

# CO-V HEALTH **PROJECT PROPOSAL**

Answering your Covid questions



# **PROJECT GENRE**

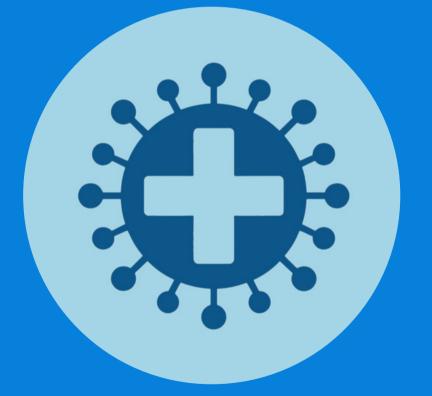
The genre of the project is a healthcare app, partnering with Local GP offering support to the local area.

The app will utilise digital tools to fulfil the client brief. It will offer advice, statistics, guidance and further services such as the ability to order PPE supplies, and book vaccinations and tests.





# "CO-V HEALTH"



Logo Design: Created by me in Microsoft Image Creator, colour and graphic edited in Photoshop.

# **PROJECT PURPOSE**

The purpose of the project is to help users access the information they need about COVID-19 quickly and collate all of it in one place.

Reduces pressure on GP surgeries.

Reduces patient anxiety: Up to date information, no call wait times, accessible.



### **PROJECT PURPOSE + INSPIRATION RESEARCH ANALYSIS**

- Project Purpose:
  - From my research in scientific journals, I found that there were links of stress and anxiety with disease outbreaks (Santabarbara, et.al, 2021).
  - This informed my decision to make a platform to easily convey information for the public in one place following guidance of the brief given by the doctors surgery.
  - I did additional research on mental health apps, which have grown in popularity in recent years, supporting my decision to make a phone app as a platform.(ECHAlliance, 2023).

# **INSPIRATION**

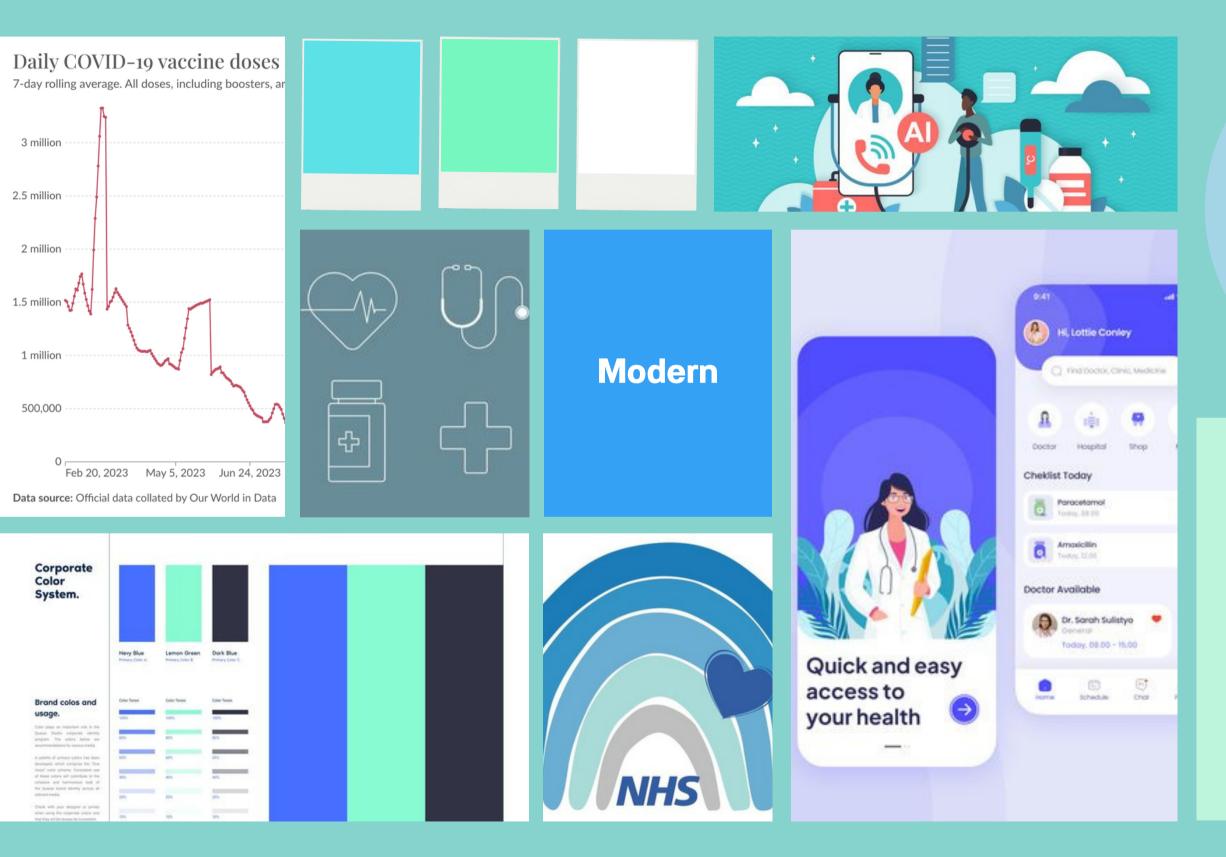
The inspiration for the "CO-V HEALTH" App project was inspired by stressors linked to disease outbreaks as highlighted by Santabara et al. (2021).

