Management Information

SIXTYHWW SENG3011 Report

Nikil Singh (z5209322)
Joshua Murray (z5207668)
Tim Thacker (z5115699)
Daniel Ferraro (z5204902)

Contents

Contents **2**

Project Plan **3**

Step By Step Plan 3

Work Breakdown Structure 4

Organisation **5**

Team Member Responsibilities 5

Gantt Chart 6

Software Tools Used 7

Appendix **8**

A: GitHub 8

B: Trello 9

C: Google Drive 9

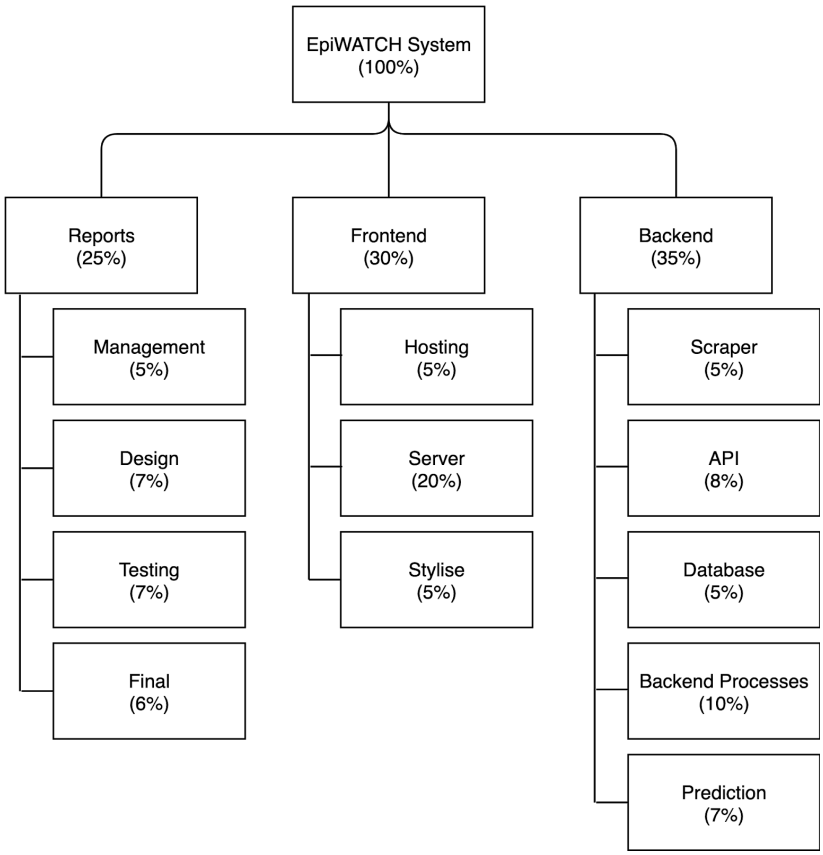
Project Plan

Step By Step Plan

Steps	Status
1. Schedule a group meeting to discuss the specification.	Done
2. Determine software tools and methods of communication between members.	Done
3. Determine data sources and basic technology stack.	Done
4. Allocate tasks to each member, and begin work on reports.	Done
5. Implement a scraper for the allocated data source.	Done
6. Develop a database for storing the data.	Done
7. Work on the report for management.	Done
8. Work on the report for technical specifications.	Done
9. Work on swagger documentation.	Done
10. Work on the report for testing.	Done
11. Perform actual testing.	Done
12. Work on the final report.	Done
13. Develop server and API endpoints.	Done
14. Host the API online.	Done
15. Develop Frontend	Done
16. Develop Login System	Done
17. Ability to follow countries and diseases.	Done
18. Develop custom feed for frontend.	Done

19. Develop a live map of outbreak locations.	Done
20. Develop Prediction API	Done
21. Work on being able to parse data for prediction	Done
22. Work on the actual prediction for a specified country and disease.	Done
23. Stylise the frontend.	Done

Work Breakdown Structure



We believe the actual implementation should account up to 65% of where time is spent for this project. The reasoning behind this is based on previous experience with projects of a similar scale.

