BEAMS TEAM

Mozamel Anwary   **z5209948**
Matthew Freeman   **z5209310**
Paul Grace   **z5208656**
Mariya Shmalko   **z5209377**
Annabel Zhou   **z5215485**

Introduction

The manual extraction of data from analytics platforms used for predicting epidemics is a process that can be automated. This requires the development of an API that will query disease reports from ProMed (https://promedmail.org/), one of the largest publicly available websites used by the international infectious disease community for reporting and monitoring emerging diseases.

This report will discuss our project management plan. We will highlight team member task delegation, communication methods, and our choice of software tools used. This report is a working document and will be continuously updated throughout the project.

Management Information

Beams Team Roles and Responsibilities

Mozamel Anwary	**Matthew Freeman**	**Paul Grace**	**Mariya Shmalko**	**Annabel Zhou**
Technical Lead Fullstack Dev API Dev DevOps	API Dev Fullstack Dev Quality Assurance	Backend Dev Quality Assurance	Team Lead Fullstack Dev Quality Assurance	Designer Frontend Dev

A list of available roles:

- Team Lead
- Technical Lead
- API Dev
- Backend Dev
- Frontend Dev
- Fullstack Dev
- DevOps
- Quality Assurance
- Designer

Team Collaboration and Communication

In order to achieve maximum productivity throughout the project the team held weekly meetings, separate to the mentoring session, and opened up a line of communication on Facebook messenger and Discord.

The team had a group chat on Facebook messenger. This served as a platform for the team to lead discussions about the general development of the API and app. A second group was created on Discord for the exchanging of important information such as team member emails and private keys which cannot be uploaded to GitHub for security reasons, making use of Discord's pinning feature. The Discord platform is also where weekly phone calls were held to discuss, in detail, the action points for the next week.

In the lead up to D3 and the final presentation, the team held meetings two or three times a week as well as the mentoring session on Teams. Furthermore, we created a separate Team on Microsoft Teams without our mentor to practice presenting (screen sharing and microphone quality) in the Teams environment.

For deliverables and documents which needed to be collaborated on, a Google Drive was created. The live updating feature that Google provides made working together simultaneously simple.

To track project progress, a Trello board was created. It served to track progress on all documentation and code deliverables. All the source code for our project was stored in a private GitHub repository.
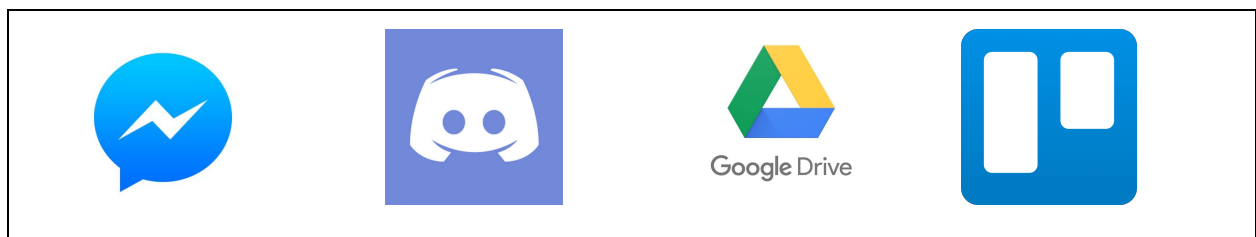
# Example of Trello Board (20/03/2020)
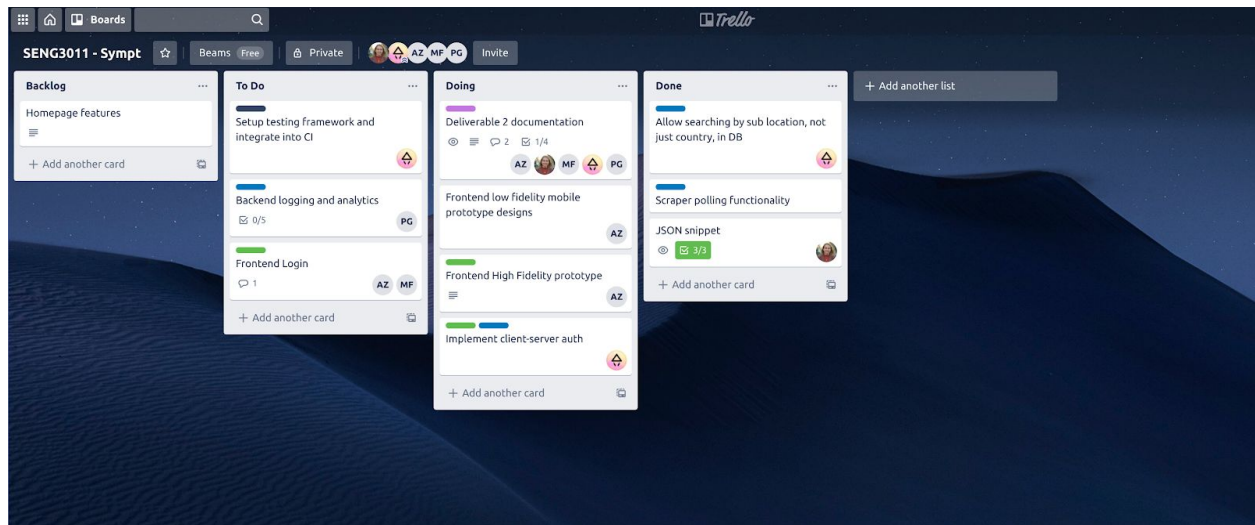
Prototyping

