

HARJIT SINGH

UX PORTFOLIO



About Me

I am passionate about technology and human behaviour and I appreciate accessible and open design thinking.

With a background in Social Work and Psychology, I value the importance of creating an inclusive digital experience which focuses on understanding the needs of the user.

Motivated by continuous learning, I have recently completed a 16 week Software Development course with CodeClan. This has allowed me to develop my technical skills and gain experience in a variety of software tools.

BBC WALK IN HISTORY

An interactive educational app for the BBC.

PROJECT BRIEF

As part of my final project at Codeclan, I developed an interactive educational app that aimed to display information in a fun and interesting way.

I worked within a team of four to produce a full stack web application using Javascript and React.

We were given a deadline of five days to complete the task!

THE PROJECT

We choose to design a user friendly educational app for displaying world history events.

The app displays 'today in history' events in an interactive timeline format.

The app enables a user to filter events of different categories by clicking on that particular category button.

WHAT WAS THE DESIGN PROBLEM I WAS TRYING TO SOLVE?

- THE BBC IS LOOKING TO DEVELOP A YOUNG PERSON'S KNOWLEDGE OF HISTORICAL WORLD EVENTS
- THE BBC BELIEVES THAT HISTORY EDUCATION TENDS NOT TO BE INTERESTING OR APPEALING TO YOUNG PEOPLE

MY APPROACH

Proto-personas

I applied **User Discovery** methods by designing a number of proto-personas to help me understand the following points:

User demographics- *Who are our users?*

User behaviours- *How do they behave?*

User needs and goals- *What do they want?*

Example

Hannah



Behaviours

Hannah's favourite subject at school is Art.

Hannah enjoys spending time with her friends at the weekends.

Hannah often becomes bored in class and can be easily distracted.

Demographics

Hannah is 14 years old and lives in Glasgow.

Lives at home with her parents and her younger sister Ella.

Hannah is in her 3rd year at Secondary School.

Needs and Goals

Hannah wants to get better at history so she can pass her exam.

Hannah wants a part-time job so she can buy a new mobile phone.

Hannah wants to go to college and become a Web Designer.

User Needs

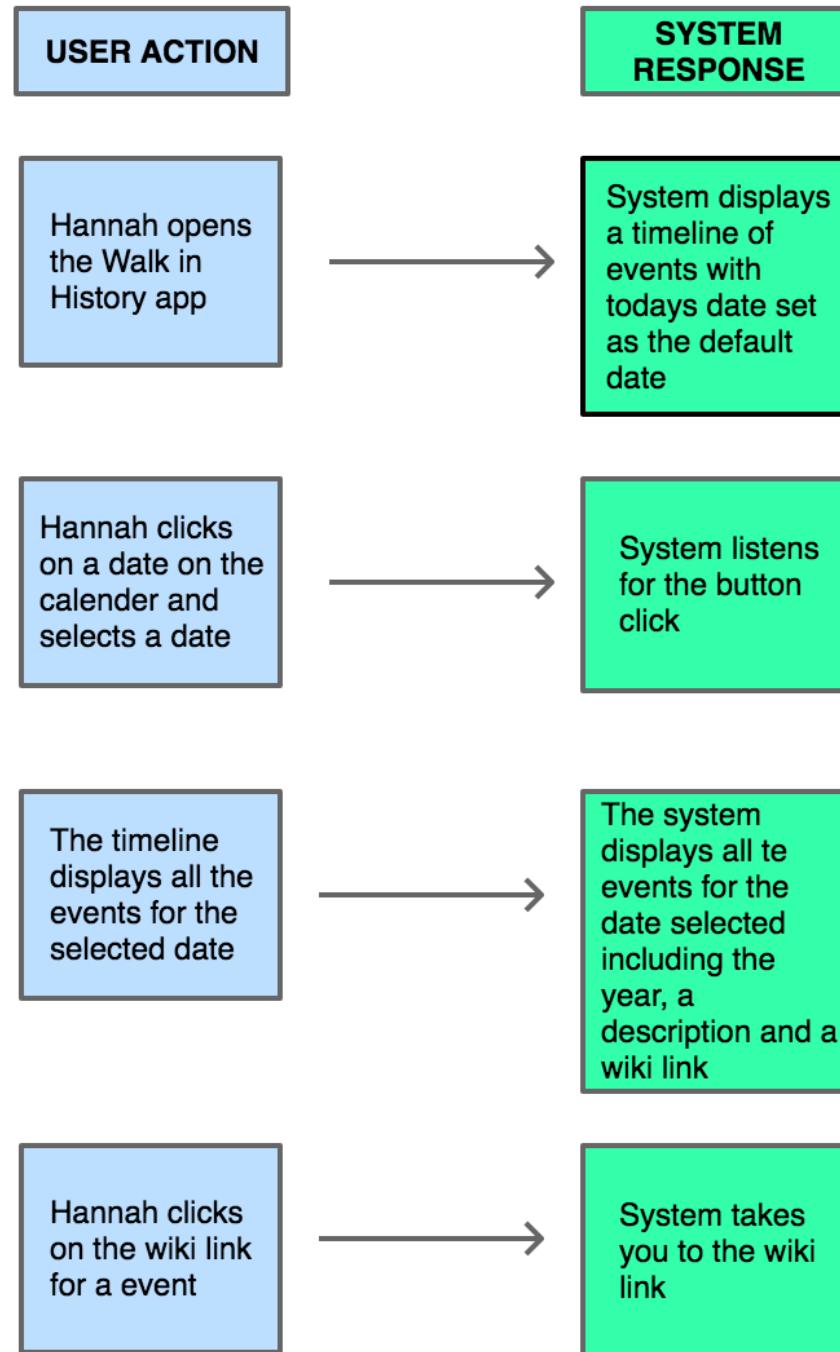
To help me understand what the user would want to achieve, I created **user needs** arising from the 'needs and goals' section of each of the proto-personas

