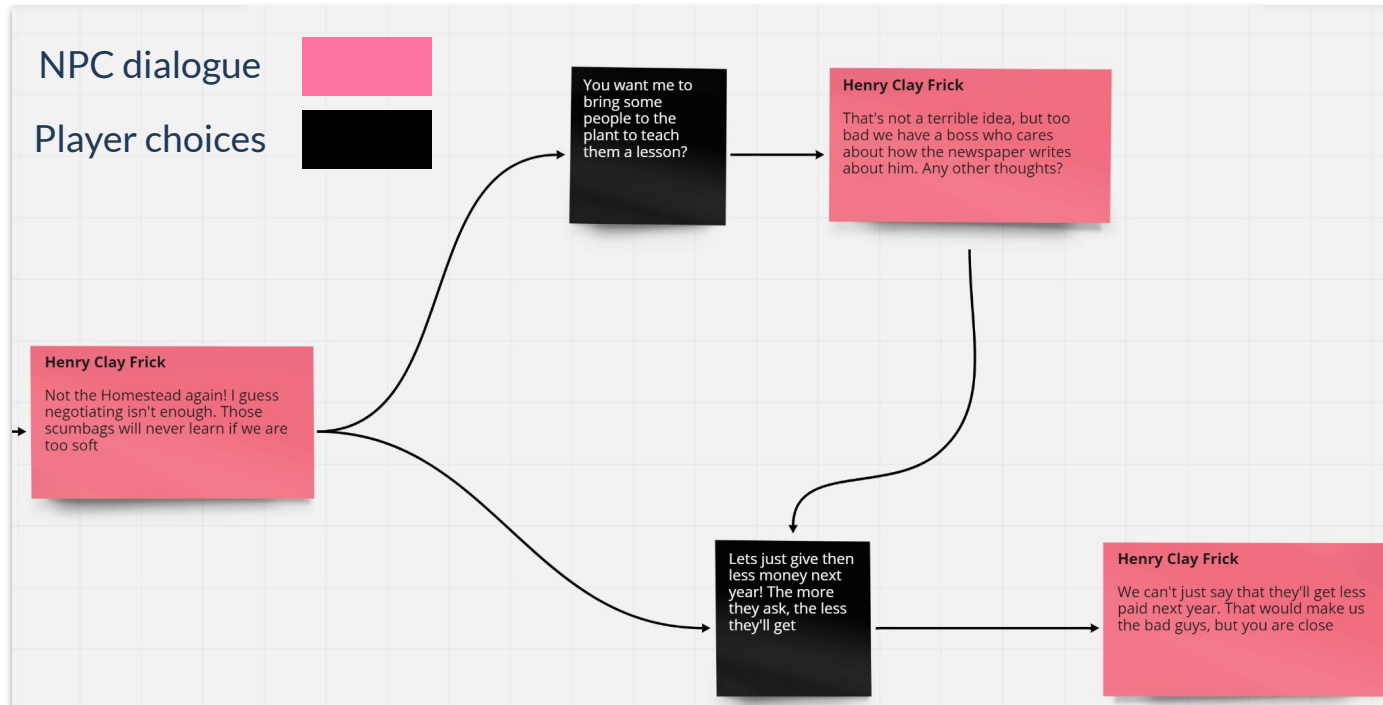Asset Drawer/Inventory

Saving & Loading

Dialogue System

A data structure for narrative branching: Node Graph

NPC dialogue

Player choices

Henry Clay Frick
What is it this time? I know it's never good news.

It's the...

Henry Clay Frick
Not the Homestead again! I guess negotiating isn't enough. Those scumbags will never learn if we are too soft

You want me to bring some people to the plant to teach them a lesson?

Henry Clay Frick
That's not a terrible idea, but too bad we have a boss who cares about how the newspaper writes about him. Any other thoughts?

Lets just give then less money next year! The more they ask, the less they'll get

Henry Clay Frick
We can't just say that they'll get less paid next year. That would make us the bad guys, but you are close

So the works want to renegotiate the contract... The contract! There must be something we can do about it

Henry Clay Frick
Damn right! They want a raise, but we'll give them something that's even better.

Dialogue System

Each choice will be a branch that triggers different dialogues and events

NPC dialogue

Player choices

You want me to bring some people to the plant to teach them a lesson?

Henry Clay Frick

That's not a terrible idea, but too bad we have a boss who cares about how the newspaper writes about him. Any other thoughts?

