universidade
de aveiro

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A multi-tenant system to manage EEG

MID-TERM PRESENTATION

Projeto em Informática
2021/2022

João Reis, 98474
João Farias, 98679
Mariana Rosa, 98390
Ricardo Rodriguez, 98388

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WHAT HAVE WE BEEN WORKING ON

Calendar

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Name	Date	Module	Type	Attribution	Checkbox
Definir estrutura da BD (protótipo)	March 23, 2022	Database	Task	João Farias, João Reis, Ricardo Rodriguez	☑
Arquitetura final	March 29, 2022	Backend	Task	Ricardo Rodriguez, João Farias	☑
Protótipo de Frontend	March 29, 2022	Frontend	Task	Mariana Rosa	☑
Definir a Base de dados (final)	April 1, 2022	Database	Task	João Farias, João Reis, Ricardo Rodriguez	☑
Milestone 1	April 5, 2022		Milestones		☑
Conversão de ficheiros (adiado)	April 20, 2022	Backend	Task	João Reis, Ricardo Rodriguez	☐
Criação da API	April 21, 2022	Backend	Task	João Reis, Ricardo Rodriguez, Mariana Ros	☑
Implementar o protótipo de frontend	April 22, 2022	Frontend	Task	João Farias, Mariana Rosa	☐
Milestone 2	April 24, 2022		Milestones		☐
Compressão dos ficheiros (opcional)	May 15, 2022	Backend	Task		☐
Criar ficheiros Docker	May 17, 2022	Deployment	Task	Ricardo Rodriguez	☐
Dar deploy da API	June 1, 2022	Deployment	Task	Mariana Rosa	☐
Dar deploy do website em si	June 6, 2022	Deployment	Task	Mariana Rosa	☐
Milestone 3	June 9, 2022		Milestones		☐
Melhorar o frontend de acordo com o fe	June 18, 2022	Frontend	Task	João Farias, Mariana Rosa	☐
Testes de high-order	June 20, 2022	Testing	Task	João Reis, Mariana Rosa	☐
Testes de integração	June 20, 2022	Testing	Task	João Farias, Ricardo Rodriguez	☐
Testes unitários	June 20, 2022	Testing	Task	João Reis, Mariana Rosa	☐

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Tasks Progression

Tasks

- API Creation [100%]
- Implementation frontend prototype [40%]
- File Conversion [postponed]
- Connect frontend with the API [100%]

New tasks

- Explore the best way to plot EDF files [90%]

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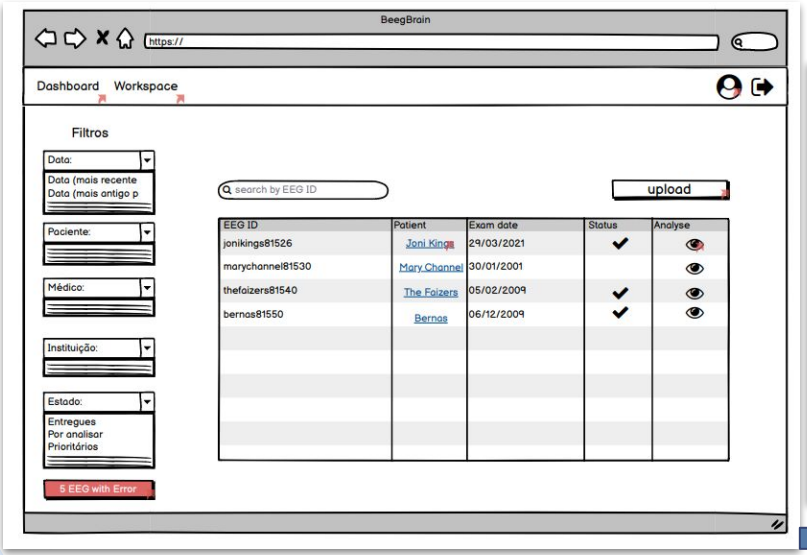
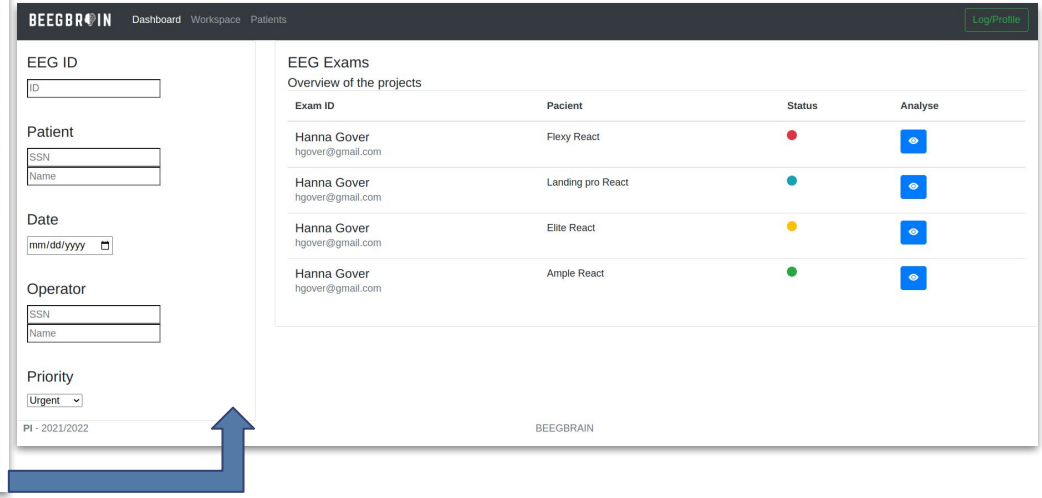
First stage prototype frontend implementation





