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Allstory: An Assistive Application for History

by

Shiyan Sun

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Fine Art in Visual Communication Design

School of Design
College of Art and Design

Rochester, NY
August 2, 2021

Allstory : An auxiliary app to help students learning history

Committee Approval:

Adam Smith Date

Chief Advisor

Mike Strobert

Date

Associate Advisor

ABSTRACT

When learning history, students have difficulty remembering large amounts of history and don't know explanations of some proper nouns, which makes them not have an in-depth understanding of history and easy to fail in the test. As an important subject, an auxiliary app is needed to help students digest the knowledge they have learned. It will use different function to break the barrier, allowing students easier to learn and love history.

Keywords:

History study, learning problem, mobile app, user experience design strategies, students.

Allstory: An auxiliary app to help students learning history
by Shiyan Sun

Although history is an essential subject that students need to learn in most of the world, students still encounter various difficulties in the process of learning. A very important reason why students feel pressured in history class is that they have encountered difficulties in the learning process. In the market, there are currently very few software to assist in learning history. Most of them use games to increase students' interest in history, but it still no use for students to complete their studies smoothly. In that case, an assistive application for history is a must.

Entering high school, students still have to study history and the difficulty of learning knowledge points has been even greater. First is many history knowledge and high memory pressure. Since students need to have a more comprehensive and in-depth understanding of historical knowledge, they will be exposed to more of them. Students bring a greater burden of memory, at the same time, students are deeply tortured by forgetting. Repeated memory and repeated forgetting have caused students' misery. Second, some history knowledge is confused. Not only will students encounter difficulties in the process of memorizing, but even history knowledge they have mastered will also be confused. Students generally report that they are prone to confusion in historical time, the meaning and nature of historical events. For example, when memorizing the time of a single historical event, students' minds are very clear, but when memorizing the time of multiple historical events, they will be very vague about it. It is difficult to accurately grasp the time point of a specific event. Students will also be confused in the process of grasping the meaning and nature of many important historical events. The last is difficulties in establishing a knowledge system. It is hard for students to master a main line in the process of establishing the knowledge system, which makes it difficult to effectively connect history knowledge.

For these reasons, even though the characteristics and manifestations of civilization development in different historical periods are different, students are more likely to have memory confusion about the content during the learning process. In terms of its characteristics, time axis is flexible and intuitive. Not only that, the operation is simple and easy to understand. It can directly reflect the sequence of historical events and effectively avoid the confusion caused by time misalignment. Therefore, timeline plays an indelible role as the best flexible solution to sort out development context of various civilizations.

In the past, time was often regarded as a subjective experience, but with the advent of visualization, time has become a structural dimension. Time helps us build a robust and intuitive framework, enabling us to better establish connections between events. Now, explaining information in a timeline manner has been widely used in various fields of corporate communication and marketing. With the development of information

visualization, time has become more than just a subjective experience. In the expression of visualization, it helps us build a robust and intuitive framework and enables us to better establish event spaces. Therefore, timeline can help us better present the evolution of data in the time dimension. From a narrative perspective, most news narratives are actually based on time sequence of occurrence and development of events. When telling many complicated events that time span is long, traditional text narrative may be inadequate. If we treat history knowledge as data, we can use special software to make interactive and dynamic works based on timelines.

Currently, although there are a lot of software for various subjects to help students learn well. It is very little about history because it requires an amazing amount of reading. However, a clear history timeline can reduce the time of sorting out various relationships, which can express the relationship between multiple and complex information more clearly. For students, understanding the relationship between information is more important than information itself. Therefore, history timeline as the best flexible solution to sort out the development context of various civilizations, which plays an indelible role. Besides, some Q&A interesting quiz and forums for discussion are also important to consolidate the knowledge learned by students.

The scope of this project is in the pursuit of creating an assistive application for history to help students learn better. A clear timeline will be shown for students to quickly search the information. Quiz and forum strengthen what they have learnt after they have read the chapters they need to learn. They will not only have an in-depth understanding of history, but also get higher score when having test. Also, some people who want to learn about history out of interest can gain a deeper understanding through this app.

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Allstory

know all history of the world

Shiyan Sun VCD Thesis 2021

CONTENT

01.Why

02.How

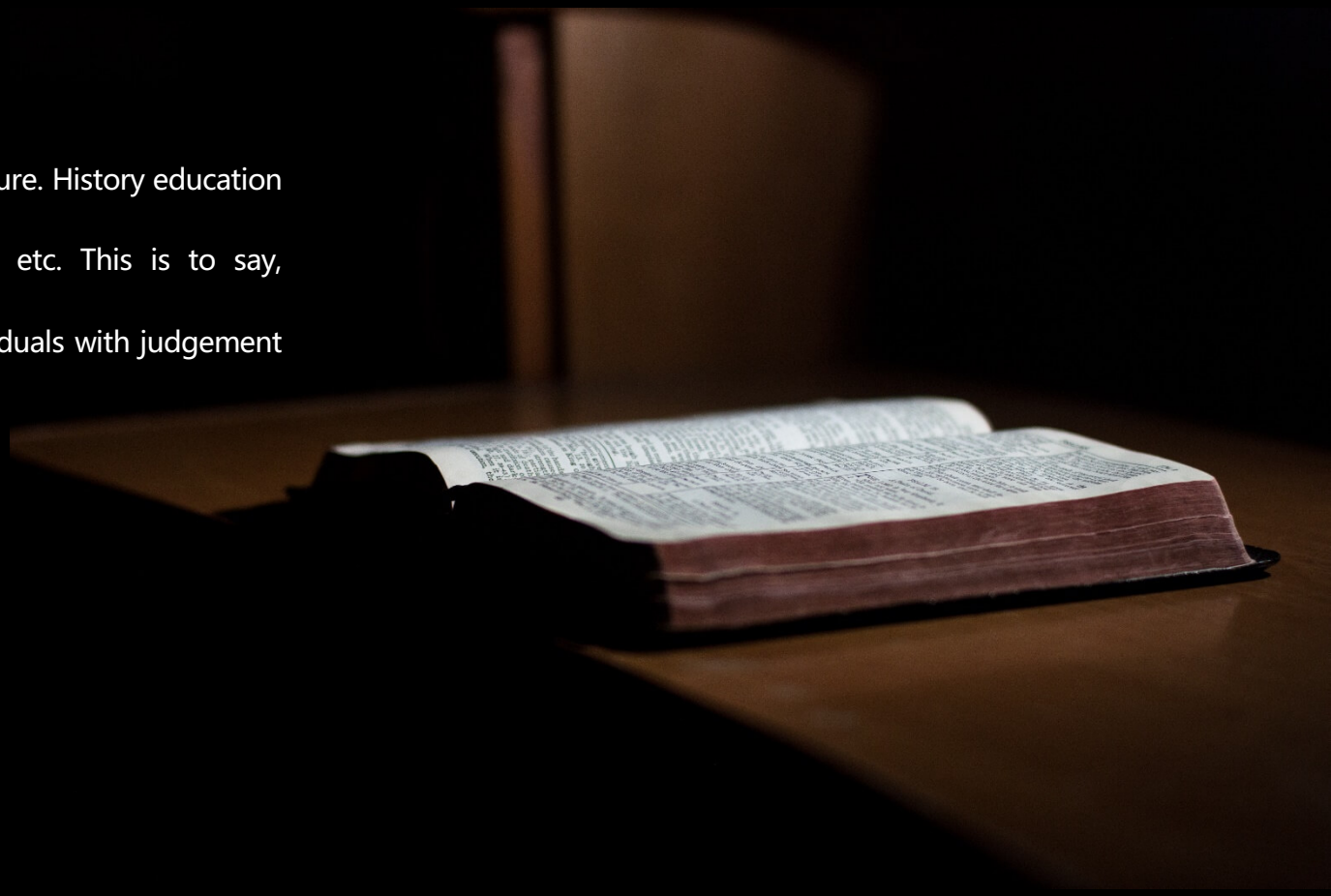
03.Process

04.Work

05.Future

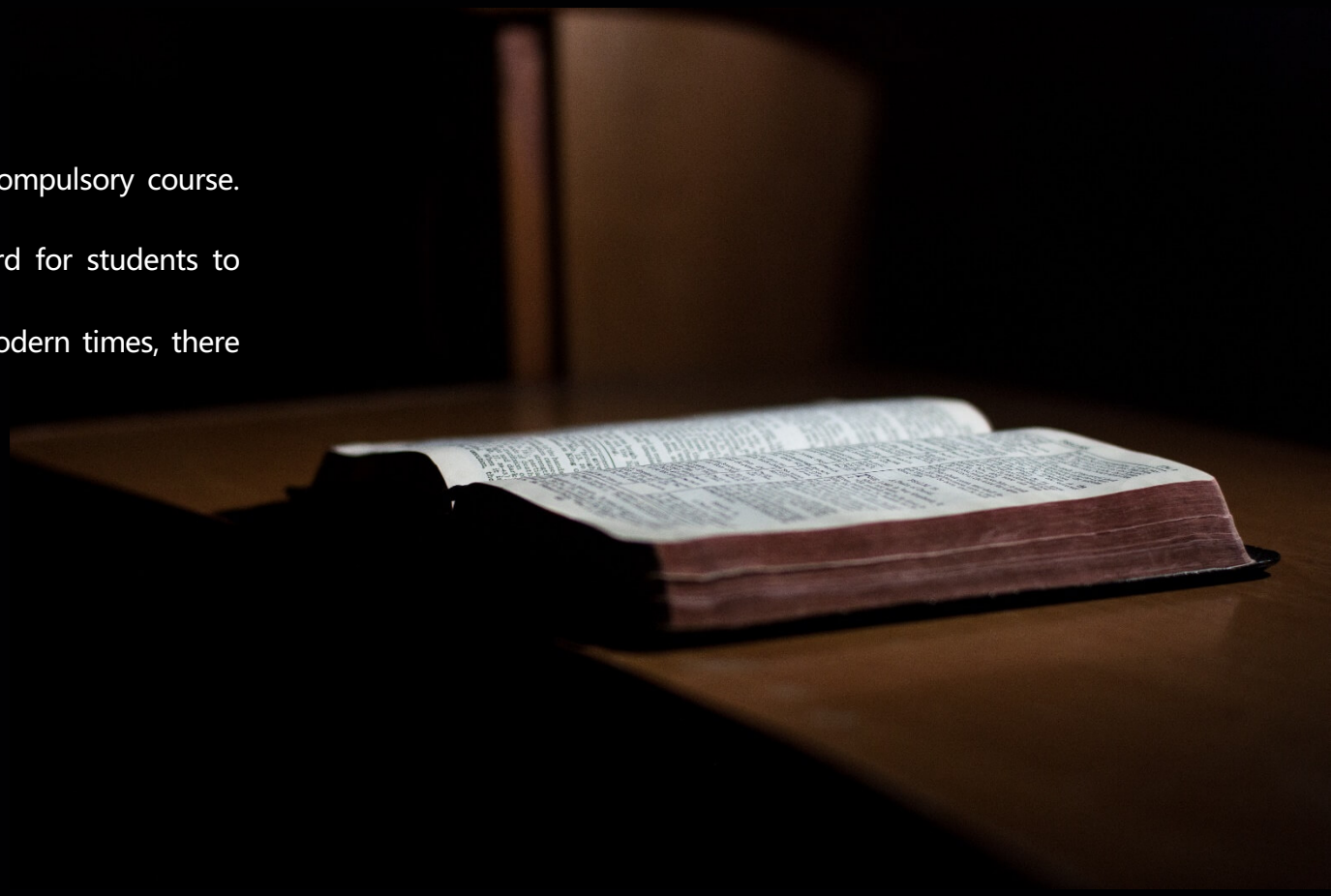
Thesis Background

For centuries, history played an important role connecting past and future. History education establish its influence basically through politics, economy, culture, etc. This is to say, absorbing history knowledge can have a long-lasting impact on individuals with judgement of modern society and respect for history, especially on students.