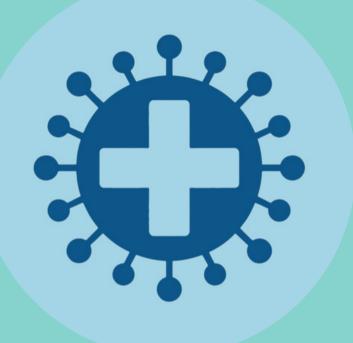
I aim to address the unpredictable nature of COVID-19 by creating a platform that streamlines information and services for COVID-19 through open-source data and GP surgery.

By having a simple platform that users can easily understand and use they will have their worries alleviated.



### **INSPIRATION-BRAND DESIGN**







#### Do you have a fever?



### **Clear Data + Advice**



### **DESIGN RESEARCH ANALYSIS**

- Design Research:
  - The brand moodboard was informed by my research in colour theory and healthcare brand.
  - My research told me that it had been noted that hospital rooms with blue walls are considered less stressful than other colours. (REHMAN KHATTAK, et al., 2018).
  - Research on healthcare branding emphasized creating a "meaningful connection between, mission, values and people you serve", (Qualtrics, 2023)
  - Hence my decision to incorporate NHS and GP surgery branding to build trust with customers and also to incorporate customer service capabilities.





Source: (onemindpsyberguide.org, 2023) Example of mental health app "Mindshift" with blue interface design.

### **DESIGN RESEARCH: ACCESSIBILITY**

- My research into design accessibility was due to the client brief to ensure accessibility.
- I found that using common UI elements is recommended so that users can learn the navigation quickly.
- Consistency and simplicity can improve accessibility.
- My research from The Web Content Accessibility Guidelines(WCAG) 2.0 explains:
  - Laying out the legal guidelines for creating accessible content.
  - (Gov.uk, 2023) It is suggested by WCAG guidelines to make content accessible by screen readers, this can be achieved by writing content as clear and simple as possible.
  - Additionally, when writing the code of the pages, by using semantic HTML, descriptive text for images, and allowing keyboard navigation the screen reader can effectively function.



