

# Bi-Weekly Report #1

## What is our project?

This project is concerned about different visual representations of the database system supported by UCLH center. Our team works on two specific methods: Visual Report and Dashboard. Currently, our priority list looks as follows:

1. **UI** (user interface)

*“We are creating different sketches to understand the idea and functionality of the two sub-projects. We are also debating the design patterns and establishing requirements through this process.”*

2. **Visual Report**

*“It is an application that would make data analysis more efficient by having problem-specific tools. It is yet to be researched.”*

3. **Dashboard**

*“This is a website that has a number of sections each retrieving different bits of information. It includes one-way connection to the database system and will visualise the data received.”*

## Progress overview:

Successes:

- Met with client and was given introduction to the project
- Methods of communications established
- Started project research from a technical side as well as project of past students
- Started initial brainstorming and paper prototyping

Problems:

- Deeper understanding of the project required
- Thorough MoSCoW is yet to be created
- More specific roles to be assigned for division of labour efficiency

## Summary of meetings

### Meeting 1: Team meeting (first meet)

Our first meeting took place on the 7th October at Malet Place (4 hours long). Unfortunately, Dr. Ramachandran was unable to give a full overview of the project at this point, as he was called away for work. However, we were able to utilize the time effectively to first cohere as a team, and then complete the preliminary tasks that the client had outlined to us earlier in the week via email. During the session, all team members joined the client's preferred communications platform, Ryver. The team also joined Gitlab so that the client was able to

share with us the work that previous teams had done on the project. We then began the task of completing the mandatory NHS online courses, with regard to the safe handling of sensitive data.

### Meeting 2:

The first face to face meeting with the client took place on the 11th October at 51 Wimpole Street (half an hour long). It was here that we were made more aware of what the PEACH project actually was, whilst Dr. Ramachandran also outlined some of the project's goals and ambitions. The client was able to give a brief overview of what aspect of the project our team would be responsible for. The client demonstrated a working version of the Visual Report application, whilst he also explained how the Dashboard UI is to be incorporated, utilizing data feeds from several different teams, thereby requiring inter-team communication from the start of development. The client also suggested several technologies he felt would be useful to UI development, particularly the Semantic UI framework.

### Meeting 3: Team meeting (project discussion) 11th October

Shortly after our first client meeting, the team met to discuss potential layouts of the dashboard UI. Taking into account the client's preference for a sidebar menu, several prototypes were sketched. There was also further discussion into possible tools and technologies that could possibly be utilized for development. As a result of this discussion, the team found that the D3 JavaScript library looked a promising avenue to explore, given the project's data heavy nature. Whilst Adobe Muse cc was brought up as a way to drastically reduce time spent building UI interfaces.

## Tasks Completed & Schedule

One of the first tasks we have completed after meeting the team is establishing reliable methods of communication both within our team as well as with the client. We have created a shared Google Drive folder to store, share and edit written content; a Whatsapp group for general communications between group members; Gitlab for code sharing and Ryver for contacting our client.

During the first meeting with our client, we have grasped a general understanding of the project at hand, primarily a front end UI that comprises of the other seven Peach sub-projects. We have also gained access to previous works done on UI and other various sections to not only aid our project technically but also reinforce our understanding of the core ideas behind the project.

After gaining some knowledge of the project, we have started brainstorming and paper prototyping ideas, *see Appendix*. We have had some insightful discussions on the layout, functionalities and preliminary use cases for the web UI that we would be ultimately designing. However, due to still being at an early stage of development, we have left many things open to change and concluded that many design properties would require further research and interaction with our client.

Finally, we have started researching some of the technologies that we may be using by going through official documentation, real life examples and exercises. These include, D3.js, Javascript, HTML, SQL and React. Additionally, we have prepared some of the tools we may use throughout the project: mySQL for managing databases, Webstorm for general creation tuning, Adobe Photoshop for layout mockups and possibly Adobe Muse for easy integration of aesthetic designs. Lastly, we are exploring Microsoft Azure.

## Plan of action

Our next steps are divided into two main sections: research and design. These two sections are co-dependent and thus our schedule should reflect a interweaving blend between the two. Research is divided among the coding side and the medical side. We will be focusing on the coding side which will comprise of researching relevant coding languages, frameworks, Peach design guidelines and other materials. We have also been given access to projects of past students. These need to be studied in detail to better understand the project, its current flaws and how improvements can be made. On the other hand, some understanding of the medical practises will help us with communicating with our client as well as developing a more user friendly system. This also means that the project becomes more of a conscious decision rather than simple rule-following.

On the design front, our priority is to meet up with our client and discuss the requirements. This would enable us to assign roles and evenly manage the workload. These will be included in the next report. We will also need to discuss with our client in more detail regarding the visual design elements and layouts. This would allow us to develop more in depth prototypes which would ultimately allow us to work from and build a functioning UI from.

## Independent Work

Since, we are at an infancy stage of the project, we have mainly worked together on establishing communications, finding out each other's' strengths and weaknesses, meeting our client. We have started to independently research about the technologies we are going to be using. As we feel each of us should have at least a general understanding of these technologies, thus we have not divided these up, but rather everyone will research relevant areas of interest.

### Connor Daly

My independent work involved primarily reading through the previous iterations of the project that was shared with us by the client. I also began reading about D3 JS and will begin to learn it over the next two weeks.

## Daniil Gannota

My personal research is about tools and libraries we may use in the project. For instance, our client gave a recommendation for the use of React library and D3.js as well as certain website generators. As part of our efficiency, I am gathering as much understanding about the variety of approaches we are about to use. I am also learning Javascript and Adobe software.

## Hai Xia

My independent research involves going through D3.js documentation and examples. I have also looked into how to combine Adobe Muse and Photoshop to easily create visually appealing web pages which could contribute later in the project with the webpage design.

# Appendix