Organisation

Team Member Responsibilities

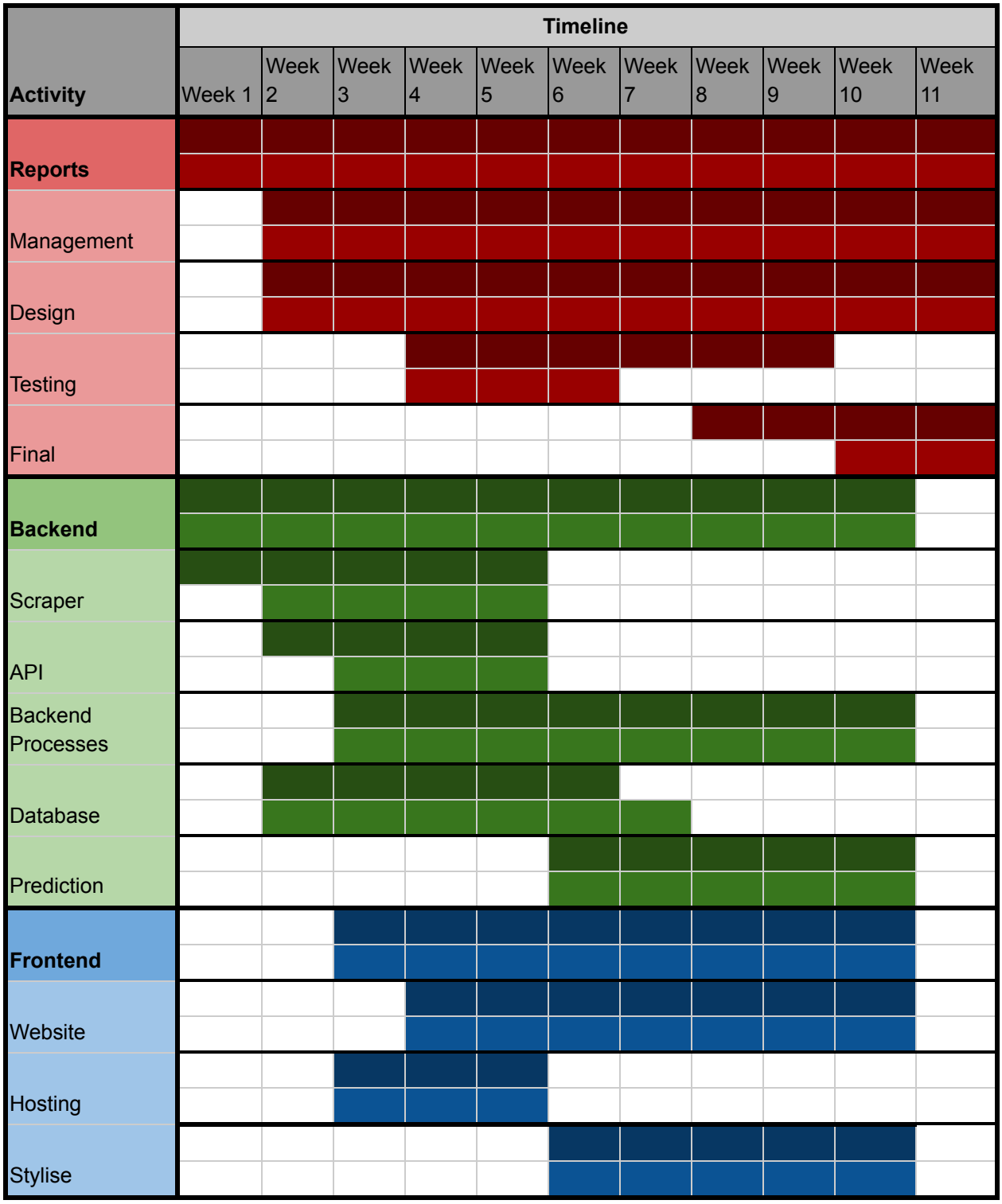
Joshua Murray: Scraper, Swagger, API
The scraper involves parsing web pages and collecting articles from them. Scraper then parses that information into JSON Objects. Implemented the swagger which describes the interactions with the API. Helped Tim with some API implementation with regards to user accounts and feeds.