## Designing for users of screen readers



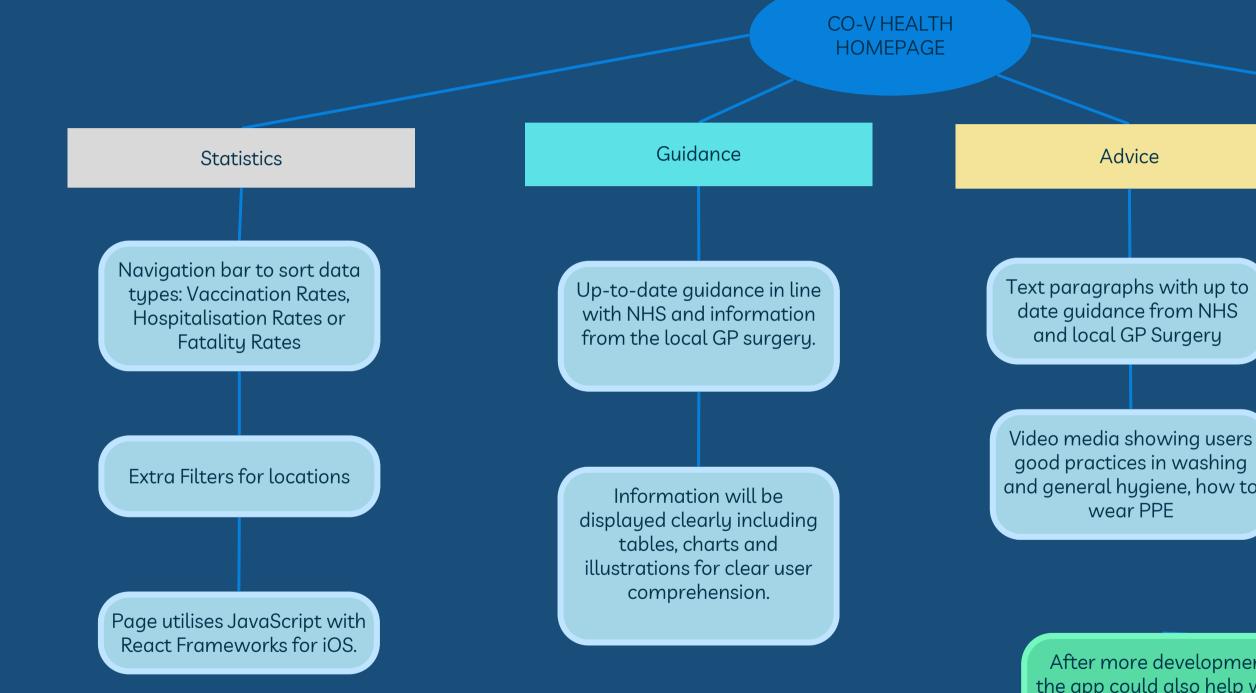
Do	Don't
describe images and provide transcripts for video	only show information in an image or video
follow a linear, logical layout	spread content all over a page
structure content using HTML5 <h1> <nav> <label></label></nav></h1>	rely on text size and placement for structure <b>36pt, bold</b>
build for keyboard use only	force mouse or screen use
write descriptive links and headings Contact us	write uninformative links and headings Click here

<u>https://accessibility.blog.gov.uk/2016/09/02/</u> <u>dos-and-donts-on-designing-for-</u> accessibility/

Home Office Digital

For more information, contact: access@digital.homeoffice.gov.uk

### **PROJECT CONTENTS**



Following the client brief, I divided the project into these four categories to most effectively cover the required information. By doing this I could break down the planning and research in more depth.

After more development. the app could also help with diagnosing users' COVID-19 symptoms and offering the choice to book an appointment with the local GP.

#### Advice

date guidance from NHS and local GP Surgery

good practices in washing and general hygiene, how to wear PPF

#### CO-V Al Assistant

Text based AI chatbot allowing users to request several features and services. i.e. "Could I help you book a vaccine in your local area?"

These features for the first deployment will be ordering PPE and booking vaccinations and tests.

> Additionally, offers customer service.

## RESEARCH

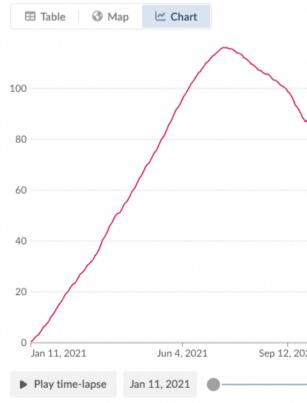
### **STATISTICS**

#### **GUIDANCE**

By using data provided by Our World in Data which is open source and updated daily. We can add this data to the app and add sort filters of:

- Vaccination rates
- Hospitalisation rates
- Fatality rates.