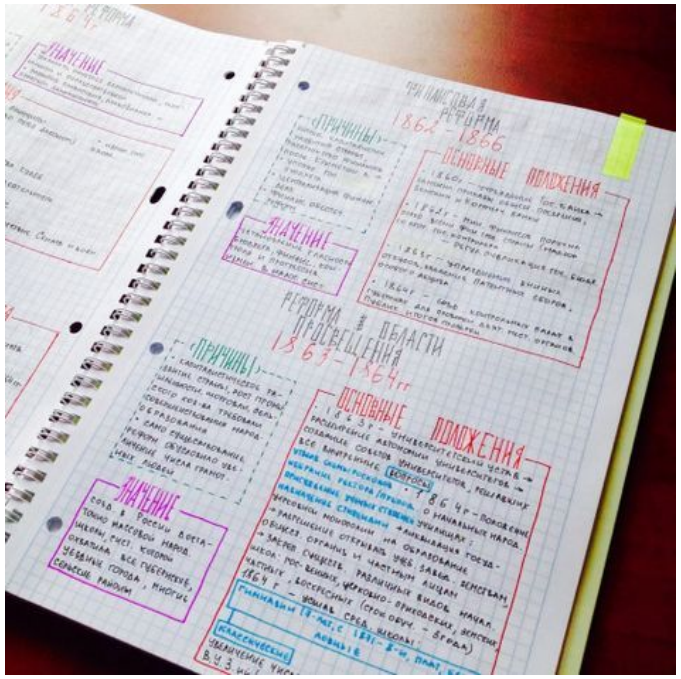


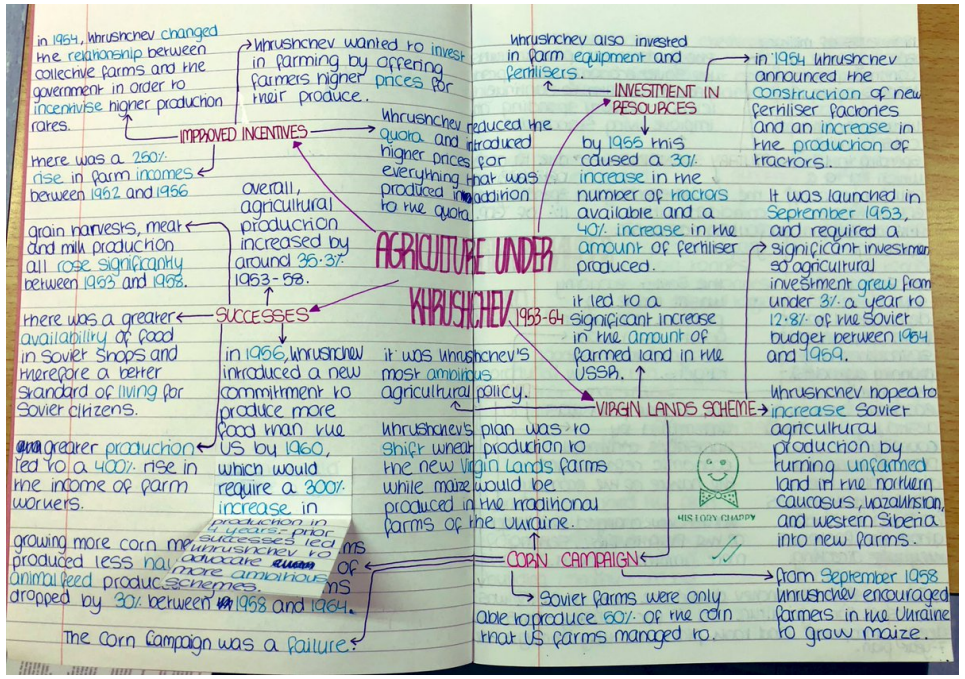
Thesis Background

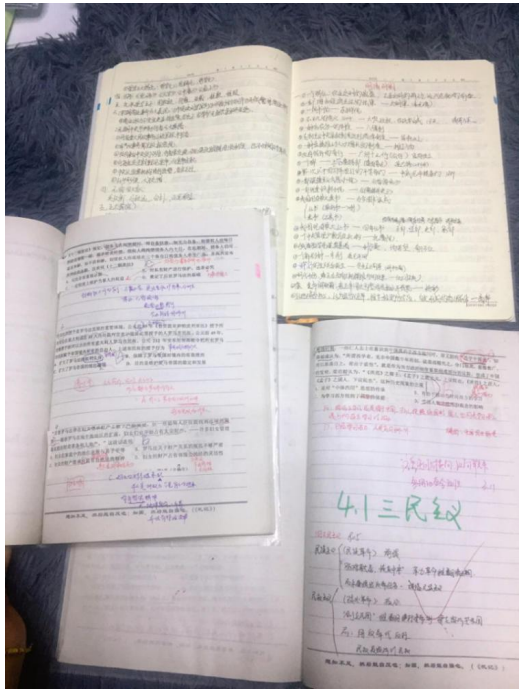
Not only in the United States, history in many countries is also a compulsory course. However, historical knowledge is too large and complicate. It is hard for students to understand the points or have a systematic memory. Especially in modern times, there have been many movements and events.



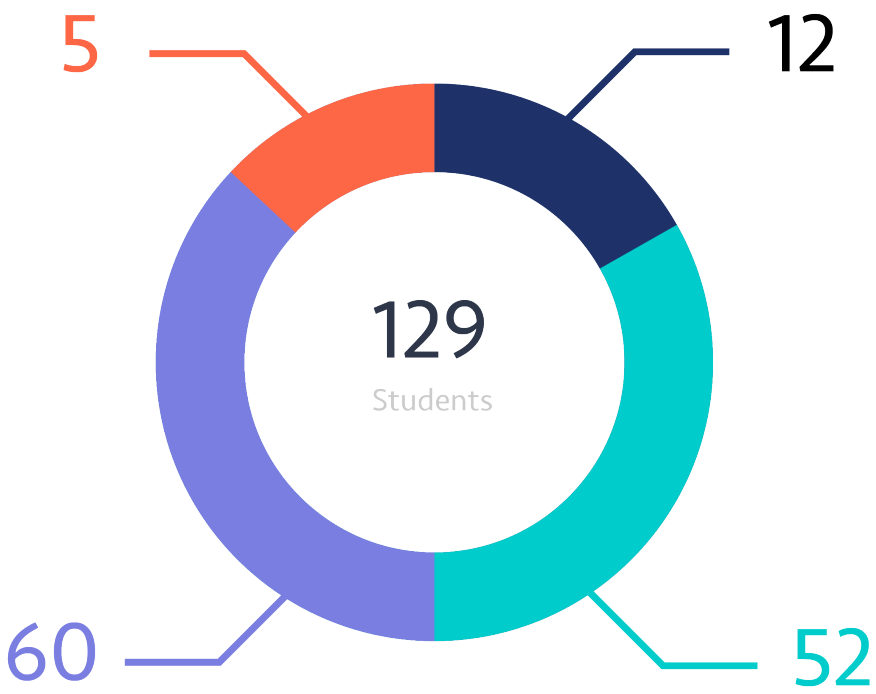
Thesis Background







Thesis Background



*data from The Challenges of Learning History: What Students and SOTL Tell Us

- **Study history takes a lot of time to memory**
- **Difficulty finding sources because they felt unsure how to effectively search for them**
- **Critically analyze sources could be an intellectual challenge**
- **The department's requirements, curriculum, or professors**

Problem Statement

When learning history, students have difficulty remembering large amounts of history and don’ t know explanations of some proper nouns, which makes them not have an in-depth understanding of history and easy to fail in the test.

Pain Points

01

Currently, compared with learning apps for other subjects, apps about history are very rare.

02

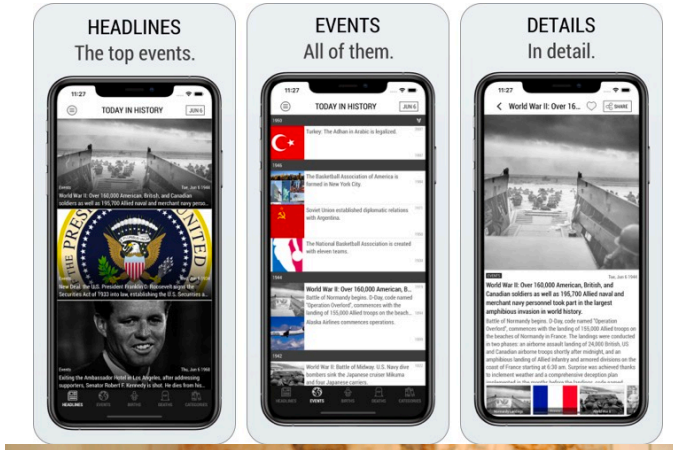
Even if there is a historical app, the interface is too messy , and the user experience is very bad.

03

Students need to sort out the knowledge by themselves, which is very complicated to check whether it is wrong.

12 Good History Apps for High School Students

- 1- TimeTours: Uxmal.
- 2- The Pyramids.
- 3- Back in Time.
- 4- Word War II Interactive.
- 6- Revolutionaries of the Past Century.
- 7- Interactive Historical Atlas.
- 8- AP World History.
- 9- US History Timeline.

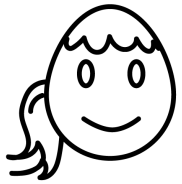


Solution

As an important subject, an auxiliary app is needed to help students digest the knowledge they have learned. It will give different quiz to answer, a clear timeline to check information and a forum to discuss.

Those who cannot learn from history are doomed to repeat it.

Interview



Siran

High school student

She needs to recite the contents of many different periods of history, which leads to her often mistaken the time when it comes to exams.

Guessy

College student of design

She thinks checking information is the most painful. Although the elective history course is very interesting, a lot of time is wasted every time when she writes an essay to confirm whether the collected information is relevant.

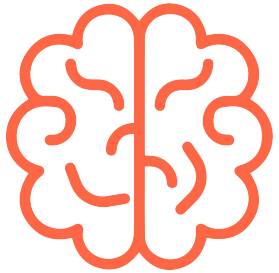
David

Postgraduate in Psychology

In his curriculum, it contains a history of psychology education. He is particularly troubled with the complicated memory of technical terms.