As a....	I want to...	So that...
14 year old girl	Learn about historical world events	I can improve on my history knowledge and pass my exam
History Teacher	Use an educational app that I share with my students	My students can improve their history knowledge in a fun and interactive way
Individual who is blind	Use an app that is easy to use and not reliant on colours for navigation	I can also improve my history in an interactive way

The User Journey

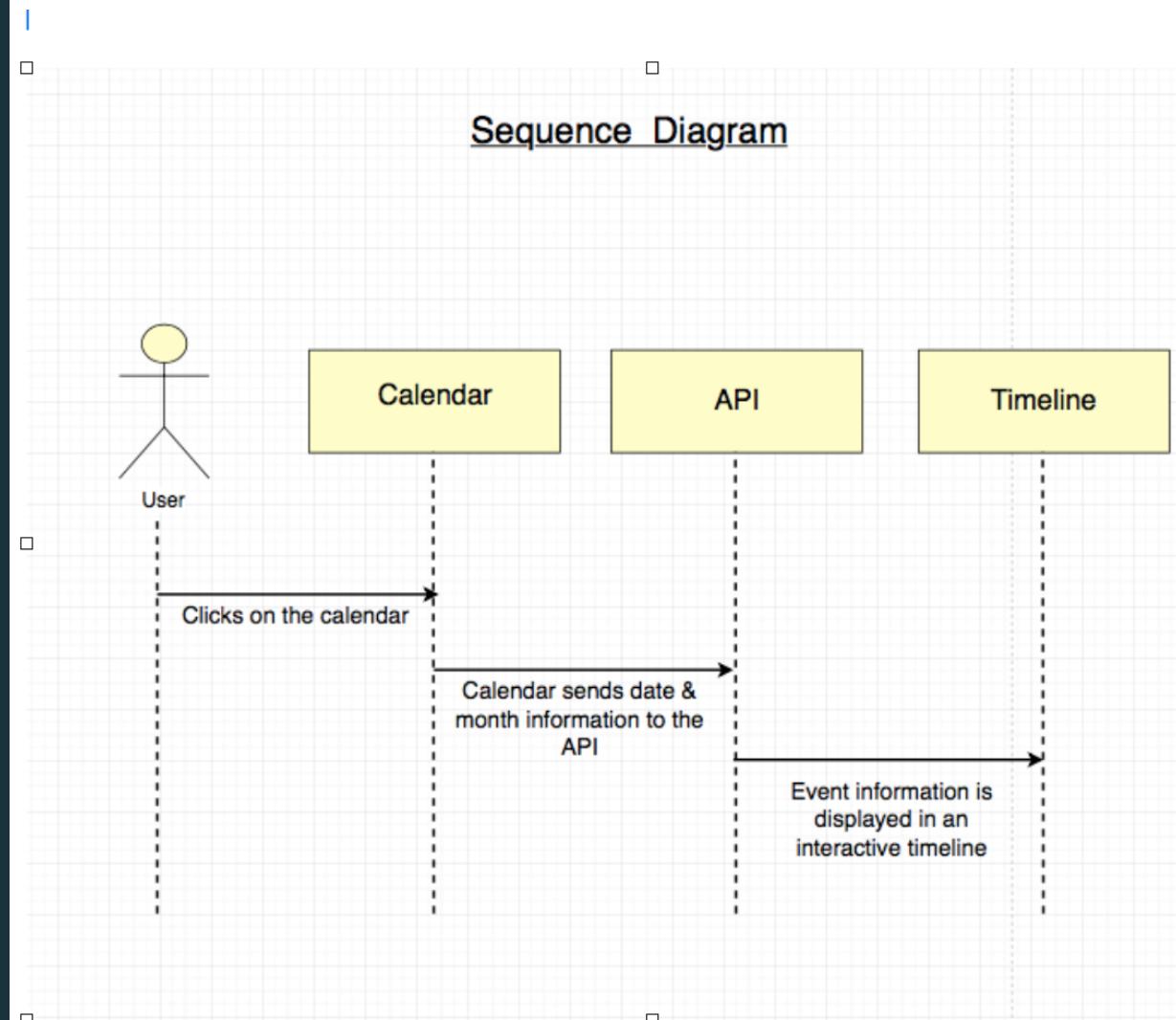
I wanted to better my understanding of the steps involved in completing the user's goals.