	ADVICE			ΑΙΑ	SSISTANT
TRIC	INTERVAL				
accine doses V	6-month rolling total	✓ Relative to	Population	Color by test positiv	ity
Iow many COVIE months?	)-19 vaccine doses v	were administ	ered in the p	orevious	Our World in Data
	n. The value shown for each date ers, are counted individually.	is the total number of va	accine doses administe	ered in the 6 months prec	eding that
🖽 Table 🛛 🕄 Map 🗠	Chart				Settings
	$\frown$				
D					
		~~~			
)			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
。					
。			/		
				1 1	
•				United	d Kingdom
,	- 1		1	1	
	n 4, 2021 Sep 12, 2021	Dec 21, 2021	Mar 31, 2022	Sep 4, 2022	
Play time-lapse Jan 11, 2	2021			•	Sep 4, 2022



"Our goal at Our World in Data is to make data and research accessible so that we can achieve progress against the world's largest problems."

### **RESEARCH ANALYSIS : STATISTICAL DATA**

- My decision to utilise open source data was informed by my research on technologies and the requirement from the client brief to provide the "latest information" on Covid Statistics.
- By building the app using React Native frameworks (Native, n.d.) and JavaScript I could use the REST API provided by GitHub to call data directly into the app and sort it to the users needs. (GitHub, 2024)

JavaScript, React and GitHub Logo.

ZL

### RESEARCH

#### **GUIDANCE**

Do you or your child have any of the following symptoms? High temperature or shivering New, continuous cough Shortness of breath Feeling tired or exhausted Aching body, headache, sore throat, blocked or runny nose, loss of appetite, diarrhea, feeling sick or vomiting Do you or your child have symptoms and either:

- Have a high temperature
