

Captain Gemini - Design Brief & Spec

This is a paper that sets out objective, idea, approach and development to respond to a Capgemini interview task. It was created by Ben Preston on the 20th January 2021.

Objective

Create a functioning app as a pre interview task with Capgemini. It needs to meet the following five objectives:

1. **A call to an API** - as described in the task;
2. **API data used** - to interact with the data;
3. **Demonstrate design and architecture principles** - as described in the task
4. **Use of Firebase** - as it is used extensively by the Applied Innovation Team
5. **Meet some practical need or purpose** - to show real world application and strong design and research principles

Idea

I know from conversations with my in laws that there is a need for an all in one sailing app. At present they use too many apps which can require a lot of data. This is not so much a problem from a cost perspective but they say loading and managing multiple apps can be difficult on islands.

Approach

1. **User Assessment** - speak with current app users and find out what features are missing
2. **Specification** - with key criteria
3. **Design** - hand drawn, ideally with a full wireframe but for this project unlikely to be time
4. **Build**
5. **Test**
6. **User feedback and improvement**

Development

Seven stage development activities as set out above

1. User Assessment

I ran an online focus group to try and understand needs, these were as follows:

1. **Mapping an weather functionality** - *I would like to see an app with map functionality that provides details on storm and wind data, but can also show me where friends ... and people I might want to avoid are!*
2. **Route planning and reviews** - *it can be hard to find good information on sailing routes. It would be great to be able to be able to read other people's experience. It's also fun when we race the ARC (*an open sailing race/floatilla) to know how long other people take. It would be fun to know how well your journey compares to other people.*
3. **Boat Detail** - *it's often hard on the ARC to remember who is on which boat and it can get embarrassing. It would be great to have a list of people on the App ideally with photos.*
4. **Local Tradesman** - *it can be really difficult to get information on reviews of local small traders and even know how to contact them. If there was some sort of review system it could be really helpful.*
5. **Events** - *there's such a strong sailing community it's lovely to all meet up and do things, but sometimes it's hard to find people to suggest things. It would be great to be able to suggest events, like walks, diving trips and so on.*

2. Specification

Based on my initial five objectives, it will meet all five providing I use Firebase and an API.

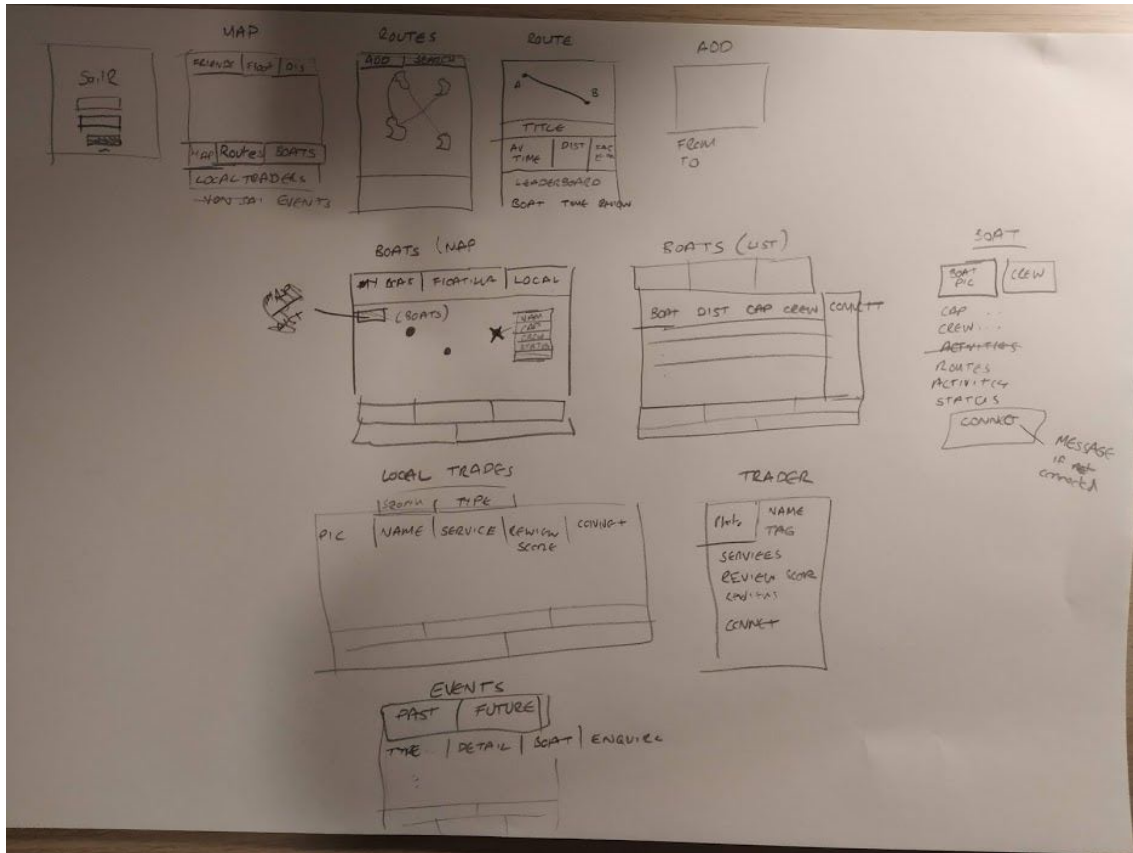
Overall this will mean my project will:

- **Needs to be mobile first** - I will deploy this project on Firebase and do all first designs and build based solely on mobile
- **Use of Firebase** - I create a database that then stores and displays data from Firebase
- **API call** - I will use a NASA API to get storm weather data. This will probably not be a long term solution but will give a first point of user testing. I will also use the Google Maps API to demonstrate this data.
- **Meet all of above five user assessment points** - I will incorporate all five elements from below into my design

3. Design

Visually the first stage of the app would look like the below....

- It would go from the sign up/in page to a map with localised boats
- And then have options for routes, boats, trades and events



4. Build

Work is ongoing at repo

<https://github.com/BenPreston/Captain-Gemini>

It is live on firebase at:

<https://captain-gemini.firebaseio.com/>