In order to do so, I created a user journey which analysed how the user would interact with the app and how the system would respond.



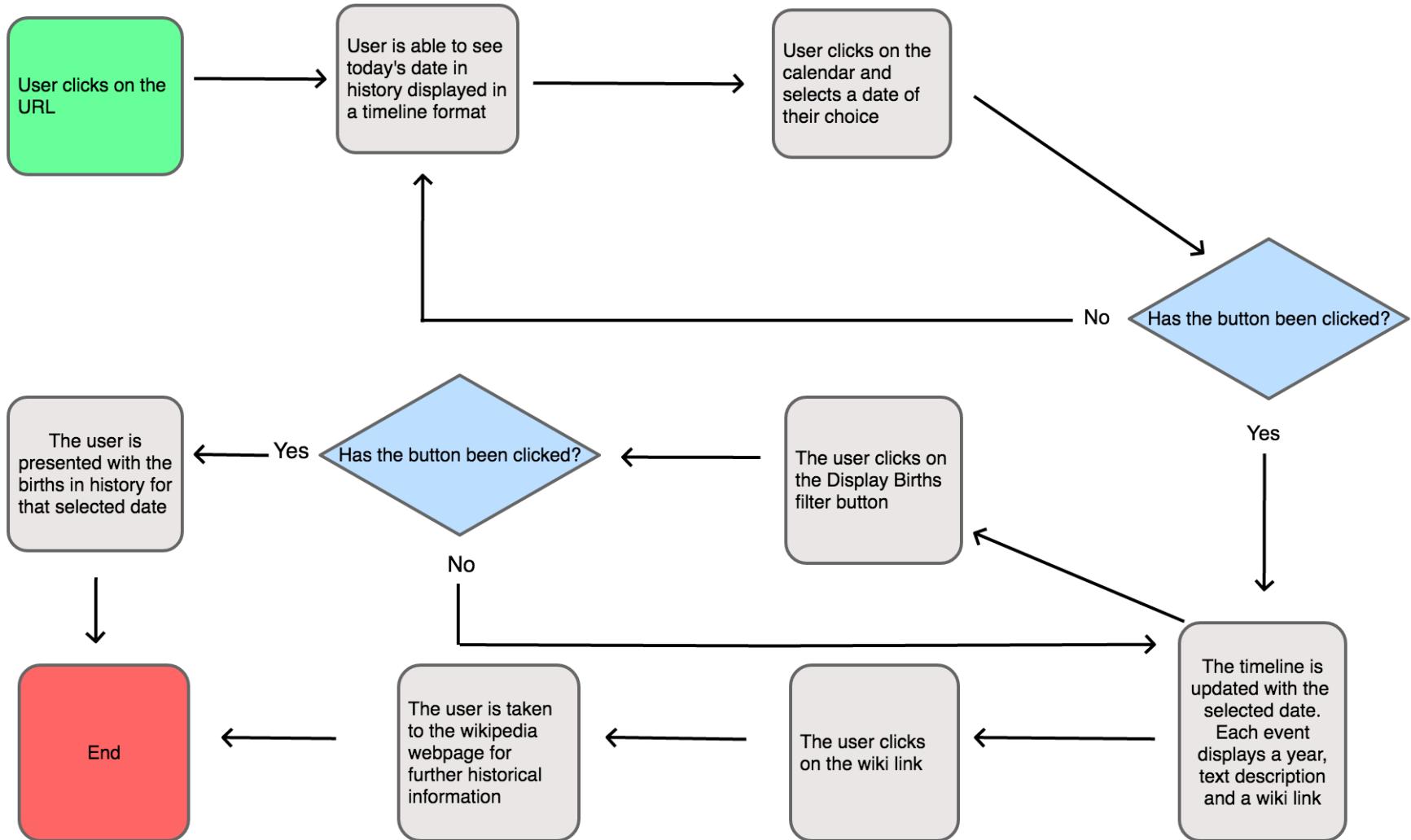
Sequence Diagram

A Sequence diagram helped me find out what messages were sent between a systems objects and the order in which they occur. e.g. the calendar, API and the timeline.



User Flow