- Do not feel well enough to go to work, school, childcare, or do your normal activities

YES

NO

YES

NO

Source: https://www.nhs.uk/conditions/covid-19/covid-19-symptoms-and-what-to-do/

Try to stay at home and avoid contact with other people

Most people feel better within a few days or weeks of their first COVID-19 symptoms and make a full recovery within 12 weeks. For some people, it can be a more serious illness and their symptoms can last longer. YOU ARE NO LONGER REQUIRED TO DO A COVID-19 RAPID LATERAL FLOW TEST IF YOU HAVE SYMPTOMS. HOWEVER, PLEASE SEE FOLLOWING ADVICE OPTIONS:

### **GUIDANCE: CONTINUED**

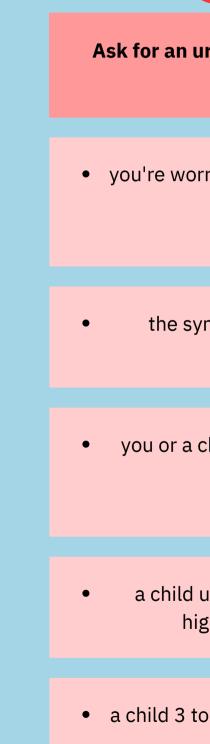
If you are eligible for treatments for COVID-19, you should take a rapid lateral flow test as soon as you get symptoms. Check if you are eligible here.

But if you or your child have tested positive for COVID-19:

 try to stay at home and avoid contact with other people for 3 days after the day the test was taken if you or your child are under 18 years old – children and young people tend to be infectious to other people for less time than adults

• try to stay at home and avoid contact with other people for 5 days after the day you took your test if you are 18 years old or over

• avoid meeting people who are more likely to get seriously ill from viruses, such as people with a weakened immune system, for 10 days after the day you took your test



It's particularly important to get help if you're at increased risk of getting ill from COVID-19, such as if you're pregnant, aged 60 or over, or have a weakened immune system.

### **EMERGENCY ADVICE**

Ask for an urgent GP appointment or get help from NHS 111 if:

