COMP0016, 2020-2021 - Team 06

Dashboard for Visualising Infusion Pump Data

Client: Gemma Renshaw, GOSH

Sheena Visram

**Daulet Batayev (daulet.batayev.19@ucl.ac.uk)**

Henry Ching (henry.ching.19@ucl.ac.uk)

Tianang Chen (tianang.chen.19@ucl.ac.uk)

Abstract

- User friendly, data-rich **progressive web application** (PWA) for clinicians and patients to monitor and **visualise the infusion pump feed data**. Ability to create tailored treatment plans for patients. Reliable storage and access to the treatment history of patients.

- System architecture diagram:
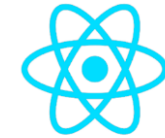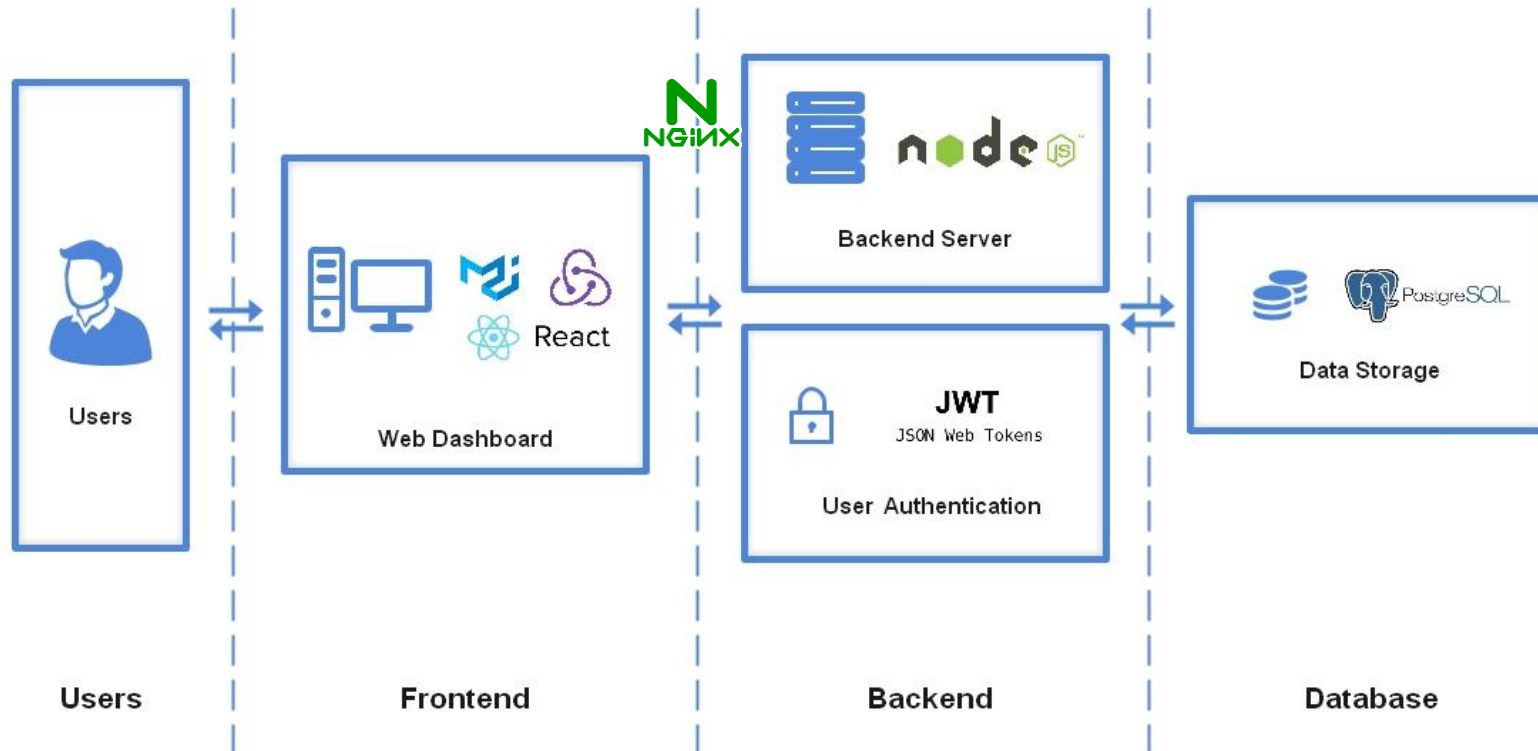
MoSCoW Achievements List