To assist with ensuring that all team members were on the same page when it came to what we were implementing and what we envisioned our app to look like, a Figma prototype was created. This depicted mock-ups of the various screens and the basic workflow of the application. Between each Deliverable and as we received feedback at the different stages of the project, the Figma was updated to reflect changes we wanted to make to our app.
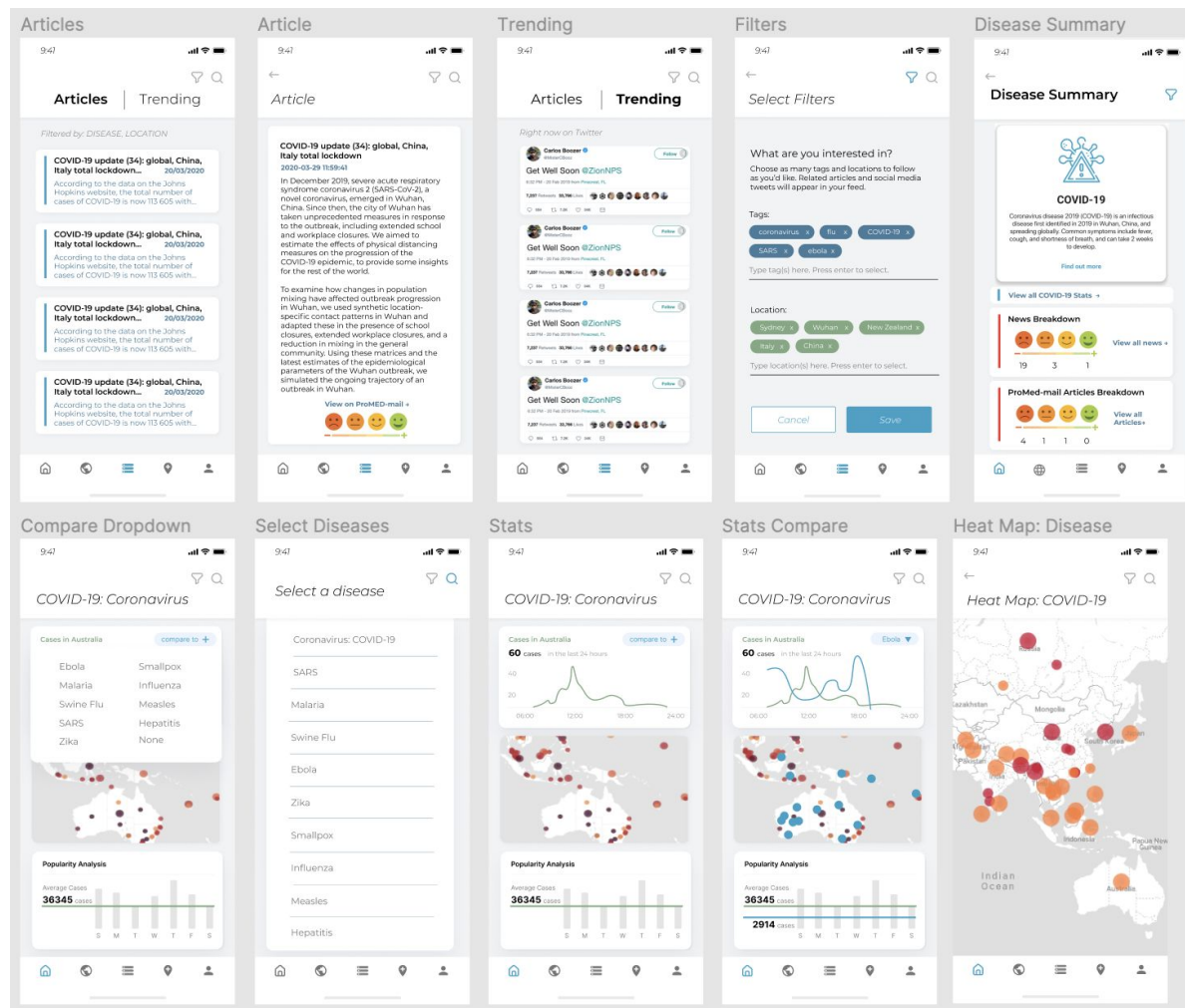
As our app evolved into a more analytics-based focus, we removed various features and adapted old ones in order to make improvements, increase usability and refine our use cases.
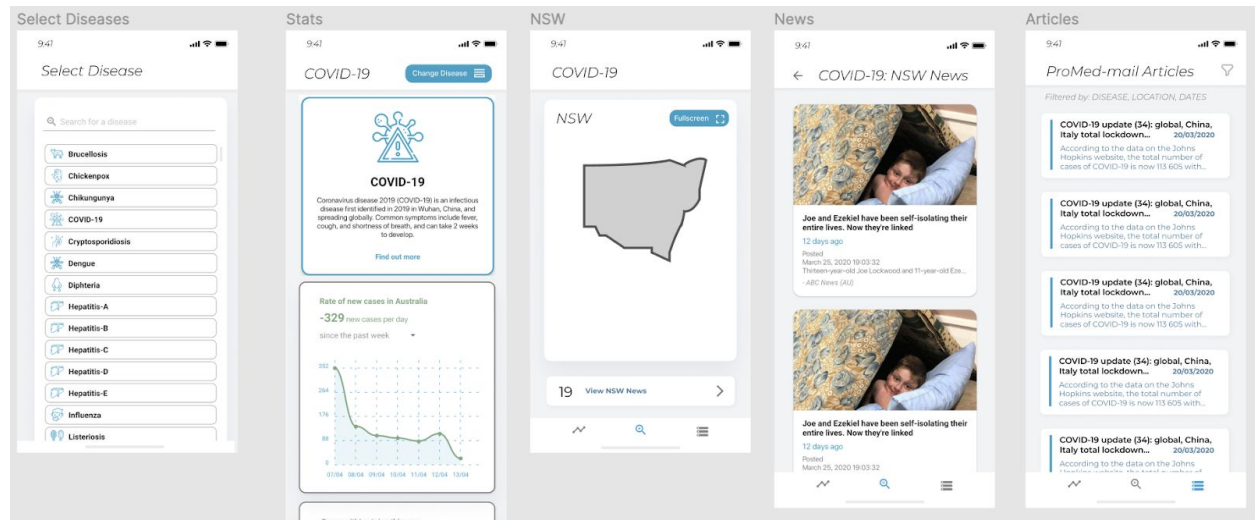
Major Achievements in the Project

