

天主教輔仁大學英國語文學系學士班畢業成果
ENGLISH DEPARTMENT, FU JEN CATHOLIC UNIVERSITY
GRADUATION PROJECT 2023

指導教授：周德嫵老師

Dr. Lynn Chou

VR Game Design
Viking Age: A Time to Live and Eat

學生：陳柏諺 撰

Ryan Po-Yen Chen

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Course Title: 電腦應用及程式設計

學生：陳柏諺

English Name: Ryan Chen



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Title: Viking Age A Time to Live and Drink

Name :陳柏諺 Ryan Chen

ID: 408110089

Introduction

(Please briefly talk about the background of the project, your motivation of designing this project, and the objectives of it).

For the Mozilla Hub, we hope to create a game that backs to the Viking age and specifically focuses on the food they eat, the beverage they drink, and the environment they live. The motivation for us to do this topic is derived from a text from Beowulf that inspired us to create our scene, "Then a bench was cleared in that banquet hall So that Geats could have room to be together and the party say, proud in their bearing Strong and stalwart. An attendant stood by with a decorated pitcher, pouring bright Helpings of mead". We build our scene and object based on this kind of atmosphere. For our objectives of this game, we hope that through this 3D model, we can use the image to make our description visualization to give players a deeper and more thorough understanding of Viking farming and food. As for the target users for our game, everyone interested in Viking Age culture, especially agriculture and food, is our target user.

VR Game Design

Student ID: 408110089




Name: Ryan Chen

Group ID: 5

Topic	Viking Age: A Time to Live and Drink	Teammate(s)	Tina Chang/Tina Wu/ Jimmy Huang/ Darwin Au
Theme	The food, drink and the living environment Vikings had	Background	Middle Ages
Target Users	Everyone interested in Viking Age culture, especially agriculture and food.		
Objectives	We hope that through this 3D model, we can use the image to make our description visualization to give players a deeper and more thorough understanding of Viking farming and food.		
Character(s)	The players		
Plot	<p>Plot I.</p> <ol style="list-style-type: none"> 1. The players enter the farmland 2. The players wander the farmland to look out for the ingredients which can be used for making food. 3. The players enter the longhouse through links 4. After entering the longhouse, the players will see bread, porridge, mead, cider, and pickled herring on the table which were made from the ingredients they have just seen on the farmland. <p>Plot II.</p> <ol style="list-style-type: none"> 1. The players enter the longhouse 2. After entering the longhouse, the players will see bread, porridge, mead, cider, and pickled herring on the table 3. The players click the link to the farmland 4. The player wanders the farmland to find the ingredients that could turn into food in the longhouse. 		
Game Play and mechanics	The players can freely wander the farmland and the longhouse which we created. In the two scenes, our group collected the 3D objects from Sketchfab, images, pictures from Google pictures, and descriptive words from our Storymaps assignment to make our audience have a deeper understanding of these Viking cultures. After they comprehend knowledge, we also design two worksheets to make them verify whether they have understood the content.		

Storyboard

Scene	Image		Sound
	Screen shot	Description	
Path A 1-4		The players will enter the farmland to hunt for food, and we hope the players will seek herrings first.	No sound effect
Path A 2-4		The players will enter the farmland to hunt for food, and in this section, we hope the players can find out barely which could make mead, cider, porridge, and bread.	
Path A 3-4		After finding out all the food, the players will walk into the Viking village and take a look at what it looks like. Then the users will enter the longhouse.	
Path A 4-4		After entering the longhouse, the players will see bread, porridge, mead, cider, and pickled herring on the table which were made from the ingredients they have just seen on the farmland.	

<p>Path B 1-3</p>		<p>The players will start at the village and they could choose to go to the longhouse first.</p>	
<p>Path B 2-3</p>		<p>After entering the longhouse, the users could find the food and drink, bread, porridge, herring, mead, and cider, the Vikings usually eat.</p>	
<p>Path B 3-3</p>		<p>After leaving the longhouse, the users will go to the farmland and can find the ingredients that could turn into food in the longhouse.</p>	



QC Checklist

Student ID

Name:

Group ID:

No.	Item	Module	Result			Decision
			Pass	Minor issue	Major issue	Pass/Hold
1	(e.g.)When look answer 3 questions correctly, jump to scene 2					



Programming Journal

- Articulate your thoughts
- Free up your mind and improve your concentration.
- Records the history of your progress and development

Date: 2022/6/14

Student ID: 408110089

Group ID: 408110089

1. Project goal/ scope.

We hope that through our Mozilla hub these two 3D scenes can help the people who are interested in Viking culture can have a more vivid and concrete image of it. Therefore, we created their living environment, food, and drink for their ages. To make the Mozilla hub functional, we distribute our content into two scenes, one is farmland, and another is the longhouse. On the farmland, we put herrings, crops, and so forth these food ingredients Vikings made for food. On the longhouse, we put the food made from these ingredients like porridge, bread, herring, mead, and cider. On top of that, we build our scene based on the description from Beowulf.