ID	Description	Priority	State	Contributors
1	Monitor and reliably read live data from infusion pump.	Must	✔	Daulet
2	Dashboard for visualising the patient infusion pump data over time.	Must	✔	Daulet
3	Types of graphs to choose from on the dashboard, i.e., rate over time, volume over time, etc.	Must	✔	Daulet
4	Target feed and actual feed comparison on the graph.	Must	✔	Daulet
5	Secure and reliable authorisation system.	Must	✔	Daulet
6	Patient information page.	Must	✔	Daulet
7	Make changes to the patient's treatment plan (Clinician Only).	Must	✔	Daulet

MoSCoW Achievements List

ID	Description	Priority	State	Contributors
8	Assign the supervised patients to the dashboard (Clinician Only).	Should	✔	Daulet
9	Different visualising methods to choose from.	Should	✔	Daulet
10	Hover on the point of the graph to see the percentage difference of received and target feed.	Should	✔	Daulet
11	Filter the data by day, by month, by year and by specific date range.	Should	✔	Daulet
12	Patients reporting the reasons for large gaps between target and actual feed (Such as "Exercised between 1pm and 2pm", "Low appetite because of XYZ").	Could	✔	Daulet
13	Clinicians update the records of the patients, example: If a patient did handle Treatment X too well, we can add it to their info page/ database,so that if the clinicians change, they have some information to work with.	Could	✔	Daulet

MoSCoW Achievements List

ID	Description	Priority	State	Contributors
14	Registration Page - unauthorised people wouldn't be able to register and use the app.	Won't		
15	Show other patients' information to patients.	Won't		
16	Change your own treatment plan as a patient.	Won't		
		Key Funtionalities:	100%	
		Optional Funtionalities:	100%	

*MoSCoW list has been modified time to time upon the agreement with the clients.

Individual Contribution

Part of Project	Daulet Batayev	Henry Ching	Tianang Chen
Client Liaison	33%	33%	33%
Requirement Analysis	33%	33%	33%
Research	33%	33%	33%
UI Design	50%	25%	25%
Prototyping	33%	33%	33%
Programming	100%	0%	0%
Documentation	33%	33%	33%
Presentation	33%	33%	33%
Blog	40%	40%	20%
Testing	80%	20%	0%
Legal Essay & Poster Design	0%	0%	100%
Project Website	33%	33%	33%
Video Editing	100%	0%	0%
Overall Contribution	60%	20%	20%
Main Roles	Full-stack Developer, Database Manager, SRE&DevOps, UI/UX, Tester	Tester, Portfolio and Dev Blog Manager	UI/UX, Portfolio Manager, Report Editor

- Application URL: https://dauletbatayev.com/
  - Admin Credentials (for registering new users)
    - **Email**: admin@admin.com **Password**: goshcomp0016team62021

  - Clinician Credentials
    - **Email #1**: an.zhao@gmail.com **Password #1**: anzhaotest
    - **Email #2**: sheena.visram@gmail.com **Password #2**: sheenavisramtest

  - Some Patient Credentials:
    - **Email #1**: james.smith@gmail.com **Password #1**: jamessmithtest
    - **Email #2**: jon.j@gmail.com **Password #2**: jonjonestest

- GitHub repository: https://github.com/COMP0016-Team6/NHS-Patient-Dashboard/
- Project website: https://comp0016-team6.github.io/
- Development blog: https://comp0016-team6.github.io/Dev-Blog/