• you're worried about your or a child's COVID-19 symptoms or are not sure what to do

the symptoms are getting worse or are not getting better

you or a child have other signs of illness, such as a rash, loss of appetite, or feeling weak

a child under 3 months old and has a temperature of **38C** or higher, or you think they have a high temperature

• a child 3 to 6 months old and has a temperature of **39C** or higher, or you think they have a high temperature

### **ADVICE**



The advice page will contain a mixture of text provided by the local GP surgery and illustrative videos on:

- Good hygiene
- how to wash hands,
- How to wear a mask(PPE).

The videos will be from approved medical sources or new videos will be created using illustration techniques.

Sources left to right: • https://www.youtube.com/watch? v=d3EPLfzNM\_Q • https://www.youtube.com/watch? v=gt65qzpzmQU • https://www.youtube.com/watch?v=u2f-OEMUcTQ

#### **AI ASSISTANT**

An AI Assistant will fulfill several requirements for the app. The textbased app will prompt users to answer questions directing them to the information they require.

### **Customer Service**

- Research has shown users are more likely to use an app with excellent customer service.
- Reduces the need for dedicated customer service and will reduce phone calls to the GP Surgery.
- Can direct users to relevant pages and answer FAQs.

### **Order Supplies**

- Directs users to approved retail partners where they can order supplies such as PPE.
- Users can feel confident that the PPE will be an approved quality due to the recommendation by the GP.

### Book Vaccinations

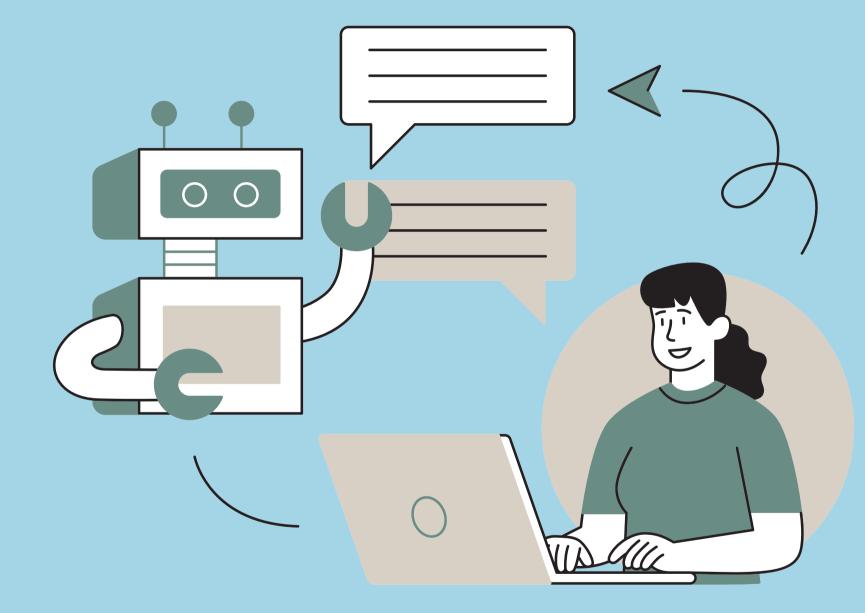
- **+ Tests** Following clicking on the list of initial prompts or requesting information about vaccines.