I designed a User Flow to help me understand the series of steps the user would take when interacting with the app. This was beneficial as it helped to identify any potential problems that may arise and how to minimise these when possible.

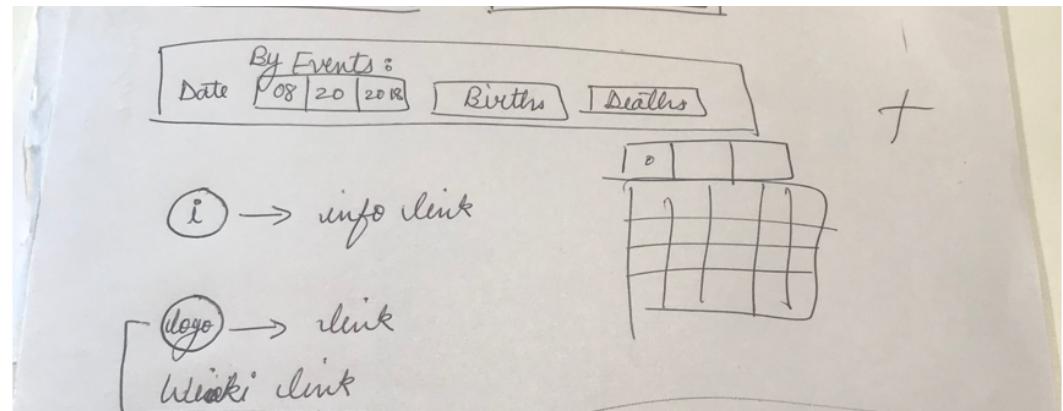


Sketches

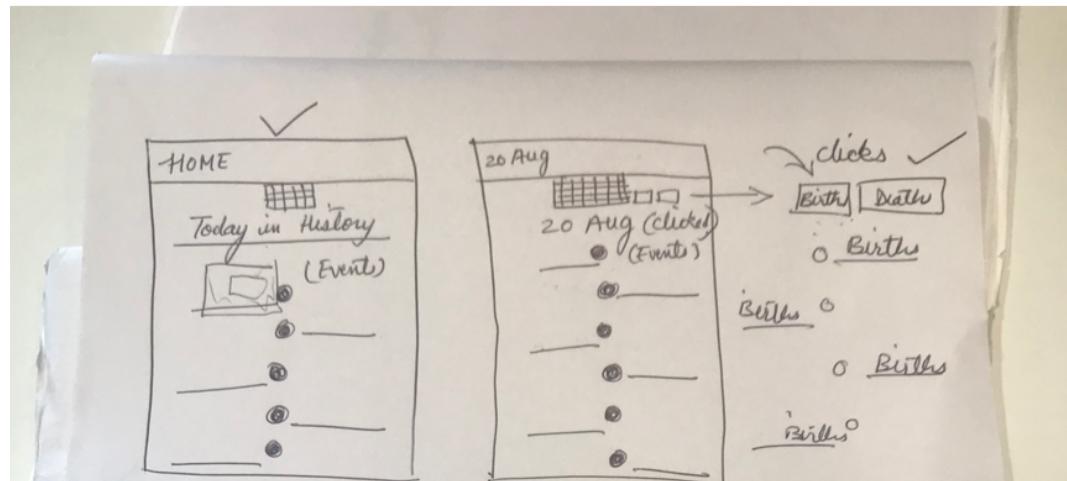
I created sketches of the user interface, focusing on how the calendar and timeline would be best displayed.