2. My task(s)

I am responsible for designing one of the paths' storyboards from the village to the farmland. On top of that, I also lead the discussion to make our group on the right track and in a good atmosphere. Moreover, I also offer some of my ideas and opinions, and some of them have been adopted into our final product. Lastly, I have provided the information and 3D object I have made in the Storymap and Jigspace.

3. Progress.

#.	Task description	Done
1.	Choose the topics of the final project	4/25
2.	Discussion for the two flowcharts and two storyboards for the two paths in the final project	5/30
3.	Finish two flowcharts for the two paths in the final project	6/6
4.	Finish two storyboards for the two paths in the final project.	6/6
5.	Discussion for the handout	6/6
6.	Discussion for the objects we need in the two scenes in the final project	6/8
7.	Finish the handouts for the target users	6/10
8.	Finish the two scenes for the final project	6/13
9.	Give a presentation for our final project	6/13
10.	Finish the LOD Report Document	6/25

4. Problem solving solutions

#	Problem encountered	Solution(s) tried/ other possible solutions
1.	Problem of co-editing: Story Maps and Jig Space (O)→failed Mozilla Hubs (X)	<ul style="list-style-type: none"> ● Use the same account and take turns to finish the responsible part to complete the entire project. ● Distribute work properly
2.	Problem rose from distance learning: malfunctional devices /technical problems→ inefficient discussion	<ul style="list-style-type: none"> ● Discuss with teams and line ● Communicate with group members more frequently
3.	Familiarity of the Tools We Use: Unfamiliar with the virtual-world- creating platform such as Mozilla spoke	<ul style="list-style-type: none"> ● Watch Youtube teaching video ● Ask for group members and teacher's help
4.	Technical Problems: The avatars created and uploaded by ourselves failed to appear on the scene in Mozilla Hubs.	<ul style="list-style-type: none"> ● Ask for group members and professor's help ● Tried distinct avatar
5.	Too Much to Add: The limitation to the size of the project make us need to cut down on the amount of 3D objects we planned to use.	<ul style="list-style-type: none"> ● Create two scenes ● Keep the most important objects and delete the least important decorative objects.

5. Lesson(s) learned.

a. From trial and error
(Detail)

During the entire semester, Mozilla's spoke frustrated me the most. I have spent a lot of time on it, but I just can not make it present in a correct and logical order to achieve the effect I hope to present. Luckily, I have a bunch of good team members, they are always willing to listen to my problem and teach me to step by step. Eventually, with Youtube videos and their help I have learned most of the basic functions and successfully make what I hope to present.

b. From team member(s)
(Detail)

From my group members, I learned the importance of teamwork. In our group, some of them are good at using these technology tools, some of them are good at providing ideas and opinions, and some of them are good at art design. Each of us has our strengths, and if we face any difficulties, we just throw a question to our line group and everyone will do their utmost to solve it together.

Consequently, after the collaboration this semester, we knew each other even more.

c. From other team(s)
(Detail)

From the other group, I found that every one of them has their unique ideas and the way to design, which makes me learn a lot. Among all the groups, one of them presents it in a museum made the question on the wall and the specialty of Viking as the showpiece impress me the most. I think this is an interesting way to present it and I love it so much.