Nikil Singh: Prediction, Testing
Prediction involves parsing article information for case and death data, then generating a prediction, using regression analysis. Testing involved testing in terms of both black box and white box testing of various components, in particular the API.

Tim Thacker: The API Server, Database
Designing and implementing the database schema for viruses and users.
Writing all the API endpoints and the logic behind them to get the data from the database which is returned.

Daniel Ferraro: Frontend, Deployment
Frontend involves developing the actual website and displaying the required information on it. Deployment involves setting up the API and eventually Website onto a server.

Gantt Chart


Activity
Timeline
Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Reports
Management
Design
Testing
Final
Backend
Scraper
API
Backend Processes
Database
Prediction
Frontend
Website
Hosting
Stylise

Software Tools Used

GitHub: Used to hold a repository of the source code. Acts as a version control for all iterations of the software. Was chosen as all members of the group were familiar with the service and since it is also the industry standard. Furthermore, the version control system and branches allow for multiple iterations of the API.

An example of the use of GitHub can be found in Appendix A.

Link for GitHub: https://github.com/DanielF737/SENG3011_SIXTYHWW

Trello: Used to organise tasks to accomplish. Essentially a ticker system that shows which members of the group are doing what task. Was beneficial in allocating tasks, organising efforts towards the tasks and keeping on schedule for completing the tasks. However, further into the project the use of Trello was dropped as it became more of an inconvenience and everyone had a clear idea of who was doing what.

An example of the use of Trello can be found in Appendix B.

Link for Trello: https://trello.com/b/IWi57Qhi/sixtyhww

Facebook Messenger: Used to communicate amongst members and organise meetings. Additionally, ideas and decisions are made on the platform as the members can quickly respond from anywhere.