Key Features

Objectivity



Memory

Sources

Explanation

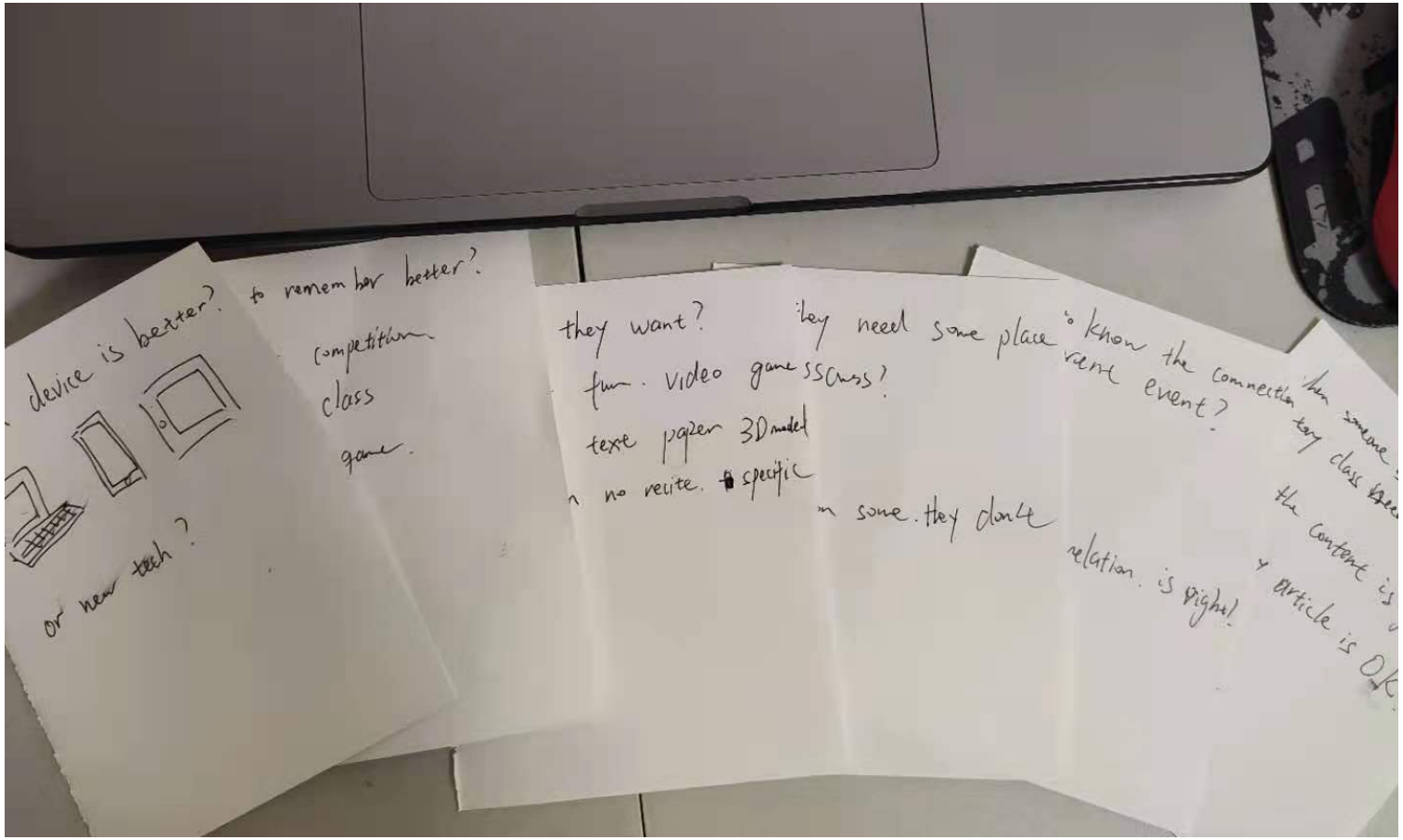
Linkage

Key Features

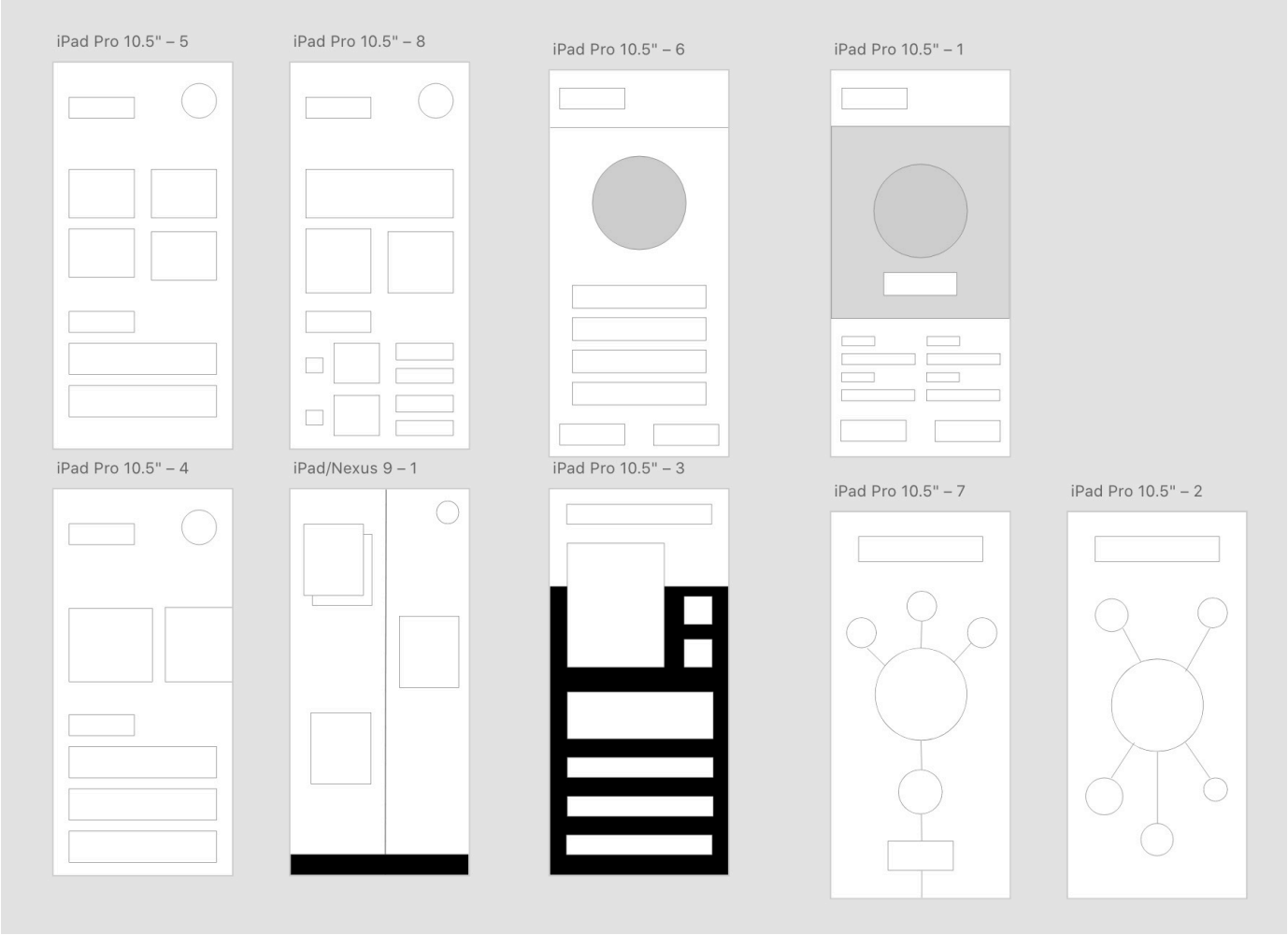
Most students juggle between trying to master many historical subjects in particular historical periods at the same time. It is a challenge that students get a general instead of an in-depth understanding of history.

How does it work?

Brainstorming



Sketch


iPad Pro 10.5" – 5
iPad Pro 10.5" – 8
iPad Pro 10.5" – 6
iPad Pro 10.5" – 1
iPad Pro 10.5" – 4
iPad/Nexus 9 – 1
iPad Pro 10.5" – 3
iPad Pro 10.5" – 7
iPad Pro 10.5" – 2

Color

Primary # 00CCCC	Secondary # FD6746
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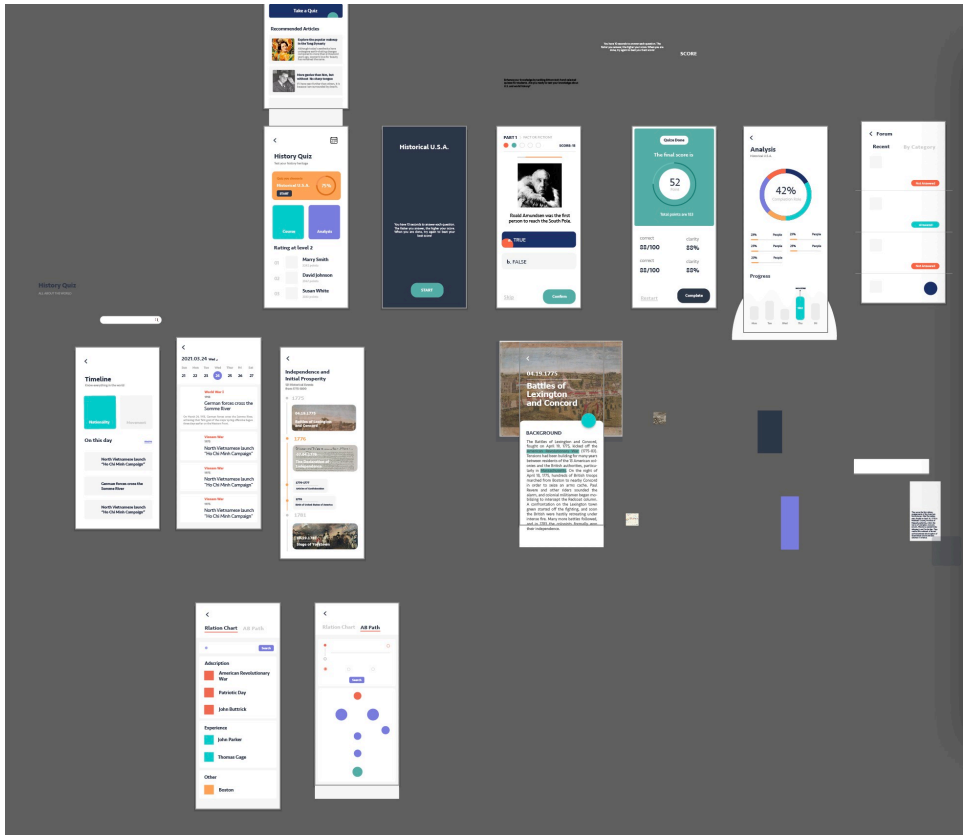
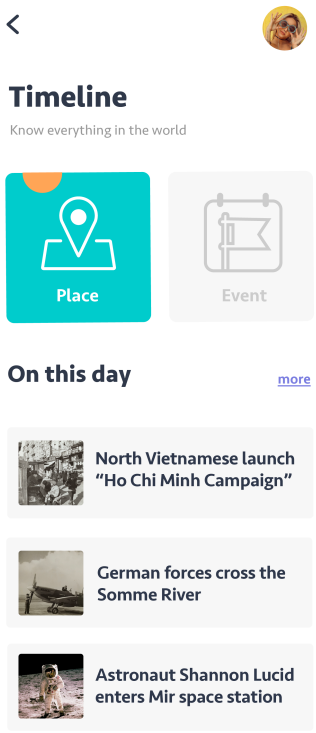
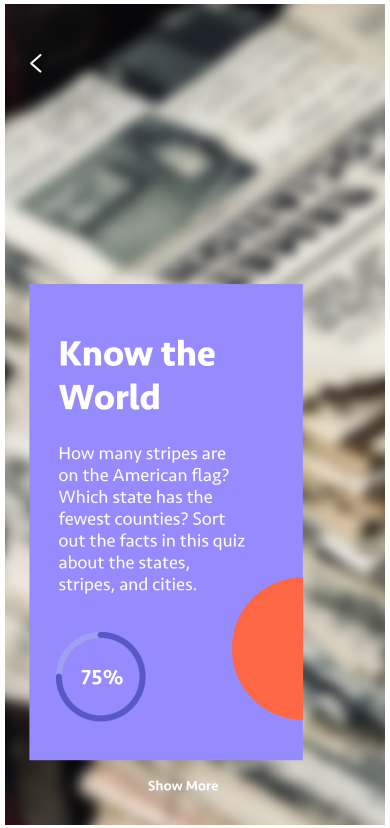
Revise