6. Most impressive conversation/ event.

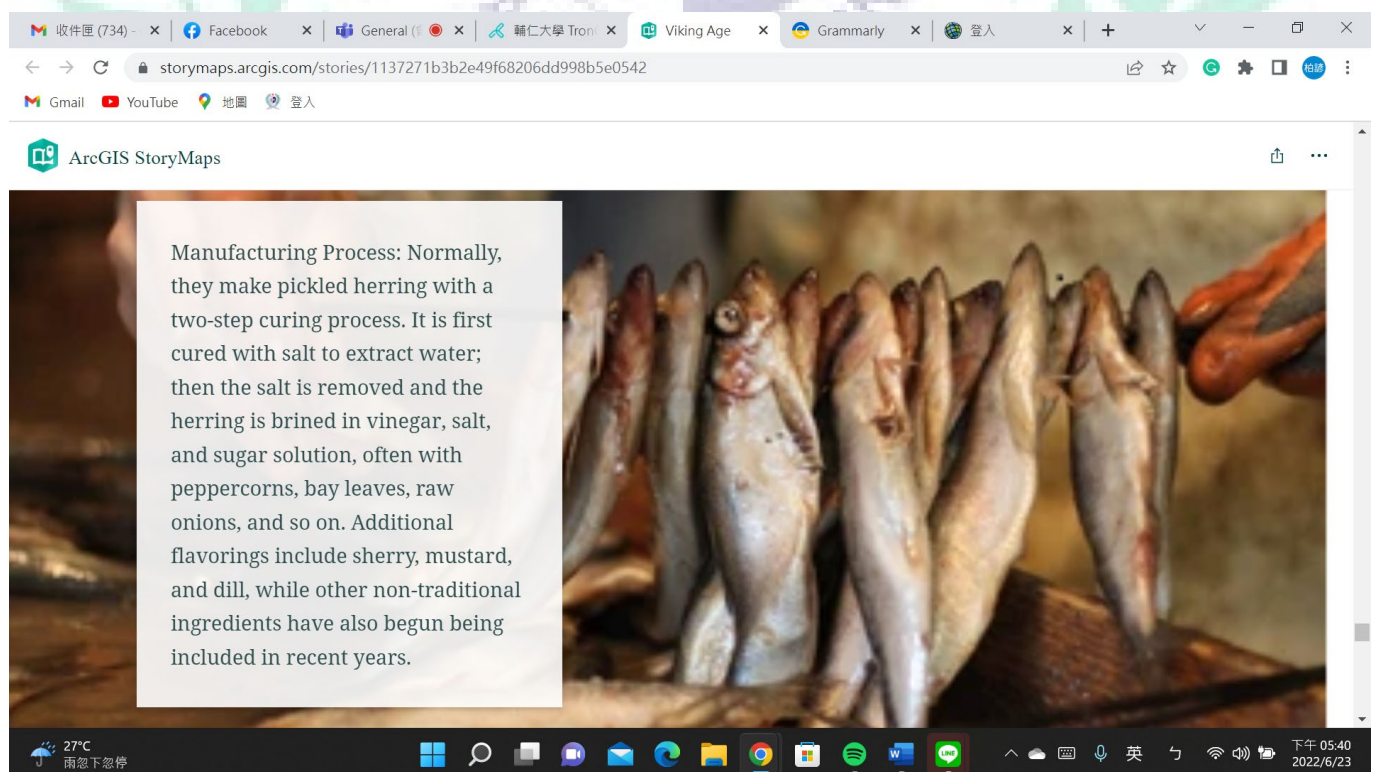
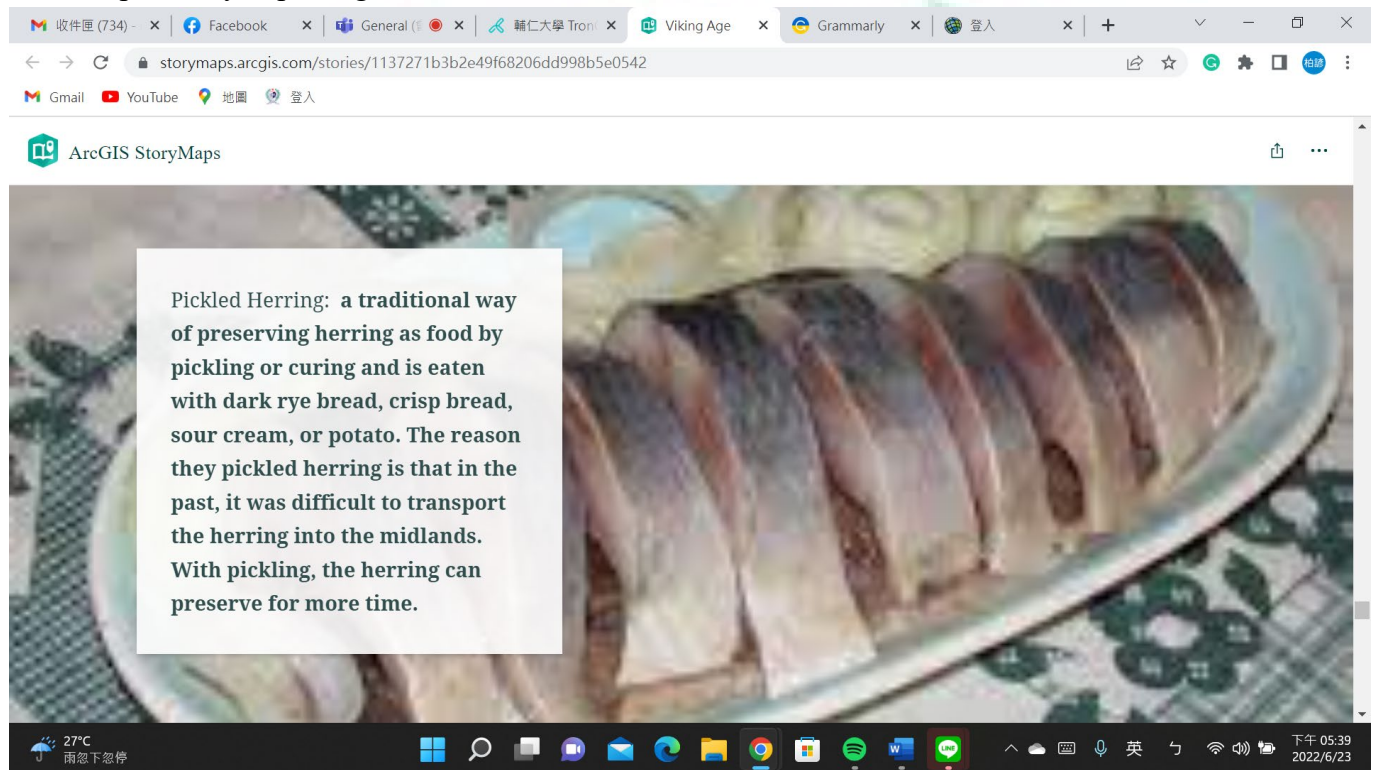
To me, the most impressive conversation is that we hope to create a matching game in our scene.