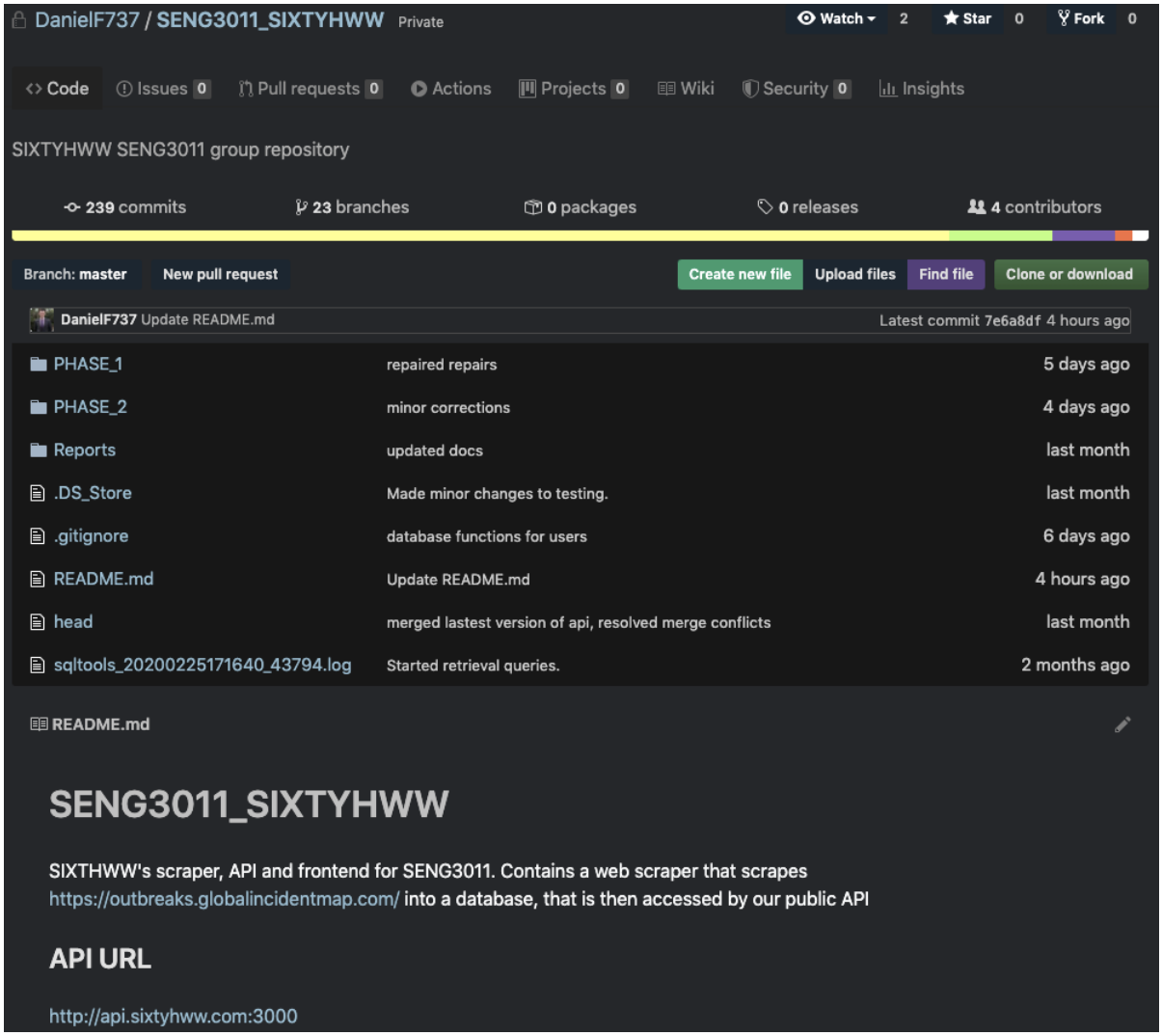
Google Drive: Specifically for Google Docs, it allows for collaborative work on reports as multiple people can simultaneously edit the documents. Furthermore, comments can be made on specific portions of the document where other members can resolve those issues. Additionally, project ideas and concepts can be constructed there. We can also store multiple files within this folder, all of which can be edited by all members simultaneously.

An example of the use of Google Drive can be found in Appendix C.