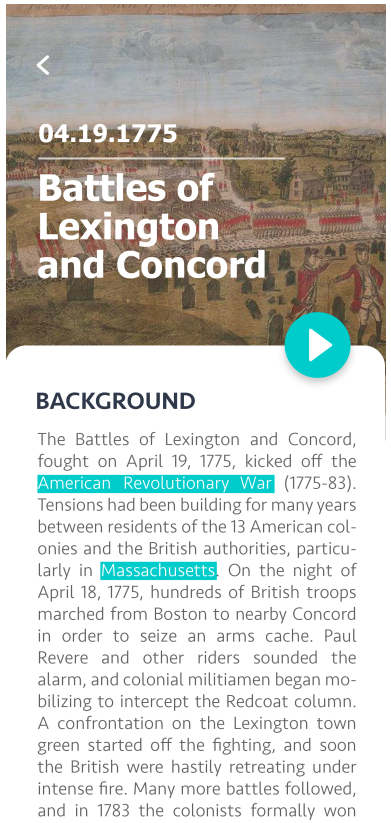

History Quiz
Historical U.S.A.
Analysis
42%
Timeline
Battles of Lexington and Concord
Relation Chart
All Path

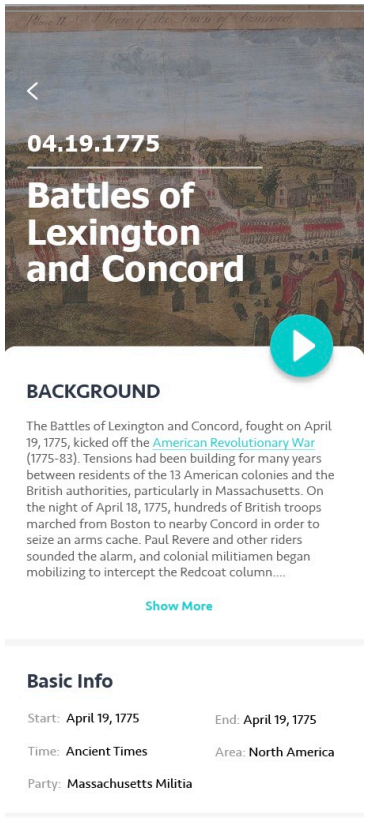
Welcome,
History Quiz
Know the World
Correct
Analysis
42%
Battles of Lexington and Concord
Relation
All Path

Revise


Timeline
Know everything in the world
Place
Event
On this day
more
North Vietnamese launch "Ho Chi Minh Campaign"
German forces cross the Somme River
Astronaut Shannon Lucid enters Mir space station


Know the World
How many stripes are on the American flag? Which state has the fewest counties? Sort out the facts in this quiz about the states, stripes, and cities.
75%
Show More


04.19.1775
Battles of Lexington and Concord
BACKGROUND
The Battles of Lexington and Concord, fought on April 19, 1775, kicked off the American Revolutionary War (1775-83). Tensions had been building for many years between residents of the 13 American colonies and the British authorities, particularly in Massachusetts. On the night of April 18, 1775, hundreds of British troops marched from Boston to nearby Concord in order to seize an arms cache. Paul Revere and other riders sounded the alarm, and colonial militiamen began mobilizing to intercept the Redcoat column. A confrontation on the Lexington town green started off the fighting, and soon the British were hastily retreating under intense fire. Many more battles followed, and in 1783 the colonists formally won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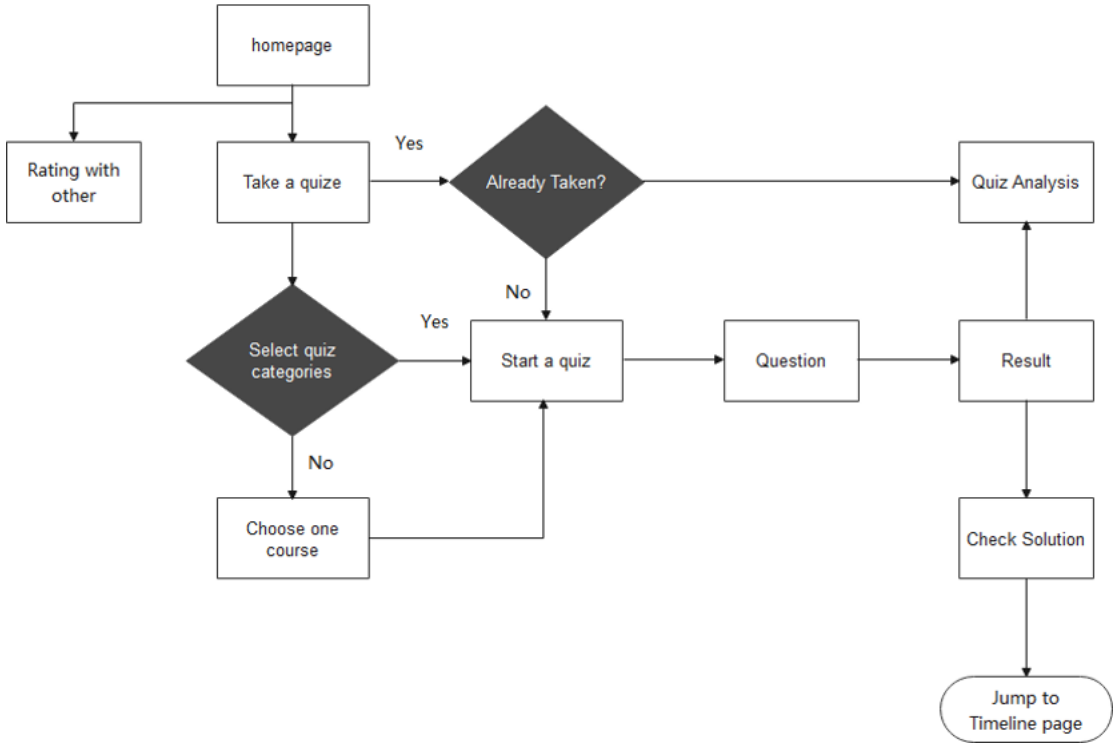
Show More
Basic Info
Start: April 19, 1775
End: April 19, 1775
Time: Ancient Times
Area: North America
Party: Massachusetts Militia

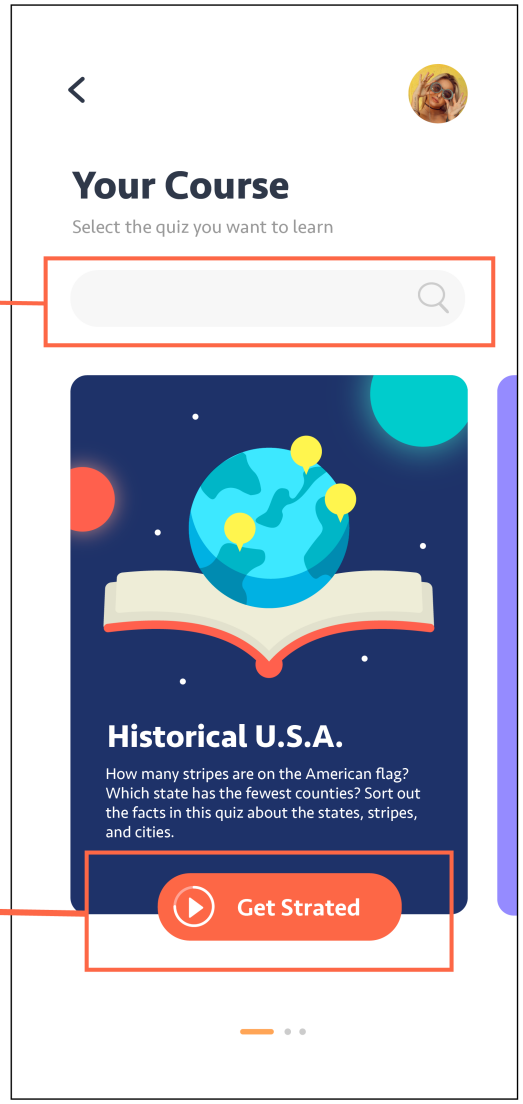
An opportunity to learn better!

Task 1

01/

It is to consolidate the learned historical knowledge. Students can set different categories to answer quiz. The faster they answer, the higher the score is. It will record the score every time and give analysis. They can also check wrong answers and review them.





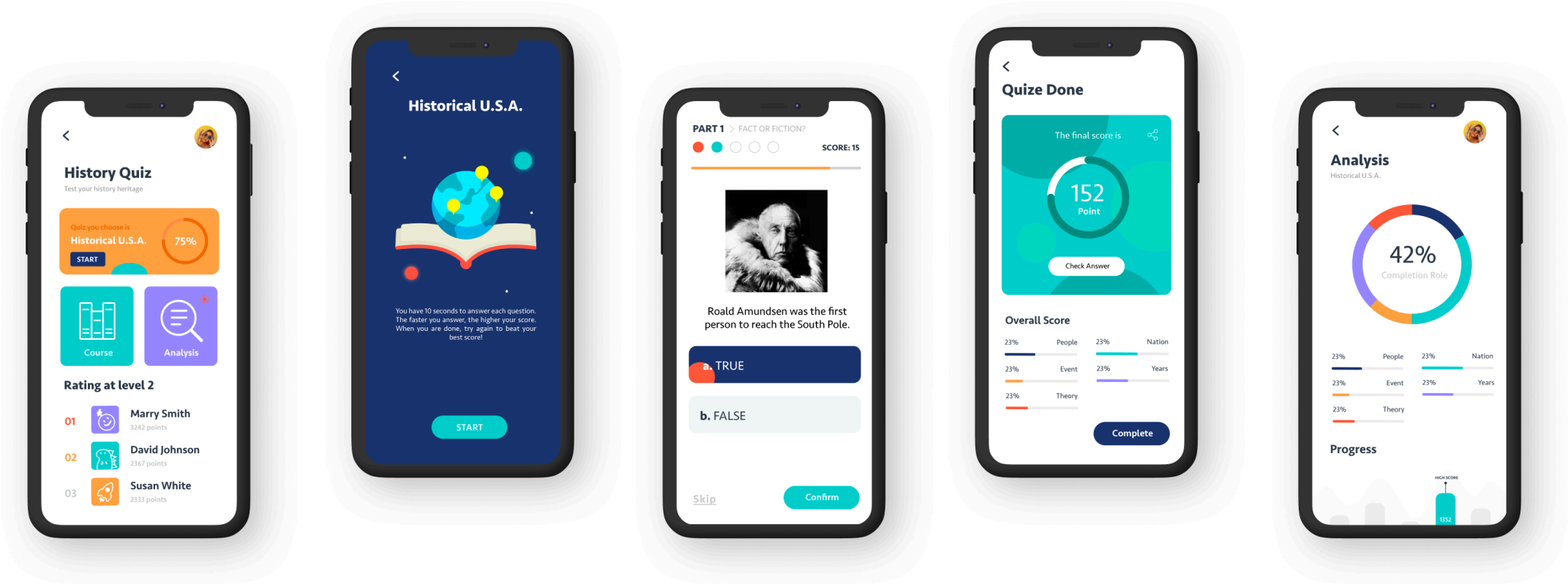
Search the course students want to learn