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CHANGES IN THE INITIAL PLAN

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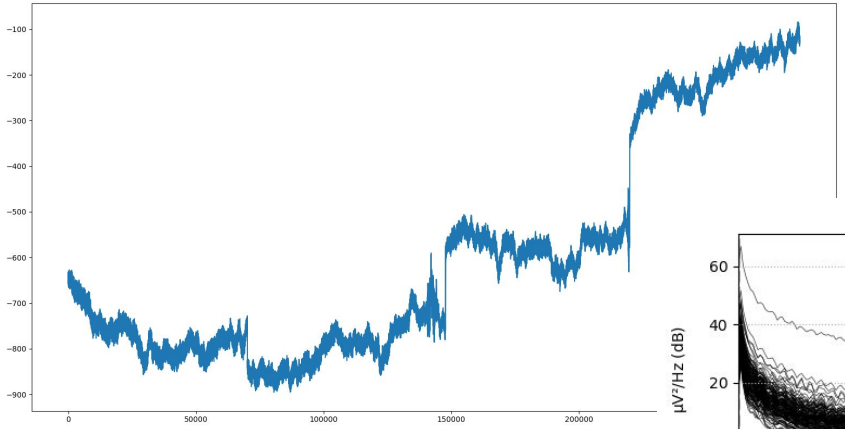
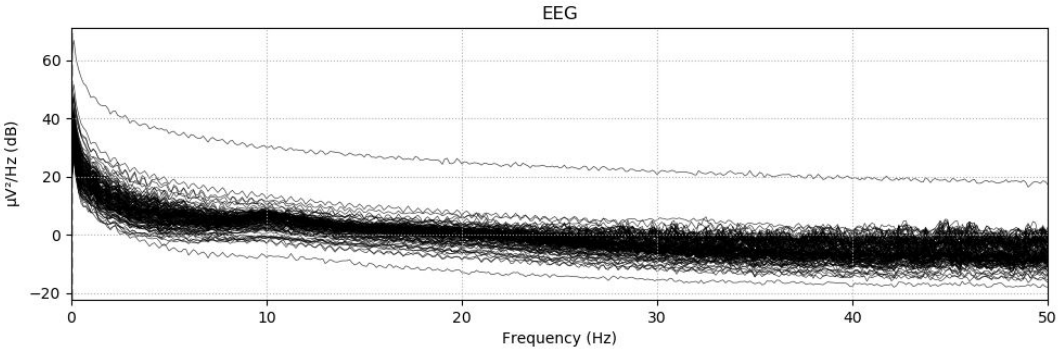
1) Explore the best way to plot EDF files