Choice 1

Henry Clay Frick

Not the Homestead again! I guess negotiating isn't enough. Those scumbags will never learn if we are too soft

Lets just give then less money next year! The more they ask, the less they'll get

Henry Clay Frick

We can't just say that they'll get less paid next year. That would make us the bad guys, but you are close

Choice 2

Dialogue System

- Create and connect dialogue nodes using script

- Proximity prompt

- Allow custom events

Global Status Tracking

- World State

- Allows the creation more advanced branching narratives

- Allows task tracking
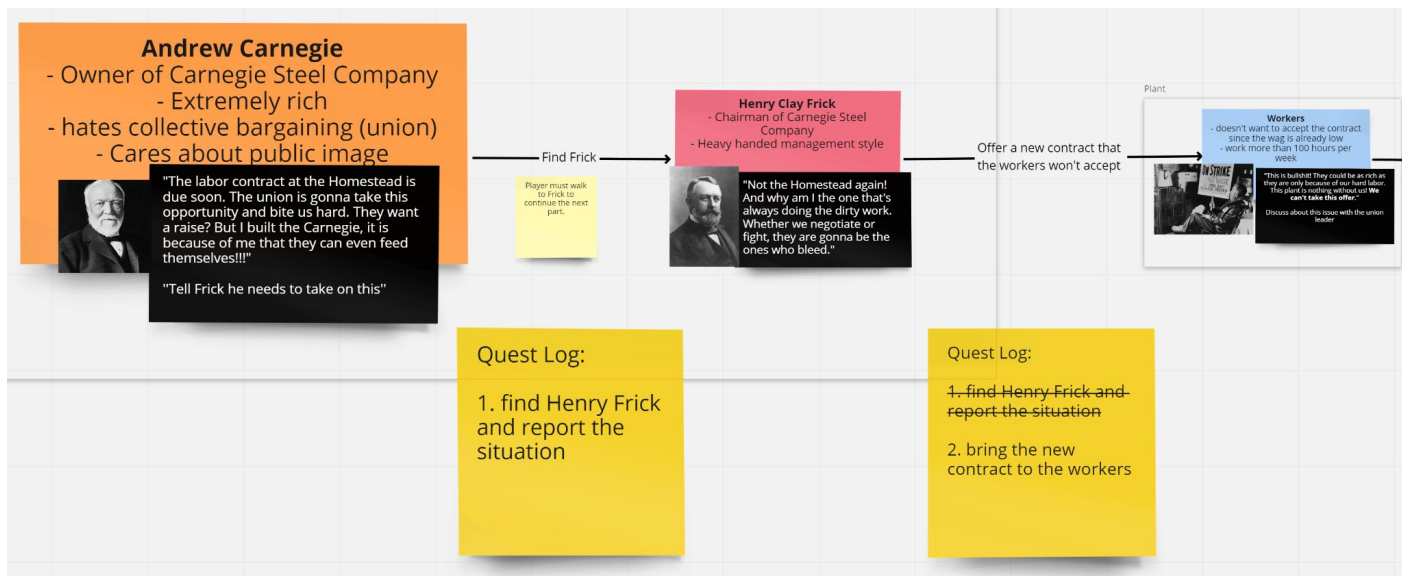
Exclusive Sharing