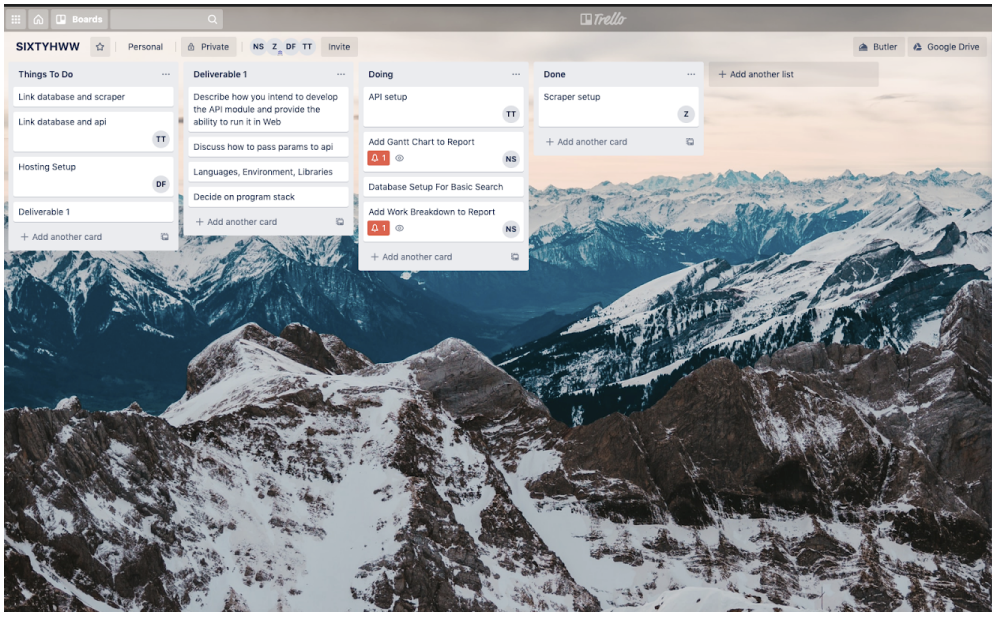
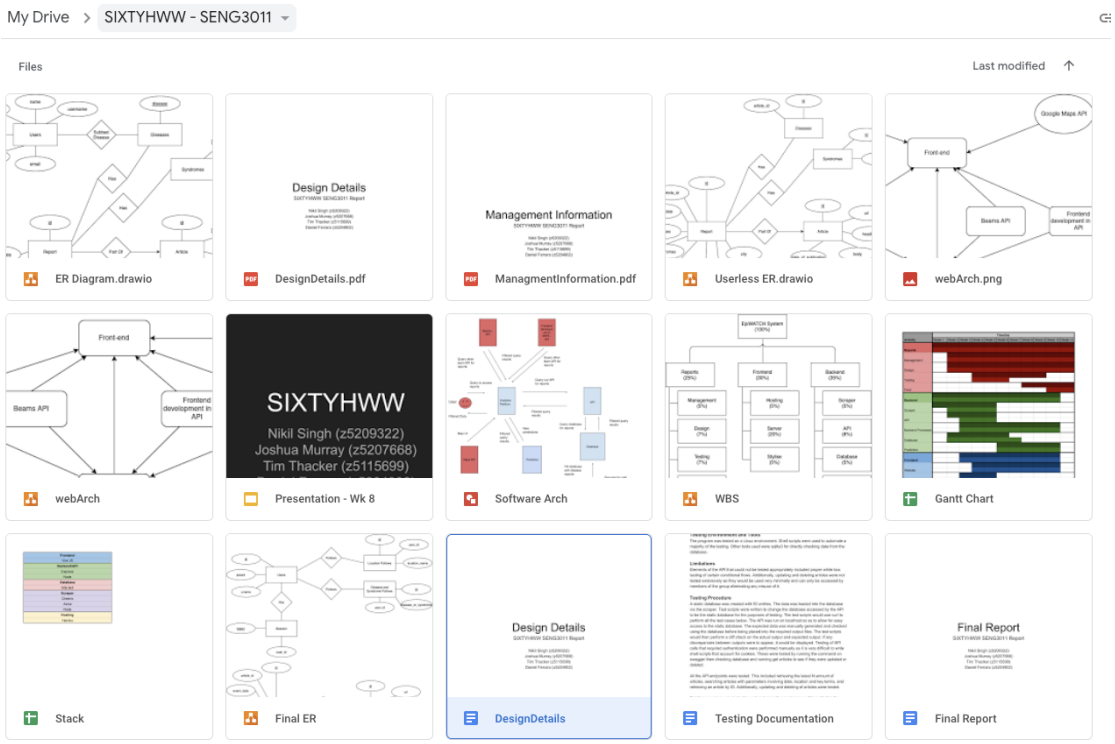
Draw.io: Used to draw diagrams that demonstrate the design and structure of the API. In this case it was used to draw an ER diagram that highlights the database schema. It was also used to draw the Work Breakdown Structure.

Appendix

A: GitHub



B: Trello



C: Google Drive