This was a quick and easy ways to get my ideas down and share them with the team.

Calendar sketch

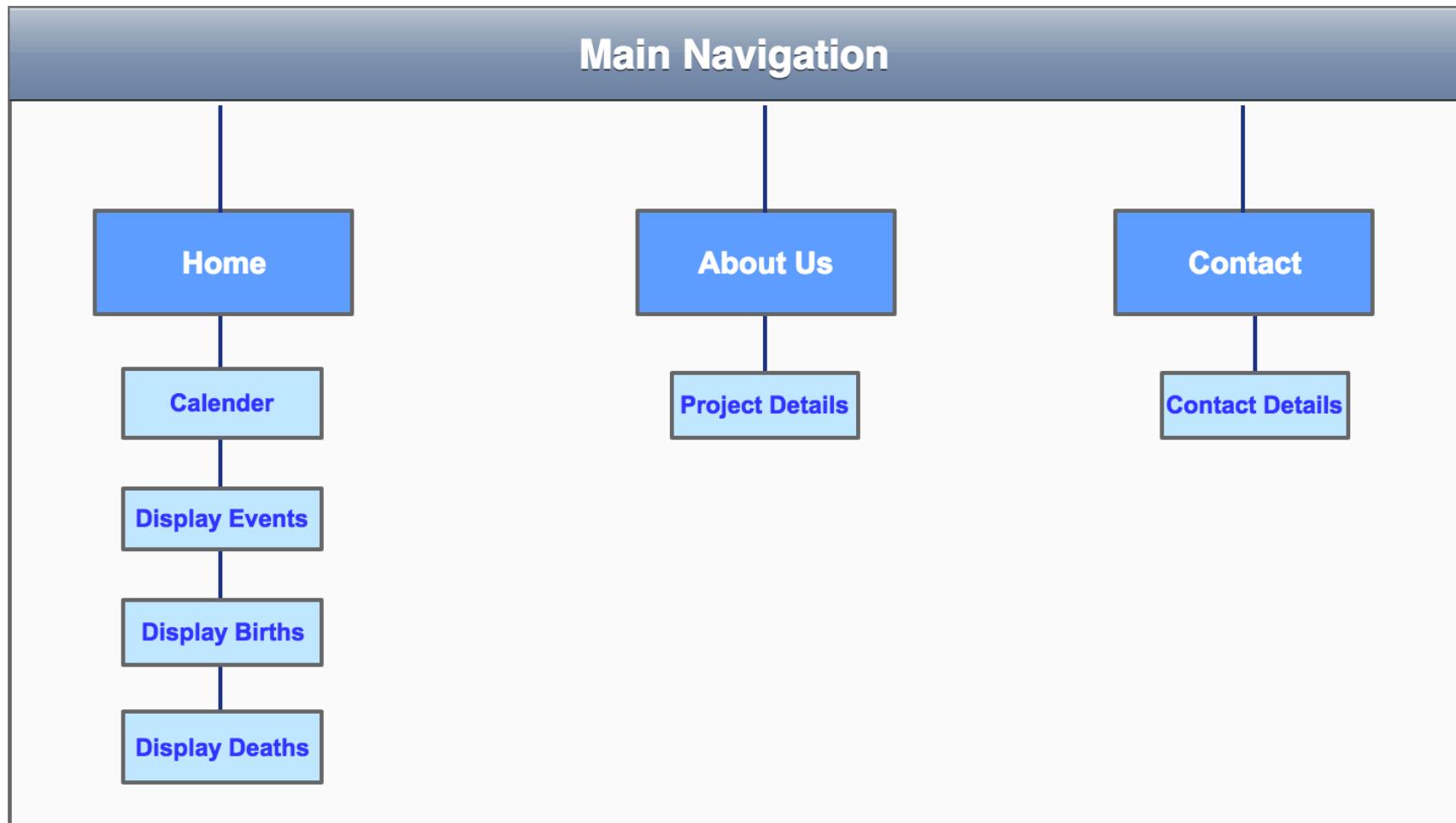


Timeline sketch



Site Map

This site map outlines the information architecture of the application.