Plot system: There will be multiple 'plots' in the game
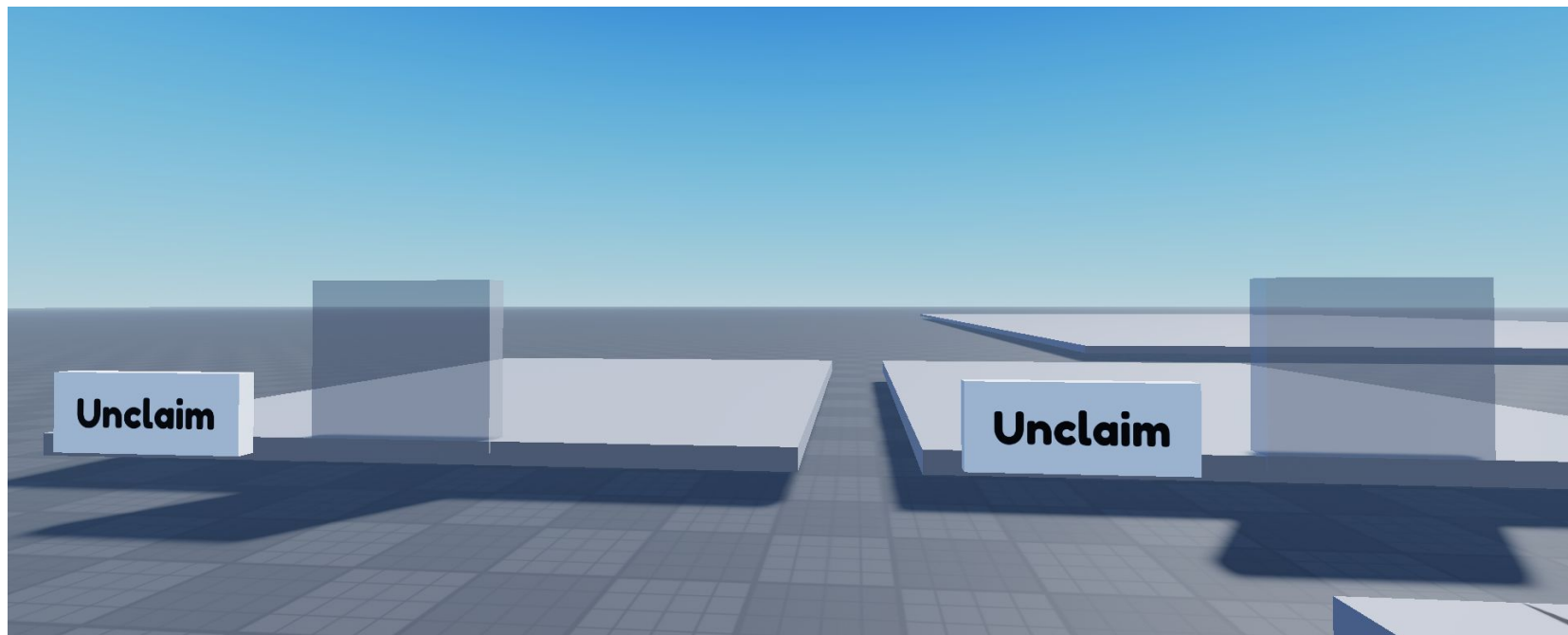
Exclusive Sharing

Plot system: Players can claim a single plot

Exclusive Sharing

Plot system: Players can only build in their plot
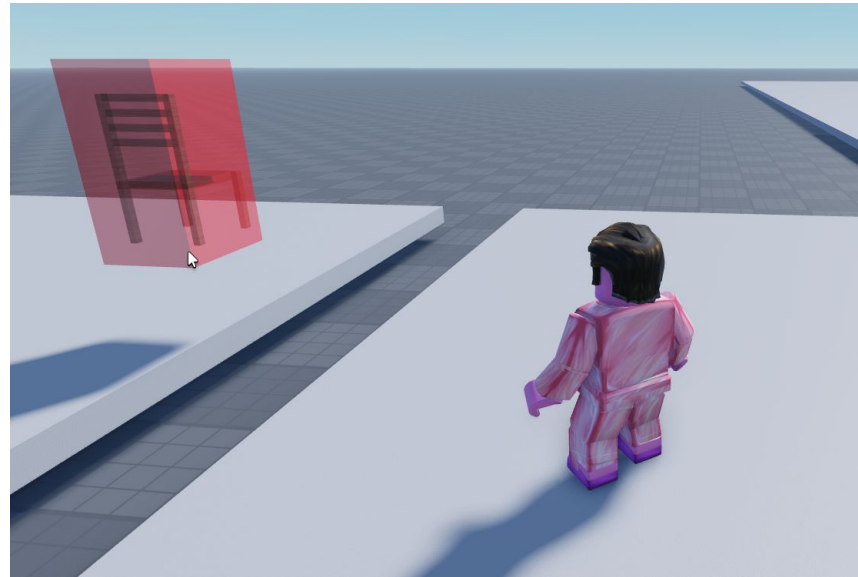
Exclusive Sharing

Plot system: Players can play other students' experience

Key Features
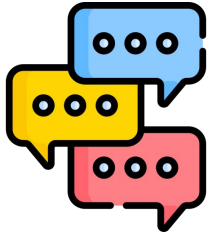
Dialogue System

Global Status Tracking
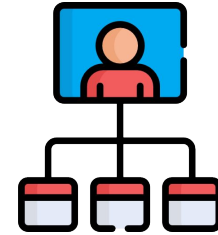
Exclusive Sharing
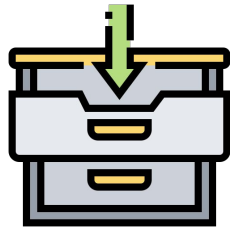
Asset Drawer/Inventory
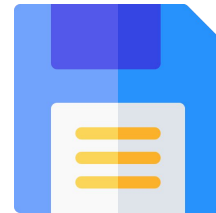
Saving & Loading

Asset Drawer

- Why do we need an asset drawer?