Process and change the course

Correct answer rate and timing score

Show right or wrong pop-up window

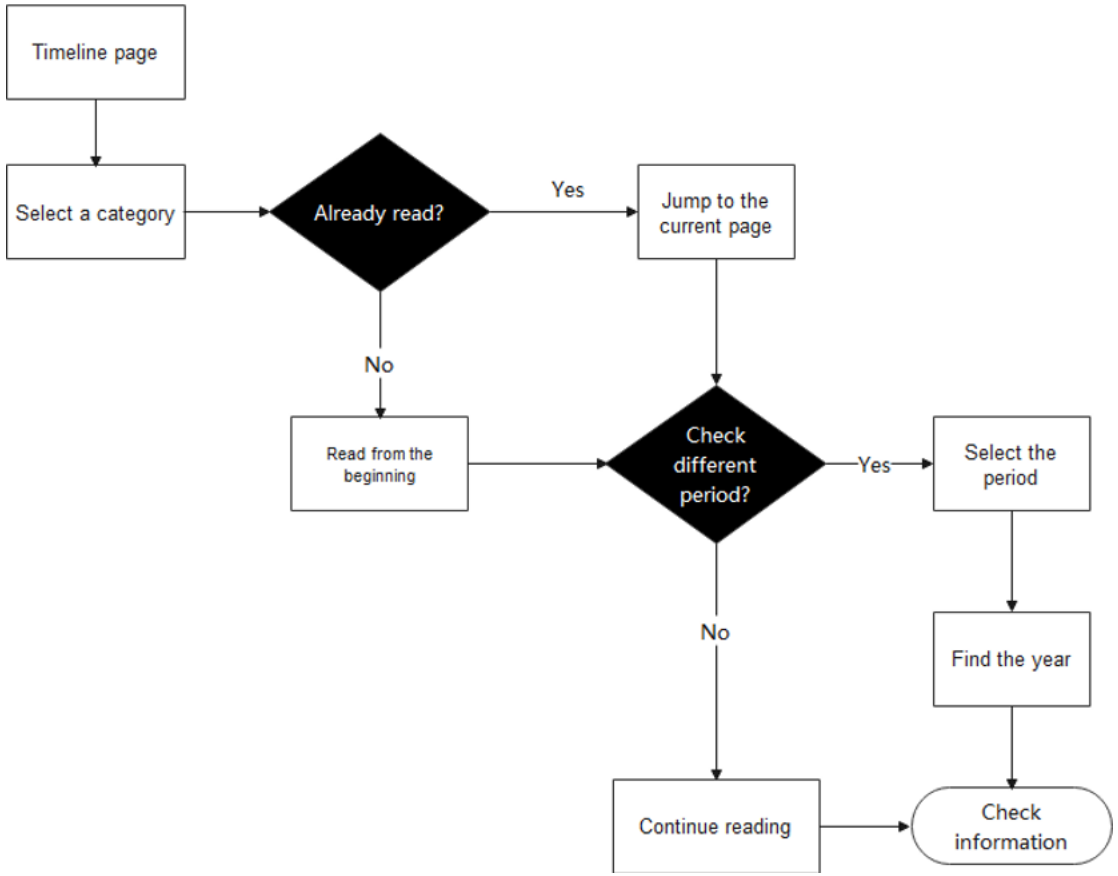
Overall

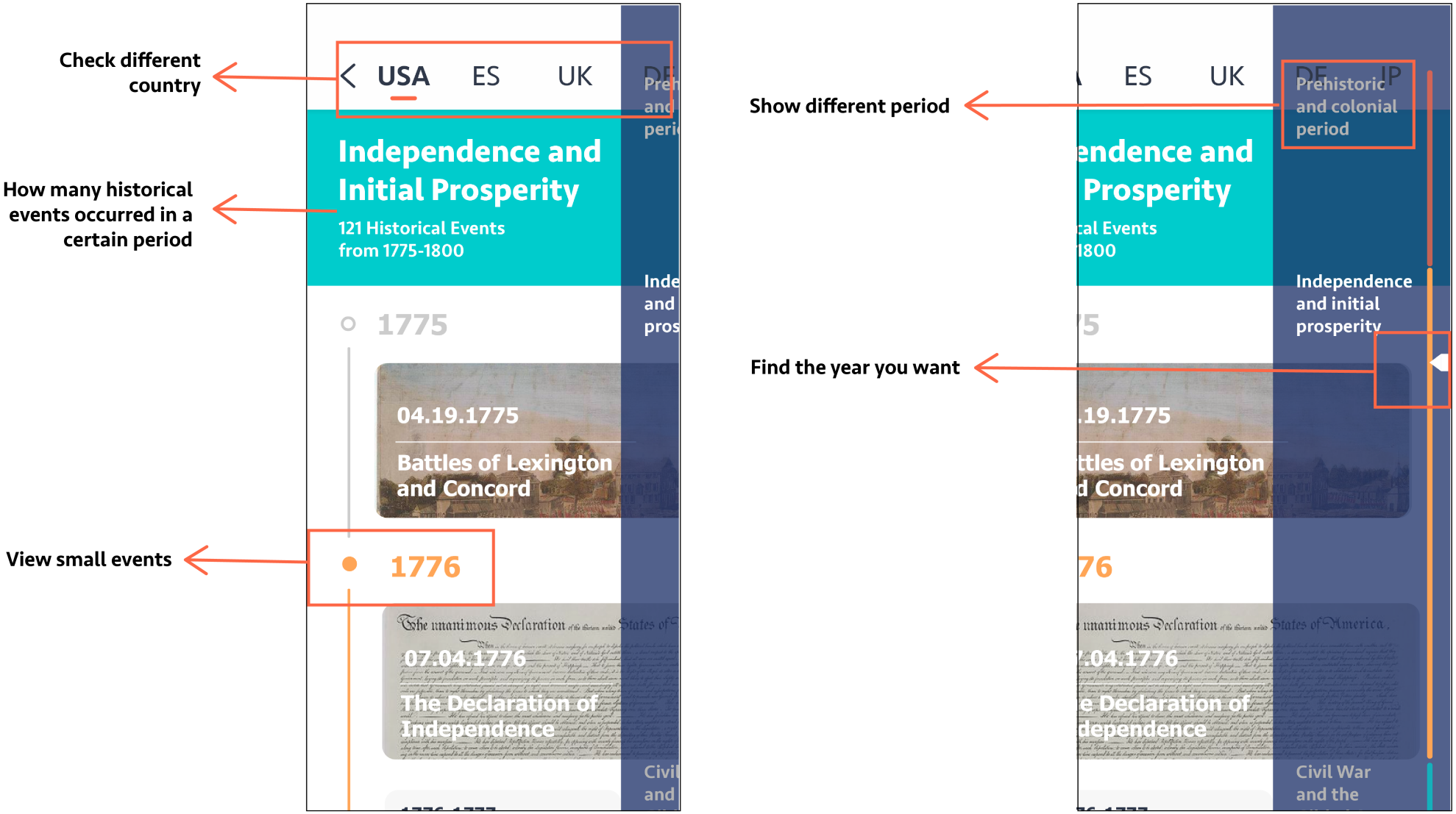

History Quiz
Test your history heritage
Quiz you choose is
Historical U.S.A.
75%
START
Course
Analysis
Rating at level 2
01
Marry Smith
3242 points
02
David Johnson
2367 points
03
Susan White
2333 points
Historical U.S.A.
You have 10 seconds to answer each question. The faster you answer, the higher your score. When you are done, try again to beat your best score!
START
PART 1 > FACT OR FICTION?
SCORE: 15
Roald Amundsen was the first person to reach the South Pole.
a. TRUE
b. FALSE
Skip
Confirm
Quize Done
The final score is
152
Point
Check Answer
Overall Score
23% People
23% Nation
23% Event
23% Years
23% Theory
Complete
Analysis
Historical U.S.A.
42%
Completion Role
23% People
23% Nation
23% Event
23% Years
23% Theory
Progress
HIGH SCORE
1352

Task 2

02 /

It is to show a clear history timeline. Students can adjust different period or choose different classification like place, event, policy and so on. Some unintelligible proper nouns will be marked out so that users can check their explanation. Resources like picture, related books and other information are also included.




Check different country
USA
ES
UK
How many historical events occurred in a certain period
Independence and Initial Prosperity
121 Historical Events from 1775-1800
1775
04.19.1775
Battles of Lexington and Concord
View small events
1776
07.04.1776
The Declaration of Independence
Show different period
Prehistoric and colonial period
Independence and initial prosperity
Find the year you want
Civil War and the

between residents of the 13 American colonies and the British authorities, particularly in Massachusetts. On the night of April 18, 1775, hundreds of British troops marched from Boston to nearby Concord in order to seize an arms cache. Paul Revere and other riders sounded the alarm, and colonial militiamen began mobilizing to intercept the Redcoat column....

Show More

Basic Info

Start: April 19, 1775 End: April 19, 1775

Time: Ancient Times Area: North America

Party: Massachusetts Militia

Resource

Image Video Audio File

Different resource students need

More information

04.19.1775

Battles of Lexington and Concord

Play button to listen the article

BACKGROUND

The Battles of Lexington and Concord, fought on April 19, 1775, kicked off the American Revolutionary War (1775-83). Tensions had been building for many years between residents of the 13 American colonies and the British authorities, particularly in Massachusetts. On the night of April 18, 1775, hundreds of British troops marched from Boston to nearby Concord in order to seize an arms cache. Paul Revere and other riders sounded the alarm, and colonial militiamen began mobilizing to intercept the Redcoat column....