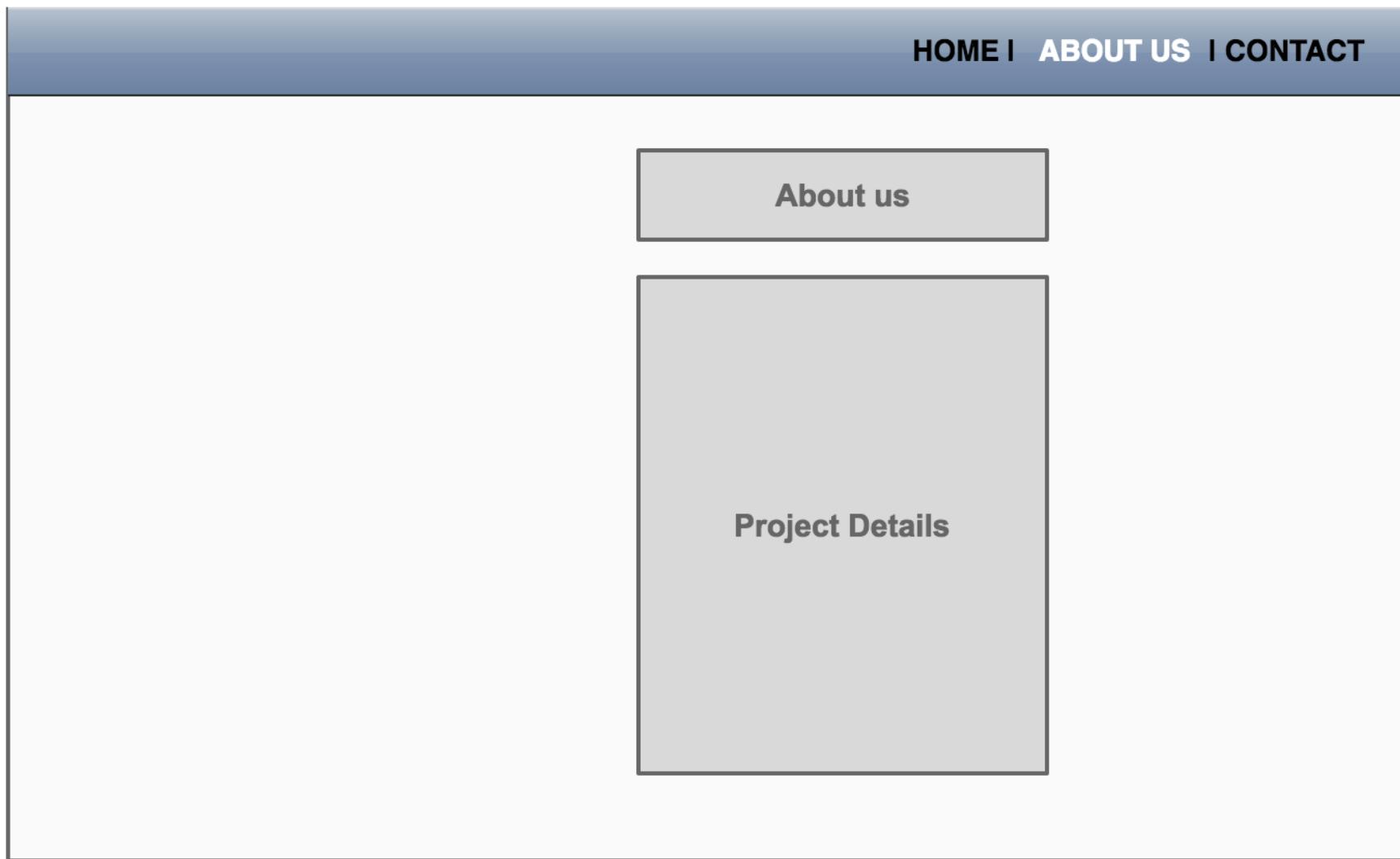
Wireframes

I created wireframes which show the bare bones structure of the app. These were built from the sitemap and helped me remain focused on the key features of the application.