However, after a discussion with Professor Lynn, we found that is not feasible. Therefore, we have a new idea to make our game into the worksheet form to reach the same effect we hope to bring to the audience.

Your work including Storymap, Jigsaw, and Mozilla hubs. Please screen capture your work and give brief description.

Storymaps:

Link: <https://storymaps.arcgis.com/stories/1137271b3b2e49f68206dd998b5e0542>




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storymaps.arcgis.com/stories/1137271b3b2e49f68206dd998b5e0542

Gmail | YouTube | 地圖 | 登入

ArcGIS StoryMaps

Eating Herring's History and Herring Manufacturing History: **According to food historian Jan-Öjvind Swahn, herring has historically been one of the most essential basic foods — and not just in Sweden. In medieval times, this was important for the trade in large parts of Europe. In the south of Sweden, Marstrand became a herring trade center as that was the place where foreigners were allowed to fish, salt, and sell fish. The locals could fish wherever they wanted. The herring industry becomes crucial**



Marstrand | Otterlyckan

Powered by Esri

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storymaps.arcgis.com/stories/1137271b3b2e49f68206dd998b5e0542

Gmail | YouTube | 地圖 | 登入

ArcGIS StoryMaps

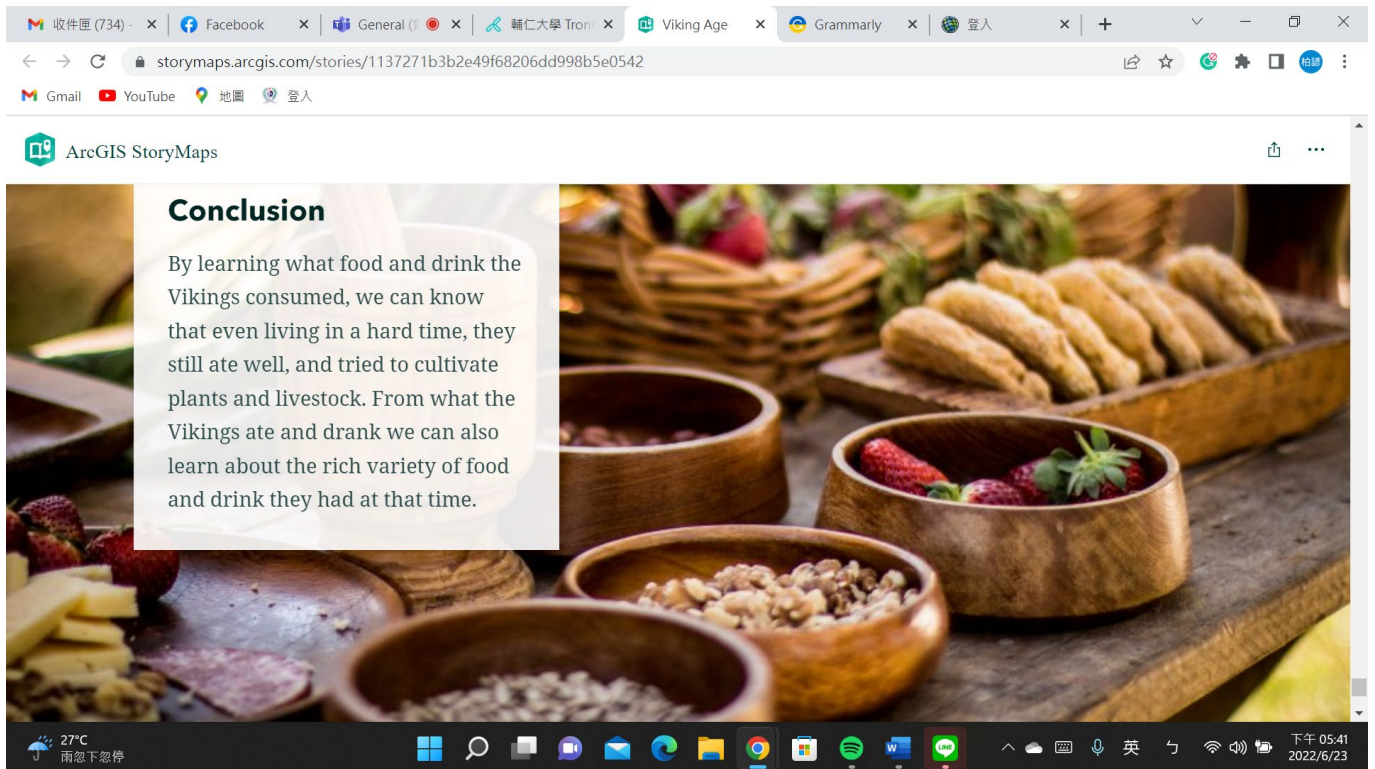
Three Golden Periods of Herring Fishing: First, in late medieval times until the 16th century, when the herring trade centers in **Skane- in the south of Sweden were one of the most important food industries in Europe. The second period was 1747-1809 in the county of Bohuslän on Sweden's west coast, not far from Gothenburg. The final period was 1877-1899. In the history of the Nordic people, the author Olaus Magnus claims that along the Scanian coasts, people**



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Jigsawspace:

Link: <https://link.jig.space/fhVoxiLLipb>

Mozilla Hub: in the next section

Final presentation PPT

Link:

https://docs.google.com/presentation/d/1fvuH5TIBvJU3ZIORJ7io2Lbbyw8qYc_28CCvztoIdU/edit?usp=sharing

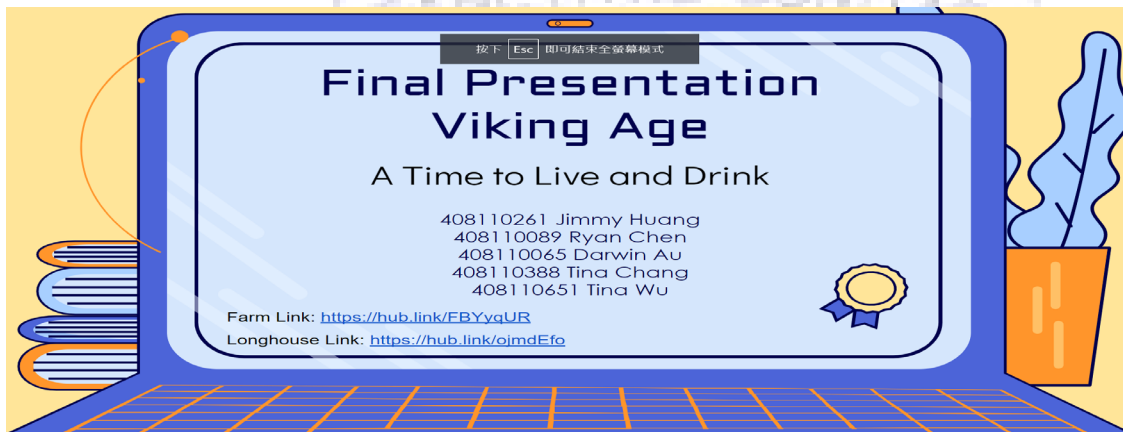


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Tina Wu & Tina Chang

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按下 Esc 即可結束全螢幕模式

01

Introduction

Jimmy Huang

4

“Then a bench was cleared in that banquet hall
So that Geats could have room to be together
And the party say, proud in their bearing
Strong and stalwart. An attendant stood by
With a decorated pitcher, pouring bright
Helpings of mead”