Explanation of proper nouns

Show More

Show remaining, including rest content,citiation, basic information

Basic Info

Start: April 19, 1775 End: April 19, 1775

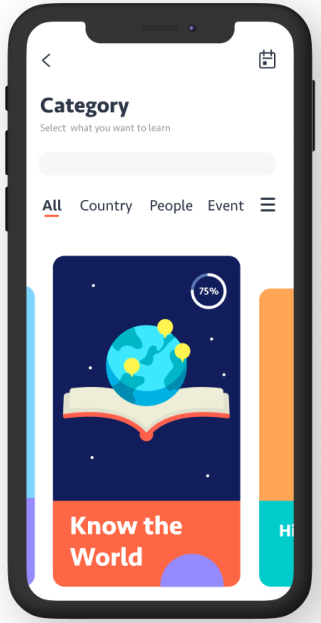
Time: Ancient Times Area: North America

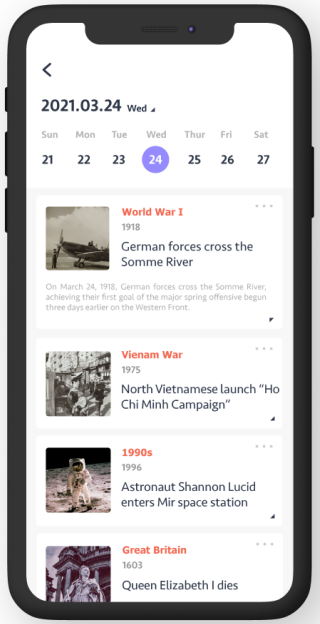
Party: Massachusetts Militia

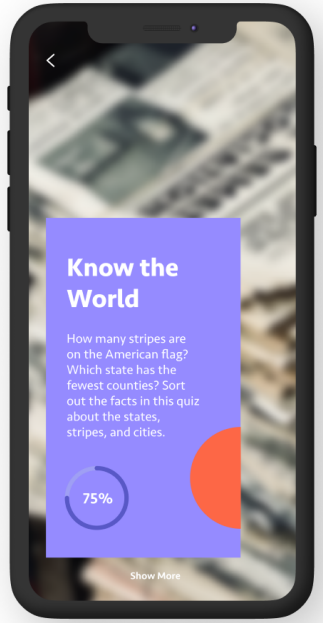
Resource

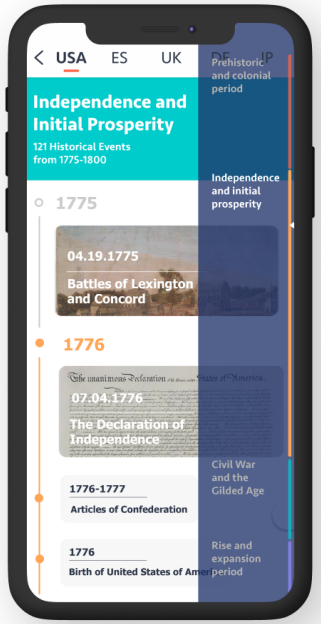
Image Video Audio File

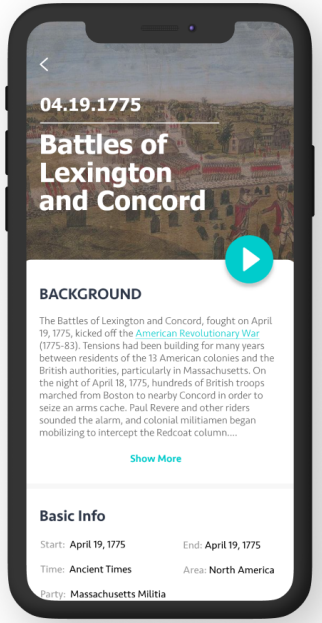
Overall


Category
Select what you want to learn
All
Country
People
Event
75%
Know the World


2021.03.24 Wed
Sun Mon Tue Wed Thur Fri Sat
21 22 23 24 25 26 27
World War I
1918
German forces cross the Somme River
On March 24, 1918, German forces cross the Somme River, achieving their first goal of the major spring offensive begun three days earlier on the Western Front.
Vienam War
1975
North Vietnamese launch "Ho Chi Minh Campaign"
1990s
1996
Astronaut Shannon Lucid enters Mir space station
Great Britain
1603
Queen Elizabeth I dies


Know the World
How many stripes are on the American flag? Which state has the fewest counties? Sort out the facts in this quiz about the states, stripes, and cities.
75%
Show More

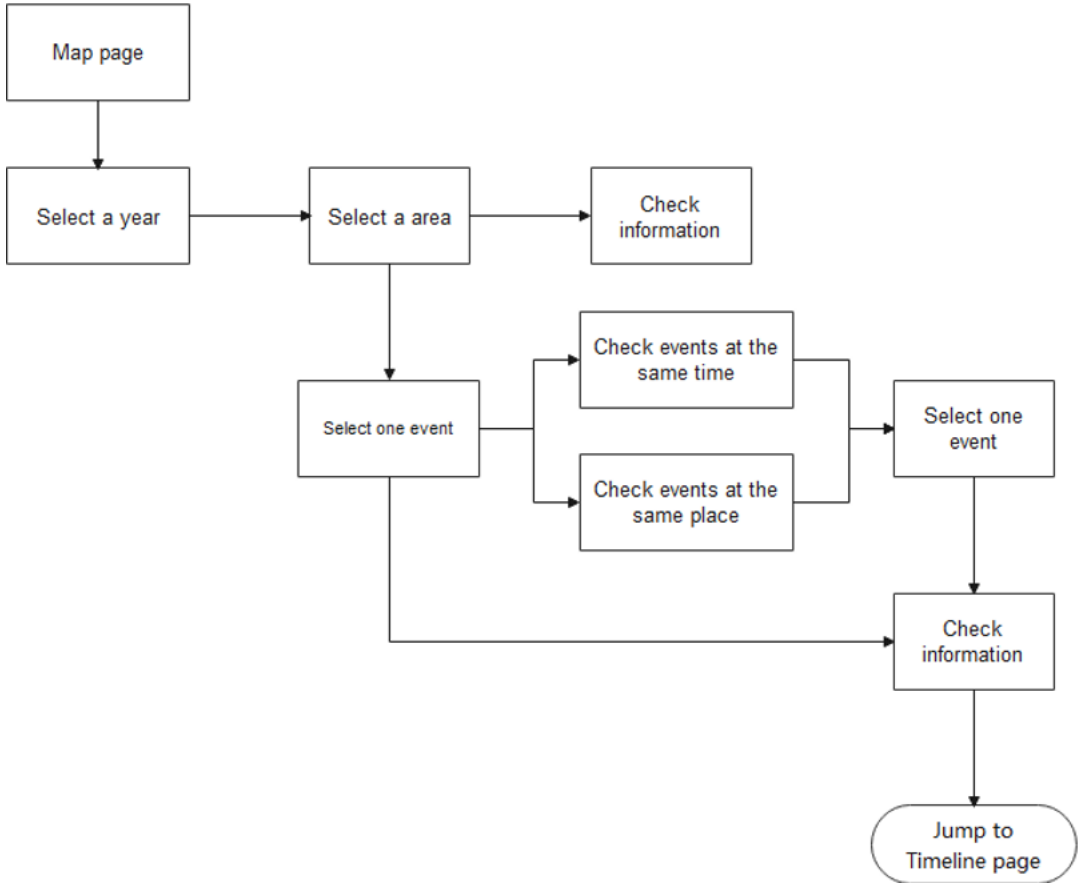

USA
ES
UK
Prehistoric and colonial period
Independence and Initial Prosperity
121 Historical Events from 1775-1800
Independence and initial prosperity
1775
04.19.1775
Battles of Lexington and Concord
1776
07.04.1776
The Declaration of Independence
Civil War and the Gilded Age
1776-1777
Articles of Confederation
1776
Birth of United States of America
Rise and expansion period

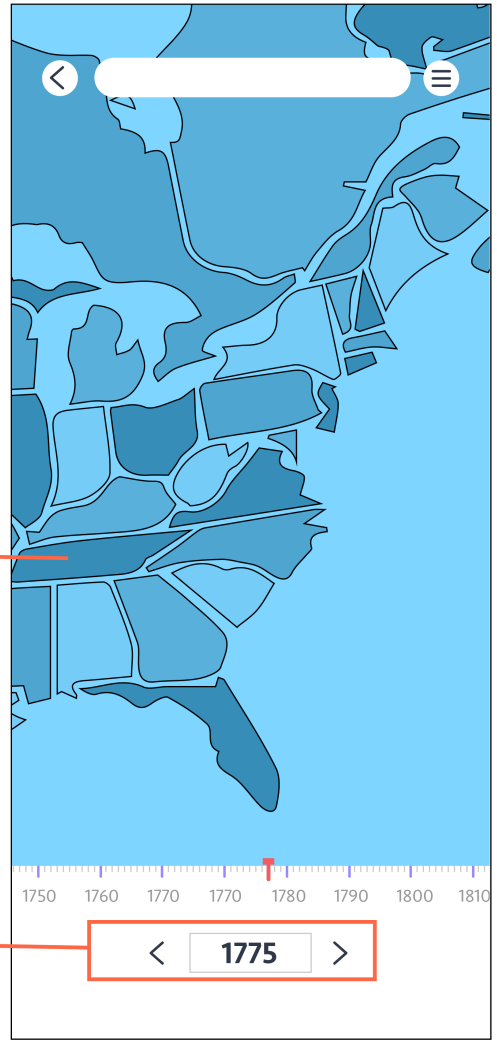

04.19.1775
Battles of Lexington and Concord
BACKGROUND
The Battles of Lexington and Concord, fought on April 19, 1775, kicked off the American Revolutionary War (1775-83). Tensions had been building for many years between residents of the 13 American colonies and the British authorities, particularly in Massachusetts. On the night of April 18, 1775, hundreds of British troops marched from Boston to nearby Concord in order to seize an arms cache. Paul Revere and other riders sounded the alarm, and colonial militiamen began mobilizing to intercept the Redcoat column....
Show More
Basic Info
Start: April 19, 1775
End: April 19, 1775
Time: Ancient Times
Area: North America
Party: Massachusetts Militia

Task 3

03 /

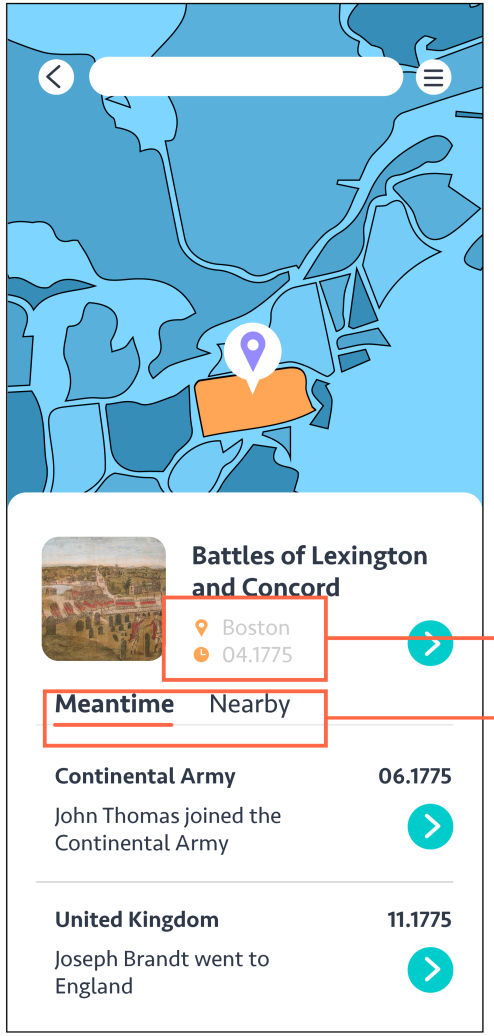
In addition to the timeline, students can choose the geographic location to find the historical data they want. The map will change according to different time periods.





