NHS PlayGround

Team 12
Members: Wei Tan, Haixiang Sun, Zixuan Wang

Client: Joseph Connor, NHSD

ABSTRACT

- **Project Type:** Web App
- **Abstract Description**:
  The aim of the project is to provide a secure and comprehensive web platform for NHS to post challenges (with its accompanying data) which are solvable by AI. The developers can work on the challenges on the platform itself and thereafter submit their solutions which will be ranked according to its accuracy.
- **Main Technologies:** Django, JupyterHub, Kubernetes

ACHIEVEMENTS

ID	Requirements	Priority	State	Contributors
1	Log-in feature which acts as a layer of security as only people with account can access site and thus data)	Must	✓	Wei
2	Setting up of different user types (clinician and developer)	Must	✓	Wei
3	Differing interfaces and functionalities for developers and clinicians (e.g. create challenge vs create solution respectively)	Must	✓	Wei
4	Set up JupyterHub Server	Must	✓	Zixuan
5	Integrate JupyterHub to the site to provide onsite coding environment with unseen dataset	Must	X	
6	Ability to upload/download CSV files (results and dataset)	Must	✓	Haixiang
7	Challenge page consisting of different challenges and their description	Must	✓	Haixiang
8	Individual challenge page (description, evaluation, data) and ability to join challenge (i.e. challenge appears on profile and triggers ability to submit solution)	Must	✓	Zixuan
9	Solutions page	Must	✓	Zixuan

ACHIEVEMENTS (2)

10	Individual solution page (description, code and results in CSV format)	Must	✓	Haixiang
11	Personalised profile page (listing solutions submitted, challenges followed and contact details)	Must	✓	Wei
12	Deploy on Azure and provide cloud computing services	Must	✓	Zixuan
13	Ability to restrict download of data for more sensitive information (clinician)	Should	X	
14	Hosting of datasets that are not part of any challenges (i.e. a dataset page)	Should	X	
15	A 'Learn' web page with structured tutorials on data science and machine learning	Should	✓	Haixiang
16	A forum page for developers and clinicians to discuss issues	Could	X	
17	Ability to restrict access to solutions (private vs public setting as developers may not want to share their solution)	Could	X	
Key Functionalities (must have and should have)		**80%** completed		
Optional Functionalities (could have)		**0%** completed		

CONTRIBUTION

Work packages	**Wei Tan**	**Haixiang Sun**	**Zixuan Wang**
Client liaison	33%	33%	33%
Requirement analysis	33%	33%	33%
Research	33%	33%	33%
Programming	33%	33%	33%
Bi-weekly Report	35%	35%	30%
Website Editing	30%	30%	40%
Overall contribution	**33%**	**33%**	**33%**
Roles	**Back End Developer, Report Editor**	**Front End Developer, Back End Developer**	**Front End Developer, Researcher**