Issues Encountered

Issues encountered include the unforeseen move to online classes due to COVID-19. This meant that in person meetings were not an option anymore. This led to online phone calls which were longer in length than an in-person meeting would have been as no one had to be anywhere or had any deadlines. This meant that a meeting that could've been 1 hour sometimes stretched to 1 hour 30 minutes or more.

Another issue encountered was the unforeseen update to Promed-mail. A few days before D2, the Promed-mail website updated their pages to include a 'Cookies used on this site' notification. This update prevented our Puppeteer code from performing the necessary steps to scrape the website. Initially, the team was unaware what the issue was but were able to find a fix and push the updated and working code into production.

Reflection

Upon completion of the project and some reflection, the team is overall satisfied with the product and its value. All team members were proficient in React before the start of this project, making the switch to developing in React Native incredibly easy and smooth. To top it off, there was an incredible abundance of documentation and support online allowing for fast debugging of issues.

The team is happy with the way the project was managed and would not do anything major differently if given a second chance. Obviously, the move to online meetings was not ideal, however the team was still able to function and hold online meetings. In terms of small improvements to project management, shortening the online meetings length and perhaps taking advantage of Trello's alert system would be something to improve on.

The technological stack which was chosen was solid and the large time gaps between deliverables meant that development could proceed throughout the weeks smoothly and without stress before a deadline. All team members worked collaboratively and stayed in contact with each other online during these unprecedented times.

As for skills that the team wishes they had beforehand, as stated before, all members were proficient in React and in general strong programmers. This meant that learning a new technology such as React Native or Typescript was relatively easy. Perhaps, including database management in earlier seng workshops would be beneficial as we had knowledge of database systems but had not implemented one from the ground up nor had much knowledge on what kind of database tools are used in industry.