– *Beowulf* (491–96)

https://slidesgo.com/

Where the Vikings Lived

Group 5:
Sharon

```

    graph TD
      Villages[Villages] --- Farm[Farm]
      Villages --- Longhouses[Longhouses]
      Villages --- Farmland[Farmland]
  
```

Farm

Longhouses

Farmland

https://slidesgo.com/

Lesson 1: Viking Houses

- Built of wood
- Ship-like outline, lined with clay
- Wooden planks placed vertically into the ground

Longhouse

- Near the farm and longhouse
- Crops that could make food

Farmland

https://slidesgo.com/

Purposes

Learning Viking Culture

A

B

Where They Live

The View of the Viking Villages

What They Eat

Introductions to the food they had

02

Target Users Objectives

Ryan Chen

Target Users

Everyone interested in Viking Age culture, especially agriculture and food, is our target user.

Objectives

We hope that through this 3D model, we can use the image to make our description visualization to give players a deeper and more thorough understanding of Viking farming and food.

9

03

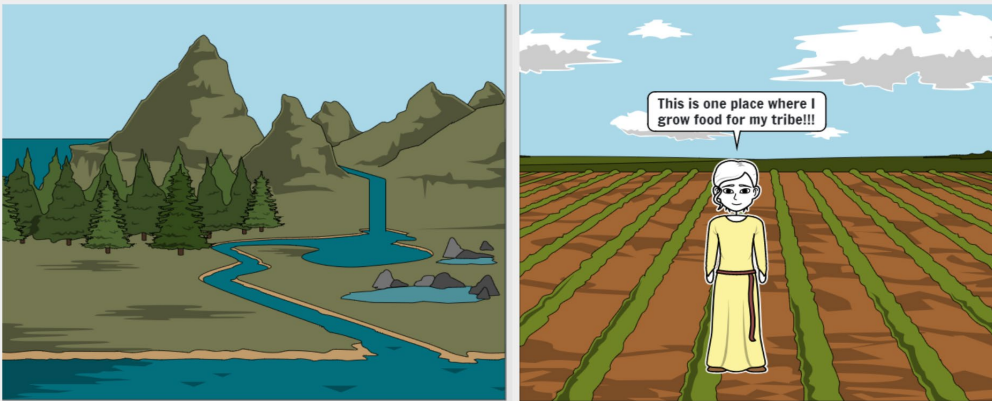
Storyboard

Ryan Chen

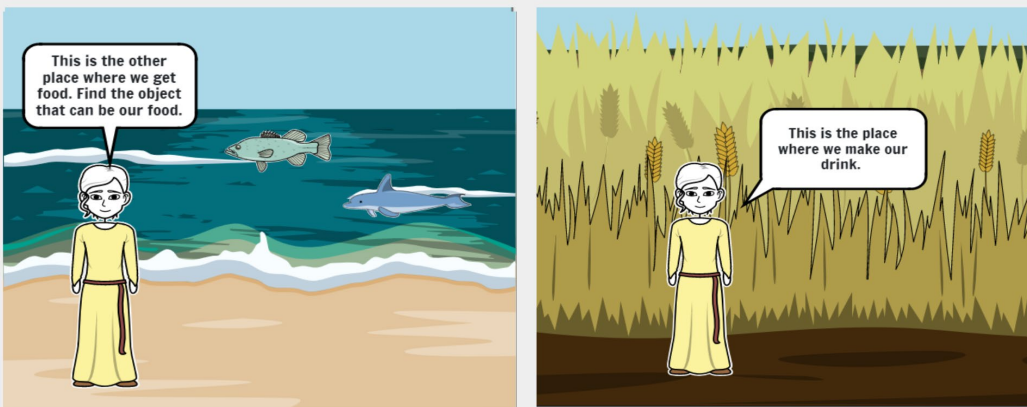
First Path: The Longhouse→The Farm



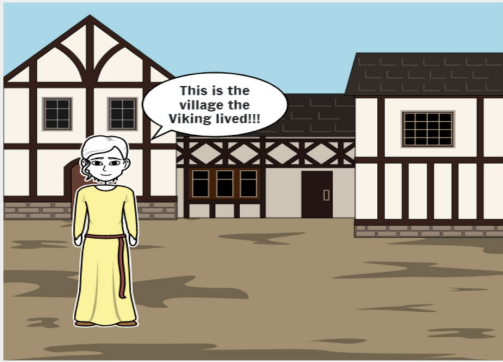
Second Path: The Farm→The Longhouse



Second Path: The Farm→The Longhouse



Second Path: The Farm → The Longhouse

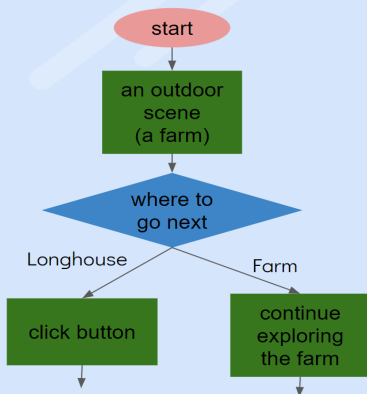


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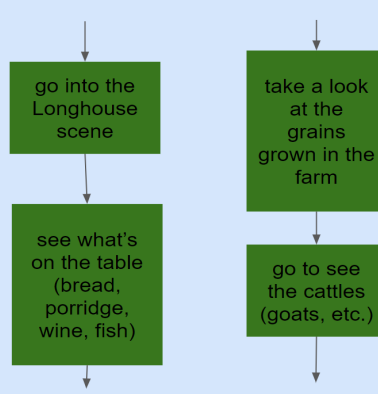
Flowchart

Tina Wu & Tina Chang

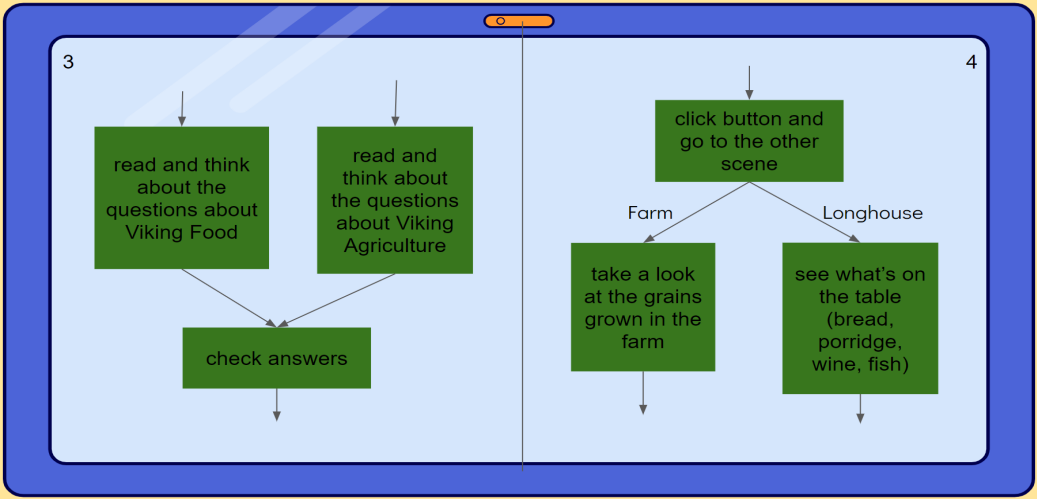
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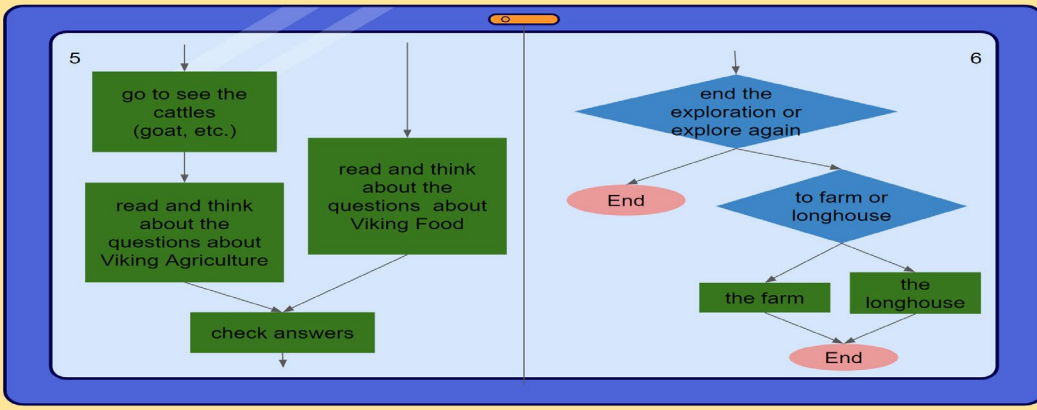
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16