- Users will be offered a list of vaccination centres in the local area.
- If eligible they will be able to book covid tests.

### **Further Expansion**

 The AI chatbot could be extended to offer limited medical advice and to book appointments with doctors on non-covidrelated issues.

### **RESEARCH ANALYSIS:**

- My research on Artificial Intelligence technology informed my decision to integrate it into the app platform.
  - It will allow the app to provide customer service and can help build a personalised customer experience. (Microsoft, 2024)
  - AI Technology in the medical field is fast expanding and can be utilised to expand the capabilities of the app in the future. (Bulla, et al., 2020)



### **AI ASSISTANT**

### Image Source: Canva

### **MORE ABOUT AI HEALTH** CHATBOTS

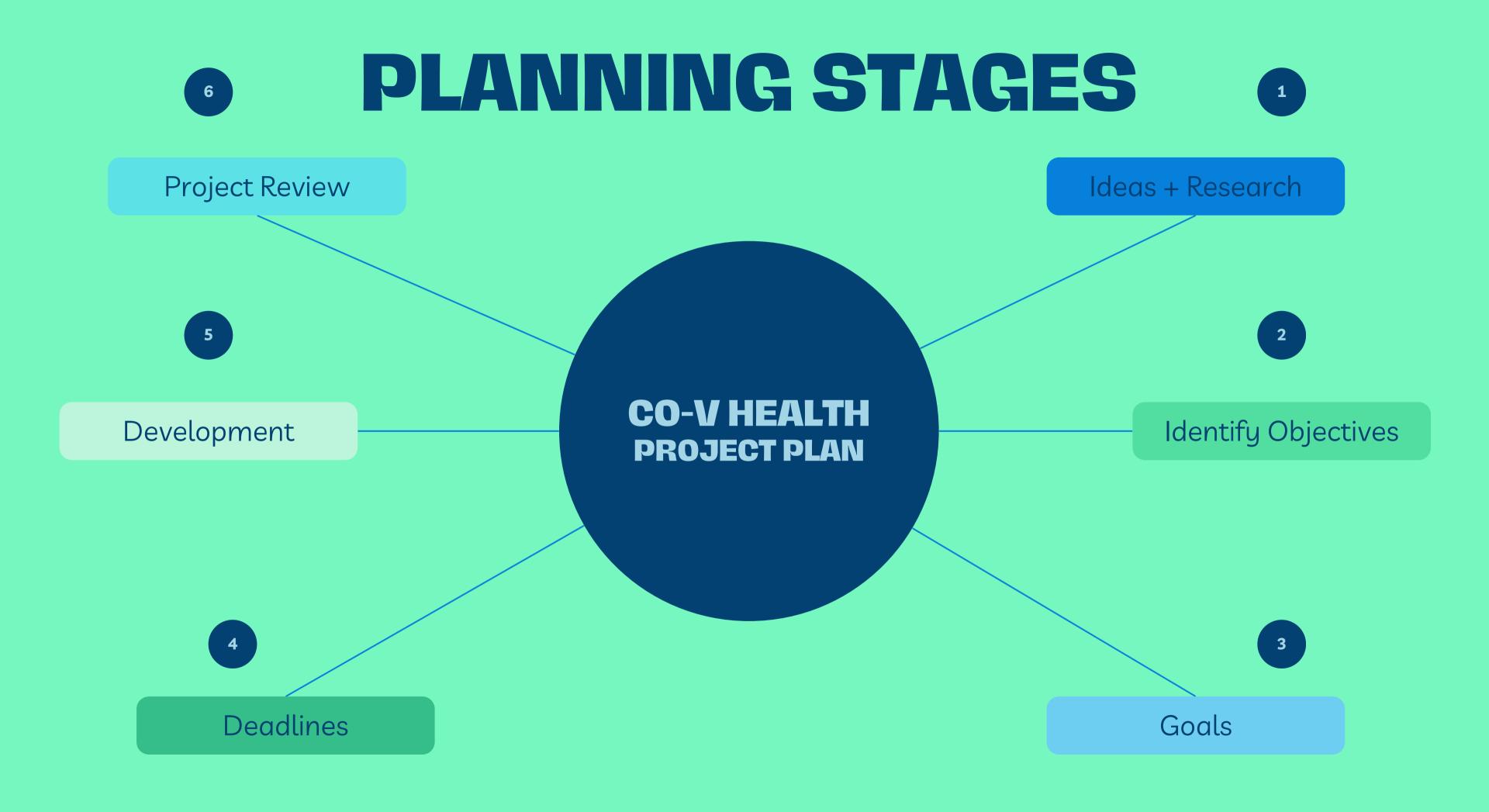


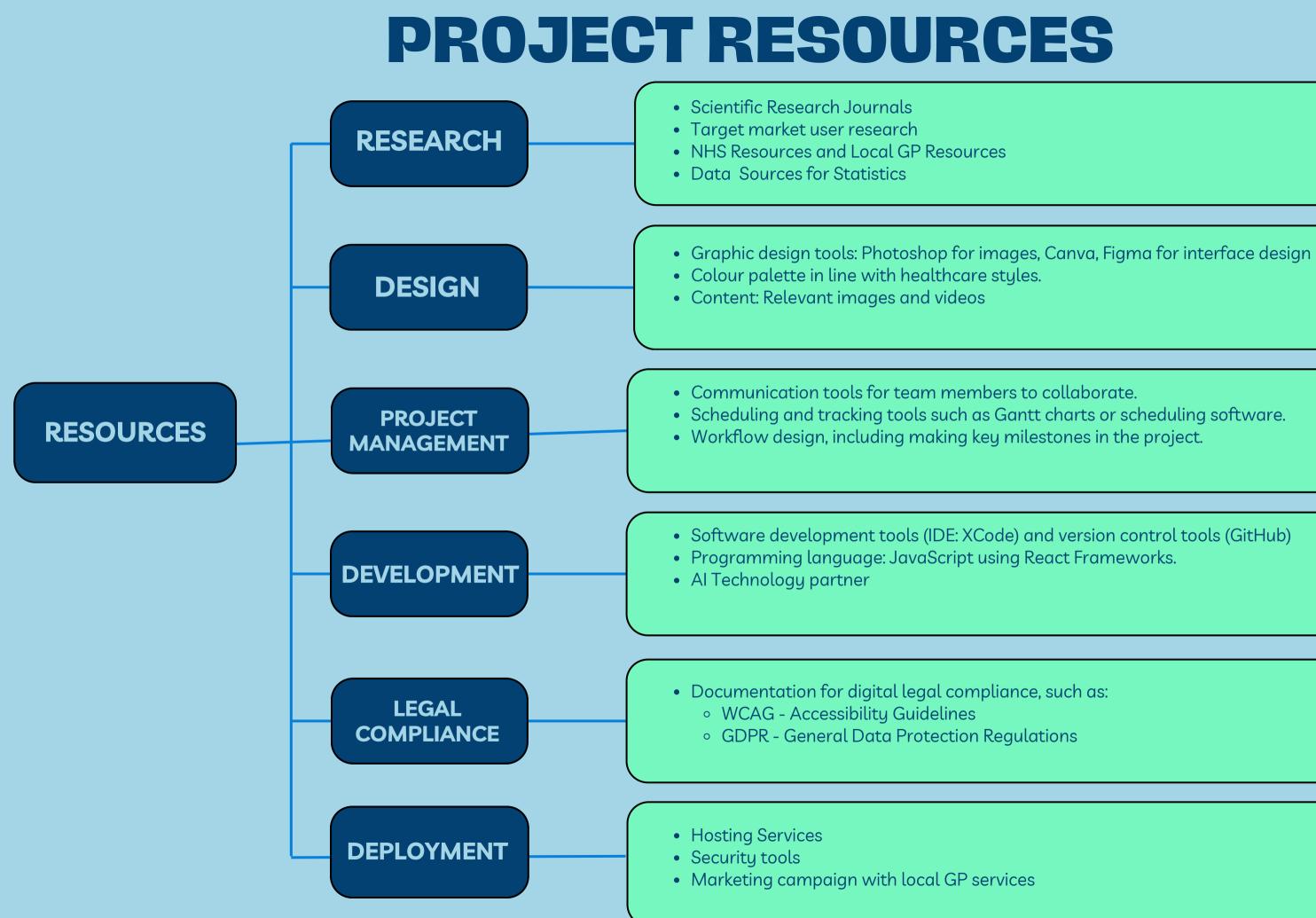


# **COMPLETION TIMELINE**

TASK / PROCESS	Feb 29	Mar <b>1</b>	Mar 2	Mar <b>3</b>	Mar <b>4</b>	Mar 5	Mar 6	Mar <b>7</b>	Mar <b>8</b>	Mar 9
Ideas Phase										
Planning Phase										
Proposal Presentation			)							
Design Phase										
Quality Assurance and Testing										
Deployment and Maintenance										

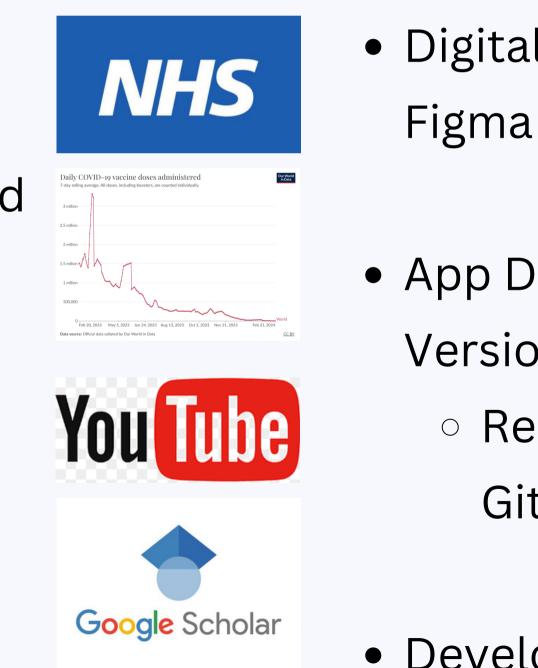






### **PROJECT RESOURCES:** CONTINUED

- This presentation was created in Canva.
- Digital Tools and Research to be used in this project are:
- NHS Guidance Resources
- Open source data: Our World in Data
- YouTube: Guidance videos
- Google Scholar: Scientific Research.





- Digital design software:
- App Development and Version control tools: • React, JavaScript, GitHub
  - **Development IDE:**