  - Worldbuilding

  - Scene Dressing

  - Adding characters

- Inspiration

  - Spore Galactic Adventures

  - Tycoon games

Asset Drawer Properties

Asset gallery to choose from

Asset Drawer Properties

Placing assets into the world

Asset Drawer Properties

Being able to orient the assets

Asset Drawer Properties

Delete assets from the world

Surveying & Paper Prototyping

- Surveyed 6 students about their approach to a potential Roblox assignment

- Introduced students to dialogue tree

- Contacted 9 teachers across 5 subjects
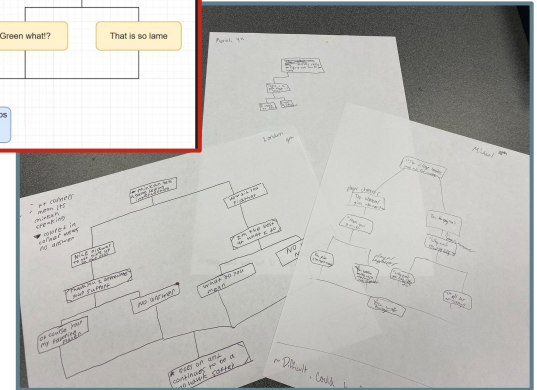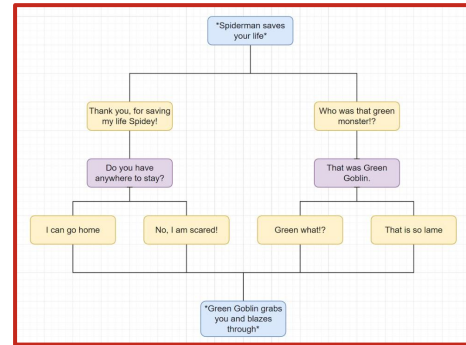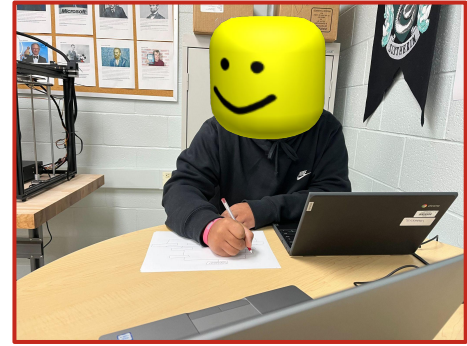
Takeaways
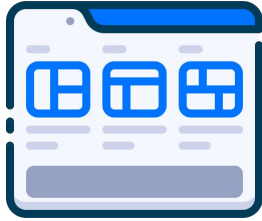
Templates can help students get started