Select place

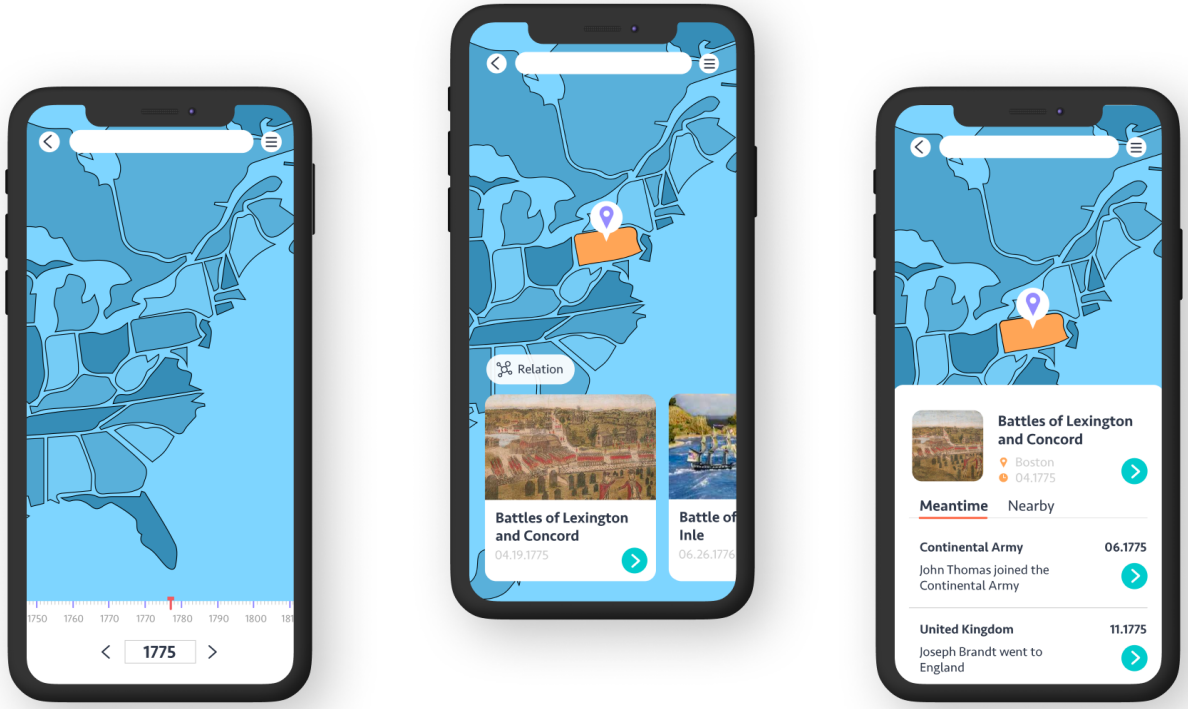
Select year



Show the time and place

Other events

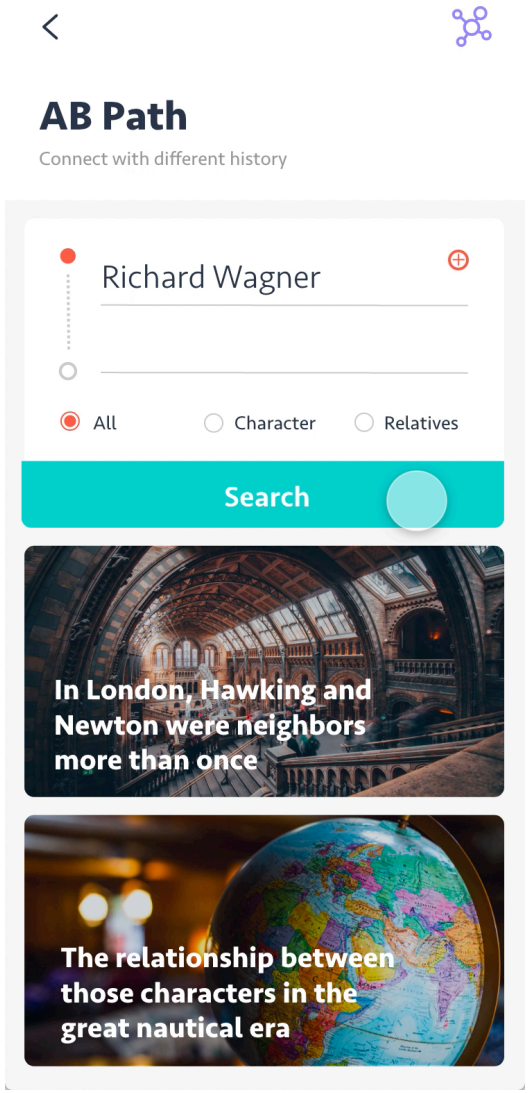
Overall

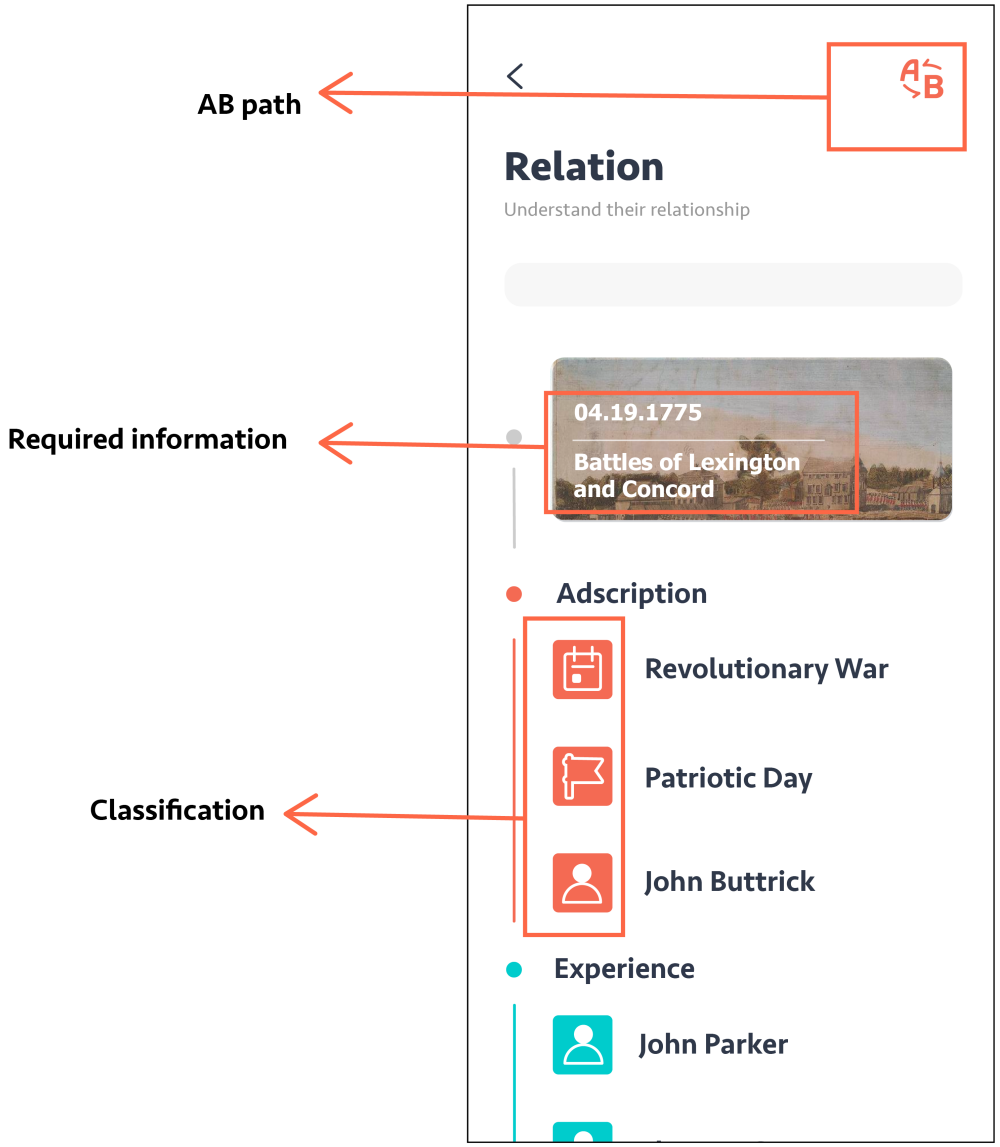

1750
1760
1770
1770
1780
1790
1800
1775
Relation
Battles of Lexington and Concord
04.19.1775
Battle of Inle
06.26.1776
Battles of Lexington and Concord
Boston
04.1775
Meantime
Nearby
Continental Army
06.1775
John Thomas joined the Continental Army
United Kingdom
11.1775
Joseph Brandt went to England

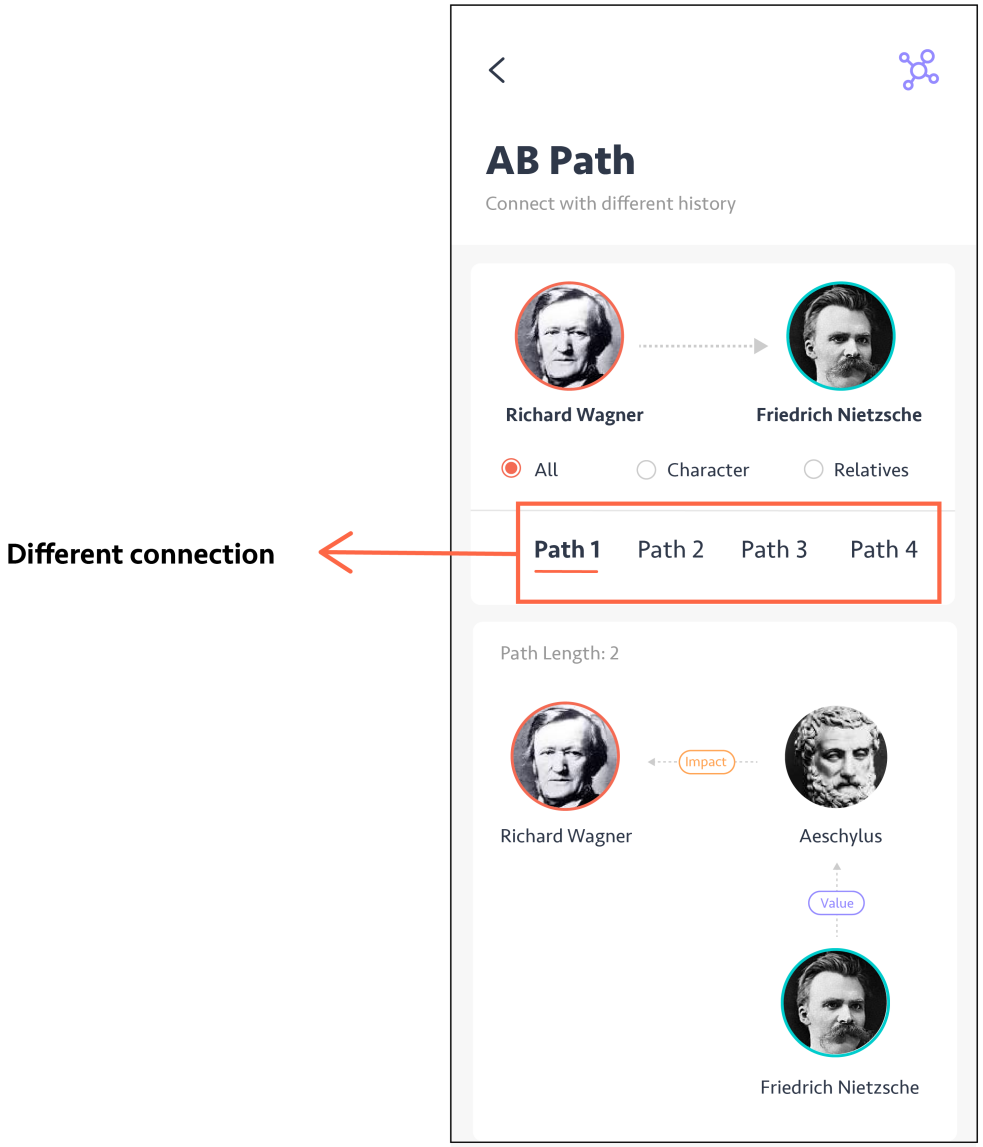
Task 4

04 /

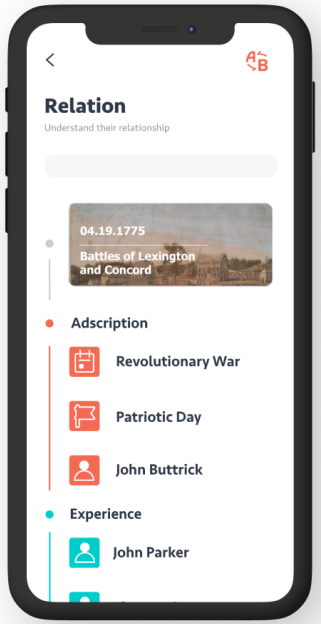
They can use this function to sort out the relationship diagram of each event. Or they can check whether some unrelated events/people are related to the same people/events.