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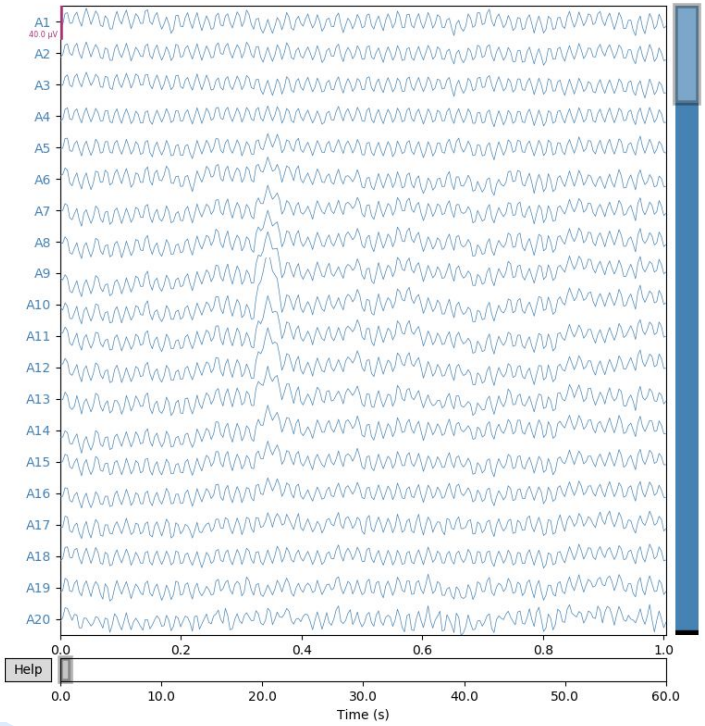
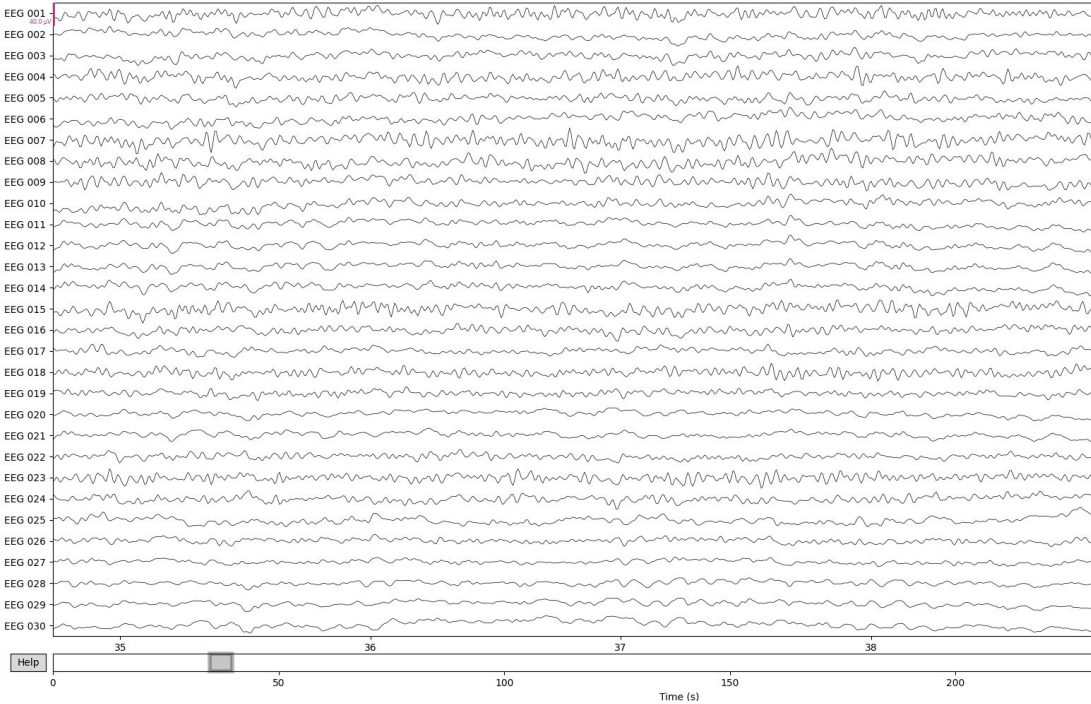
1) Explore the best way to plot EDF files





2) Changes in application

- Splitting EEG by channels → therefore there will not be overload of information;

- EGG will be send slowly according to the period of time selected, streaming data block by block.

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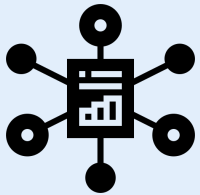
DIFFICULTIES

Our Difficulties



1. Learning Angular and Django frameworks

2. Understanding EEG and plot libraries

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OUR FEARS

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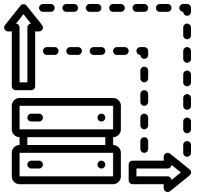
Our Fears

1. Difficult to convert some file formats



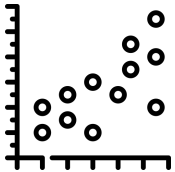
2. Scalability

3. Plot performance

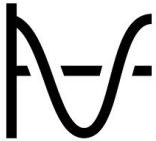
FUTURE WORK

Future Work

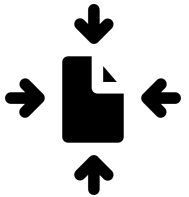
1. Improving Frontend and Backend modules



2. Plot signals in Frontend



3. Stream data to plot



4. EEG compression

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Thank you!

To get more info, check out our website
https://beegbrain.netlify.app/