Homepage

The wireframe illustrates the homepage layout. At the top, there is a header bar with three links: HOME | ABOUT US | CONTACT. Below the header, there are three buttons: Display Events, Display Births, and Display Deaths. A date picker shows the date 30/09/17. Below the date picker is a calendar for August 2017, with days numbered 1 through 31. The days 30, 31, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 1, 2, 3, 4, 5, 6, 7, 8, and 9 are displayed in blue. The days 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 1, 2, 3, 4, 5, 6, 7, 8, and 9 are displayed in red. Below the calendar is a section titled Event Timeline, which contains a timeline diagram with three horizontal lines and three blue circular markers. Each marker has a vertical line pointing upwards to a box containing the text Year, Description, and a blue underlined link labeled wiki link.

'About Us' wireframe



'Contact Us' wireframe



User testing

When the app was functioning, I decided to conduct some usability testing to ensure the application met the user needs.

Based upon the proto-personas, I recruited three participants to test the application.

Participants:

14 year old female student

14 year old male student

31 year old female teacher

I asked the participants the following questions:

Did the participants understand how to use the calendar?

Did the participants understand how to filter events based on births and deaths?

Did they learn anything by using the application?

Did they find the application fun to use?

Is there anything which could improve the user experience?

User Feedback

What the participants said...

"The app looks cool and a good way to learn new things"

"It was easy to select a date on the calendar and I liked the timeline format. The filters were also helpful"

The participants highlighted some "**pain-points**" they experienced when using the application:

"The colour of the display buttons was too harsh with them being red and I would prefer a more neutral colour"

"The text description was hard to read"

"The wiki link was not clear and could be easily missed"

"The background image in the About Us and Contact pages was too big and distracting"

Design Improvements

As a group, we applied an **iterative approach** by analysing and reflecting on the user feedback and integrated the results into our design process.

We decided that the following changes would be made:

We removed the red colour tabs as we considered that red is usually associated with deleting an object. Instead, we selected a light orange colour which complemented the existing colour scheme of the app.

I undertook research and referred to the BBC Global Experience Language (GEL) design framework to ensure that text font, size and colour was clear and consistent.

Further Design Improvements

I conducted research into Iconography using the BBC GEL guidelines. This helped me add an icon to the wiki link to grab the users attention and promote clearer navigation.

I reduced the size of the background image and applied a transparency effect so it blended into the background and was not distracting for the user.

I used semantic HTML by using HTML elements with the most specific meaning to convey the actual content.

Key Learning Points

My motivation was to keep the user at the core of the design process. This project highlighted that UX design is an iterative process which uses good research methods and logic to create the best product for the user.

Working within a team of four meant that I had to adapt to different working styles and between us manage using GitHub! We managed this by having good open communication and supporting each other.

We worked towards a strict deadline, this meant prioritising key features whilst ensuring a good user experience- this was challenging!

Take a look.... https://github.com/Harjitzk/History_App_Project

Please download the code to your local repository, the README.md file explains how to run the app.

Homepage

BBC
walk in HiSTORY

DISPLAY EVENTS DISPLAY BIRTHS DISPLAY DEATHS

09/14/2018

TODAY iN HiSTORY

AD 81
Domitian becomes Emperor of the Roman Empire upon the death of his brother Titus.
[Wiki Link](#)







629
Emperor Heraclius enters Constantinople in triumph after his victory over the Persian Empire.
[Wiki Link](#)







About Us

[Home](#)[About](#)[Contact](#)

The App

BBC Walk In History is a user friendly educational app built using *JavaScript* and *React* for anyone wishing to improve their history knowledge!

This application shows all the events 'today in history' and also allows the user to see a particular day's events by selecting that date from the calender and these events are displayed in an interactive timeline.

Also, clicking on different category buttons like 'Births' & 'Deaths' enables user to filter events by that particular category.



Contact

[Home](#)[About](#)[Contact](#)

The Team

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A black and white photograph of a person running on a rocky path. The runner is in mid-stride, wearing a dark t-shirt and shorts. The background features a range of mountains under a cloudy sky.

THANK YOU

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