17



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05 Highlights

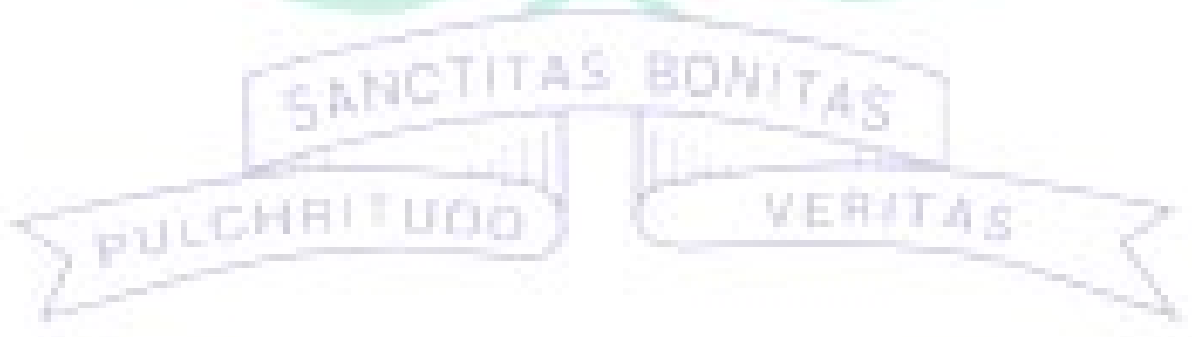
Tina Wu & Tina Chang



20



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○

There are 4 questions:

Q1: What was the weather like during the Viking Age?
 Ans: The summers are long, comfortable, and partly cloudy and the winters are frigid, snowy, windy, and mostly cloudy.

Q2: How did the Vikings make a living?
 Ans: Most Vikings were farmers, and they also traveled by sea to go fishing. The Vikings were also raiders and pirates.

Q3: What were the typical crops in the Viking Age?
 Ans: Barley, rye, and wheat.

Q4: What were the livestock the Vikings had in their agricultural area?
 Ans: Pigs, sheep, goats, and horses.

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○

That's it for the farm. Click the link if you want to go to the longhouse.

23

○

Welcome to the long house. here we have many different foods that vikings usually have.
 There will be some questions about the ingredients of the foods.

Flat bread Rye bread Herring Cheese

24



25



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There are 5 questions:

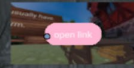
Q1: What are the ingredients for the bread? Q2: What are the main ingredient for the mead?
 Ans: wheat and barley Ans: honey

Q3: What are the main ingredient for the cider? Q4: What are the ingredients for the pickled herring?
 Ans: apple Ans: herring fish and salt

Q5: What are the ingredients for the porridge?
 Ans: barley

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That's it for the longhouse. Click the link if you want to go to the farm.



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Highlights of the Project

1. Two Scenes

Farm, longhouse

2. Clear Instructions

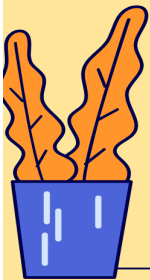
Location, descriptions of objects

3. 3D Objects & Images

Clearly demonstrate Viking culture

4. Q & A Section

Help players understand the Viking culture



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06

Problems Faced

Tina Wu & Tina Chang



Difficulties We Encountered

1. Problem rose from distance learning:

malfunctional devices / technical problems → inefficient discussion

2. Problem of co-editing:

Story Maps and Jig Space (O) → failed

Mozilla Hubs (X)

31

Difficulties We Encounter

3. Familiarity of the Tools We Use:

Unfamiliar with the virtual-world-creating platform such as Mozilla spoke

4. Technical Problems:

The avatars created and uploaded by ourselves failed to appear on the scene in Mozilla Hubs.

5. Too Much To Add:

The limitation to the size of the project make us need to cut down on the amount of 3D objects we planned to use.

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Task Distribution

Mozilla Hubs— Darwin Au

Flowchart— Tina Wu, Tina Chang

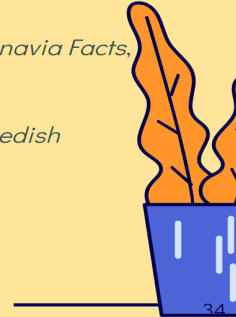
Storyboard— Jimmy Huang, Ryan Chen



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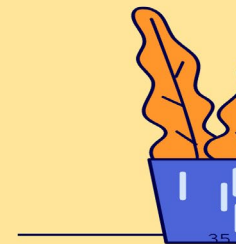
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THANK YOU



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Reflection and future study

Through the training from this semester, I am more acquainted with distinct tools, and these tools can be utilized on many different occasions. For instance, in the future, I may use to storymaps to replace PowerPoint to do the presentation. On top of that, the training of this course has largely increased my computer skills and can be quite helpful for my future career.

Reference

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