Students want to preplan the story on paper

Students value placing assets and characters very high

Interested in using Roblox for language and science classes

User Experience Chart

Research and understand the topic

Build environment in Roblox

Share and invite teachers and other students to play

Map out the story structure on paper

Build the dialogue with node graph
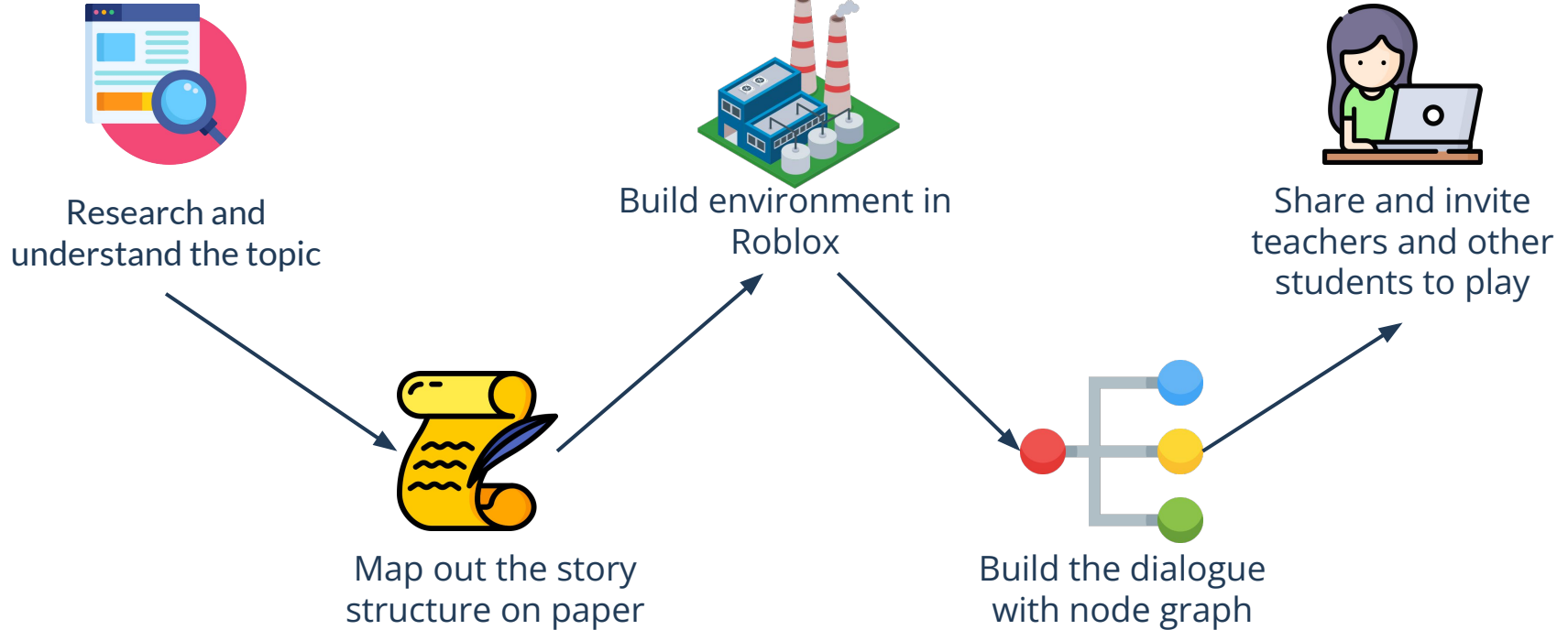
Art Target

- Create a gallery (a package of assets) for players to use into Roblox Studio to help them create their narrative experience

Sims
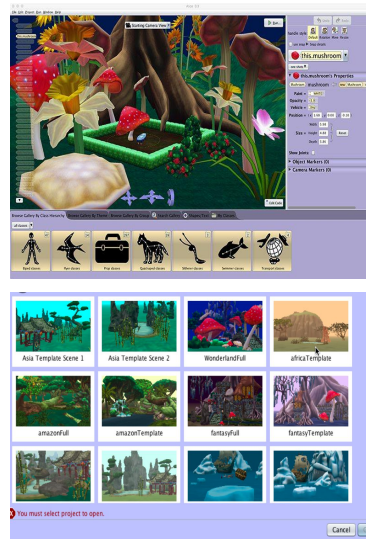
Alice3

MineCraft

Design Issues

- **Template:** Provide relevant templates with basic environment settings for players to choose.
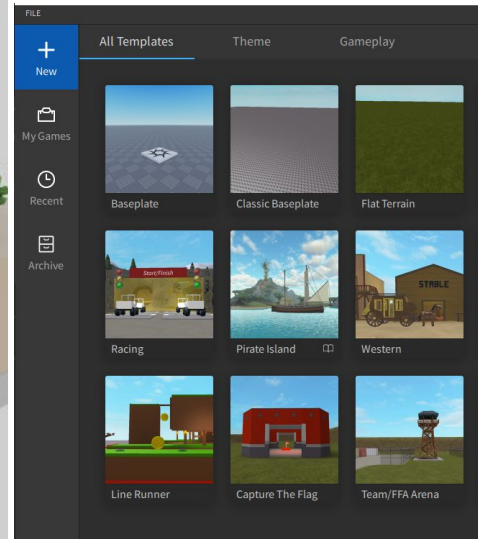
Design Issues