AB path
Relation
Understand their relationship
Required information
04.19.1775
Battles of Lexington and Concord
Adscription
Revolutionary War
Patriotic Day
John Buttrick
Classification
Experience
John Parker


AB Path
Connect with different history
Richard Wagner
Friedrich Nietzsche
All
Character
Relatives
Different connection
Path 1
Path 2
Path 3
Path 4
Path Length: 2
Impact
Richard Wagner
Aeschylus
Value
Friedrich Nietzsche

Overall


Relation
Understand their relationship
04.19.1775
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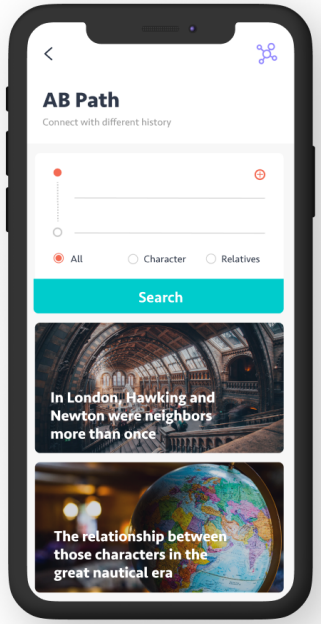
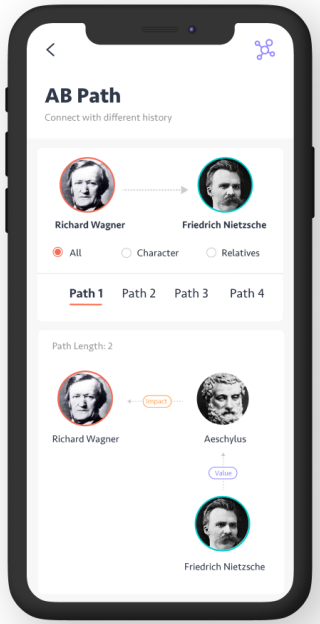

AB Path
Connect with different history
All
Character
Relatives
Search
In London, Hawking and Newton were neighbors more than once
The relationship between those characters in the great nautical era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Path 1
Path 2
Path 3
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Path Length: 2
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Value
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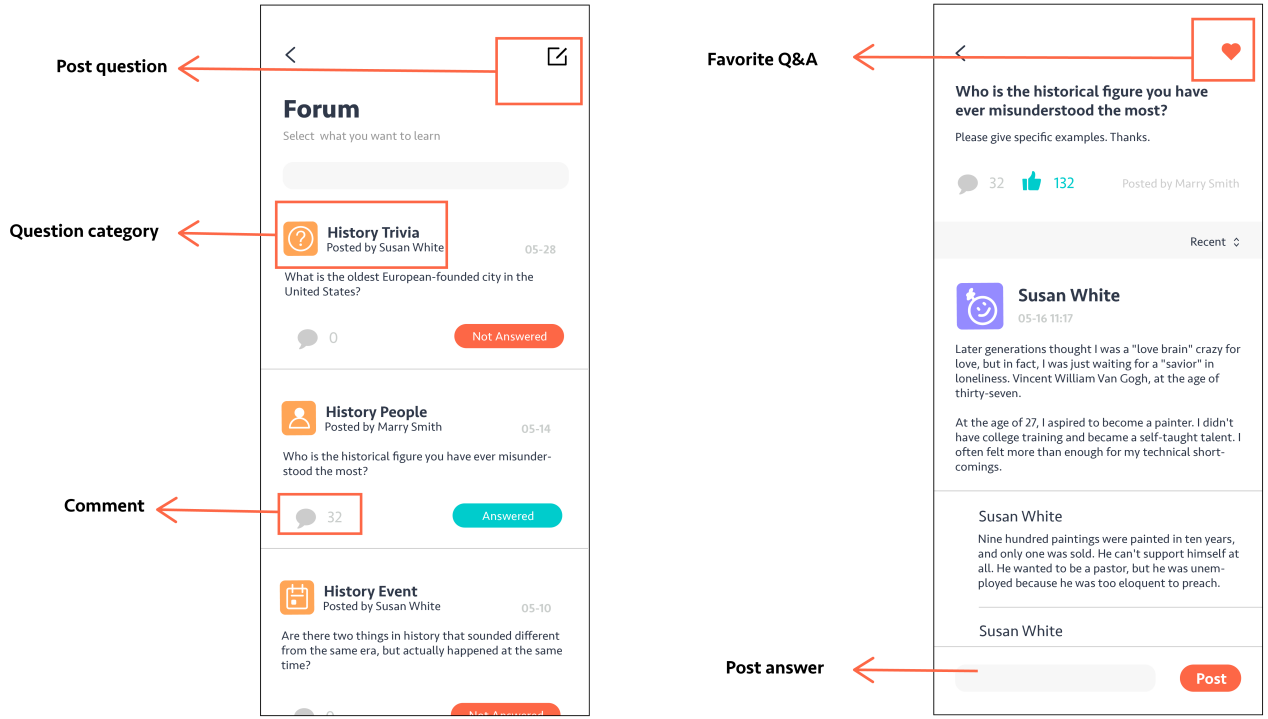
Task 5

05 /

If students have some special questions that have not been answered, they can go to the forum to find answers, or answer other people' s questions.



Future exploration

Some Idea

Some people may say that interest is the best teacher, and this auxiliary app cannot make students willing to learn history. But they never thought that when they first wanted to learn history, they found that there was no reliable app for them to learn. They may still have to spend a lot of time on these issues as mentioned before.

Since I am not a history major, the professional content displayed on the app must be inaccurate, 3D models of historical artifacts cannot be displayed either. In the future, I will ask more related experts to improve these aspects.

Shiyan Sun

VCD Thesis 2021

Allstory

know all history of the world

Allstory
know all history of the world

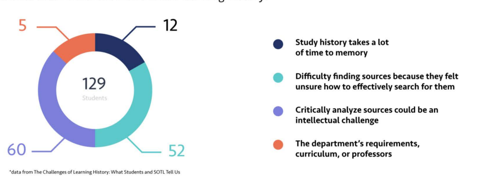
Shiyan Sun VCD Thesis 2021

Background

For centuries, **history played an important role connecting past and future**. History education establish its influence basically through politics, economy, culture, etc. This is to say, absorbing history knowledge can have a long-lasting impact on individuals with judgement of modern society and respect for history, especially on students.

Not only in the United States, history in many countries is also a compulsory course. However, **historical knowledge is too large and complicate**. It is hard for students to understand the points or have a systematic memory. Especially in modern times, there have been many movements and events.

In a study research, students show different views when learning history.



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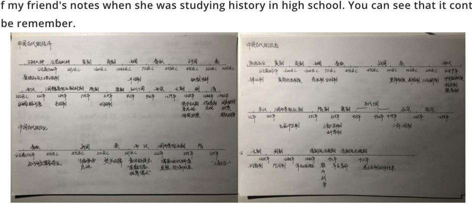

Searching for historical data is very cumbersome

Problem

When learning histoy, students **have difficulty remembering large amounts of history and dont' know explanations of some proper nouns**, which makes them not have an in-depth understanding of history and easy to fail in the test.

Pain point analysis

01. Currently, compared with learning apps for other subjects, apps about history are very rare.

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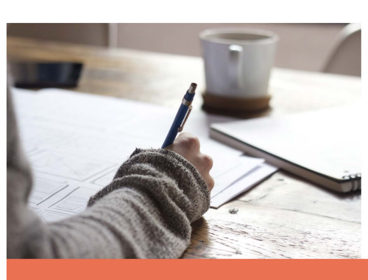


Solution

As an important subject, **an auxiliary app** is needed to help students digest the knowledge they have learned. It will give different quiz to answer, a clear timeline to check information and a forum to discuss.

Those who cannot learn from history are doomed to repeat it.

- George Santayana

Students interview

I interviewed 3 students who need to study history.

Siran
High school student
She needs to recite the contents of many different periods of history, which leads to her often mistaken the time when it comes to exams.

Guessy
College student of design
She thinks checking information is the most painful. Although the elective history course is very interesting, a lot of time is wasted every time when she writes an essay to confirm whether the collected information is relevant.

DAVID
Postgraduate in Psychology
In his curriculum, it contains a history of psychology education. He is particularly troubled with the complicated memory of technical terms.

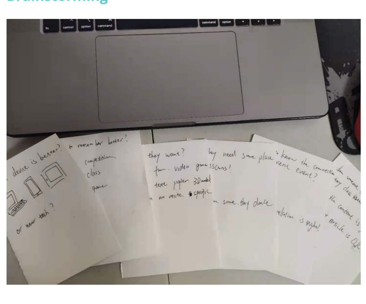
5 Key Features to struggle with

When I design this app, it has five points must to be solved.

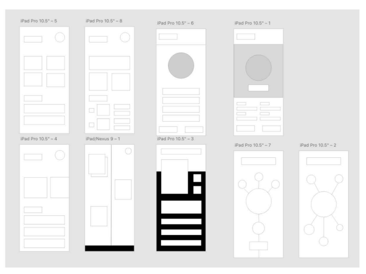
Many times, students are told that they need to know a lot about history. Hence, most students juggle between trying to master many historical subjects in particular historical periods at the same time. It is a callenge that students get a general instead of an in-depth understanding of history.

How it work?

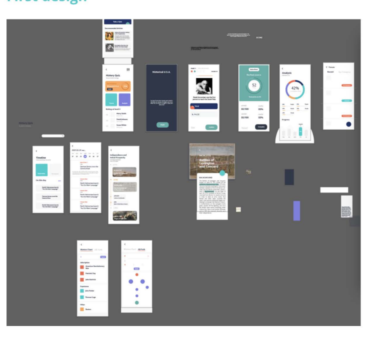
Brainstorming



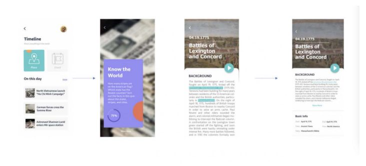
Sketch



First design



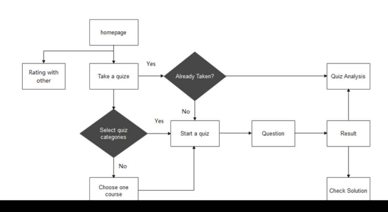
Changes



An opportunity to learn better!

Task 1： Take Quiz

It is to consolidate the learned historical knowledge. Students can set different categories to answer quiz. The faster they answer, the higher the score is. It will record the score every time and give analysis. They can also check wrong answers and review them.



RIT College of Art and Design Visual Communication Design

Allstory
know all history of the world

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Objectivity
Memory
Sources
Explanation
Linkage

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