- **Single assets:** Provide single assets (environment characters props)that players can drag from the assets drawer into their scene to add more creativity
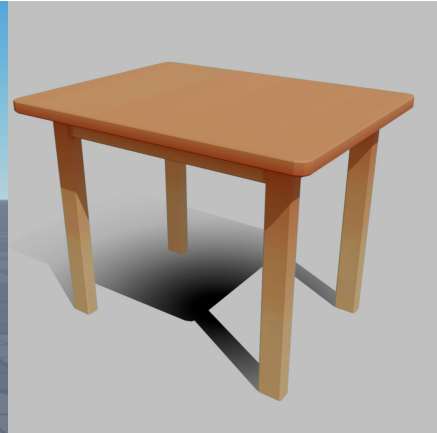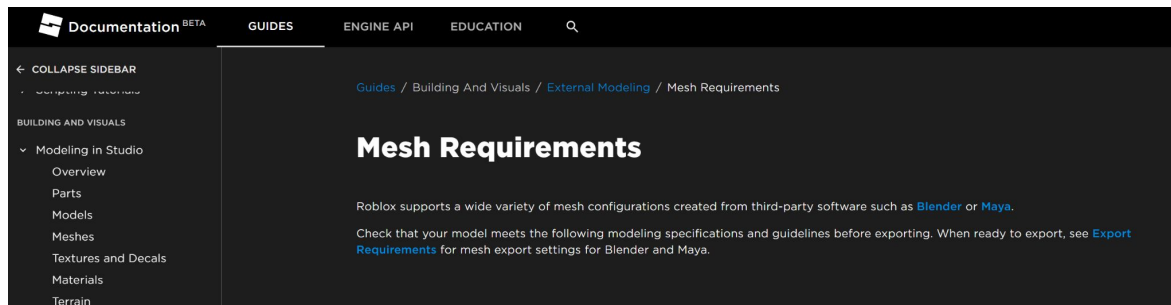
Design Issues

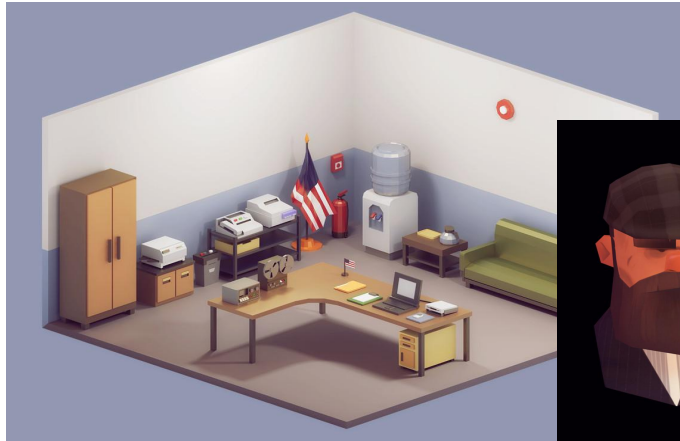- **Indoor and outdoor spaces**

Pre Production/ Research

- Test implementing art assets & discover limitations in Roblox Studio

Pre Production/ Research

- Test implementing art assets & discover limitations in Roblox Studio

- Art Style:

Gallery Process

- **Environment list**

	A	B	C
1		Asset Name	Ref Link
2	Factory	Fence	
3		Factory building	
4	Office	indside	
5		outside	
6	River	boat	
7		bridge	
8	Town		https://www.artstation.com/artwork/0XXB1y
9		Houses	
10		Train	
11		Truck	
12	Foliage	Tree	
13			

Gallery Process

- **Environment list**

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9		Houses	
10		Train	
11		Truck	
12	Foliage	Tree	
13			

Gallery Process

- **Character list and Props list**

	Asset Name
1	
2	Hat1
3	Hat2
4	Hat3
5	Upper Cloth
6	Pants
7	Shoes
8 Workers	Props...
9	Head
10	Upper Cloth
11	Pants
12	Shoes
13 AC	Props...
14	Head
15	Upper Cloth
16	Pants
17	Shoes
18 Frick	Props...
19	Head
20	Upper Cloth
21	Pants
22	Shoes
23 Union leader HOD	Props...
24	Head
25	Upper Cloth
26	Pants
27	Shoes
28 Soldier	Props...
29	Head
30	Upper Cloth
31	Pants
32	Shoes
33 Detective	Props...
34 woman	
35	

Summary

- Narrative playground tool targeted for HS Students

- Demo of how this tool could be used

- Documentation on next steps, challenges, and guidelines

Schedule

Onboarding & Brainstorming

Rapid Prototyping & 2 Key Features

3 Key Features & Iteration 1

Soft Opening

Final Presentation

| Week 1 -2 | Week 3 | Week 4-5 | Week 6-7 | Week 7-9 | Week 10-12 | Week 13 | Week 14 | Week 15 |

¼'s Presentation & More Researching

½'s Presentation

Iterations 2 & 3, Documentation

Playtests Polish & Deliver