

User stories

Sprint 1 user stories

ID	User Story	Tasks	Story Points
1	As a user, I want to store the data in a database so that I don't need to store the data in the laggy Excel spreadsheet.	<ul style="list-style-type: none">Install, configure and deploy MySQL database instance on cloud AAKO8220-2 - Authenticate to see issue detailsConvert data format and serialization on local end AAKO8220-39 - Authenticate to see issue detailsOn the local end, generate https requests for adding new data to the backend and prompts when receiving response AAKO8220-40 - Authenticate to see issue detailsInserting new data into the database from the backend AAKO8220-41 - Authenticate to see issue details	11.5
2	As a user, I want to have a relational database so that querying data can be more structured and efficient.	<ul style="list-style-type: none">Data modeling for the subset 3DCRT of the dataset AAKO8220-19 - Authenticate to see issue detailsData Normalization of subset 3DCRT of the dataset AAKO8220-20 - Authenticate to see issue detailsDesign database schema and tables for the subset 3DCRT of the dataset AAKO8220-21 - Authenticate to see issue details	4
3	As a user, I want remote access to the database so that I can access data anywhere within the organisation.	<ul style="list-style-type: none">Parse requests on the backend and generate the corresponding response AAKO8220-42 - Authenticate to see issue details	0.5
4	As a user, I want to generate benchmarking graphs automatically so that I can be free from the complicated excel graph generation.	<ul style="list-style-type: none">Generate requests for graphics with specified parameters to the backend AAKO8220-43 - Authenticate to see issue detailsPlot benchmarking graphics with the specified parameters with the python library <i>matplotlib</i>. This includes multiple type of graphs. AAKO8220-44 - Authenticate to see issue details	5
5	As a user, I want to retain the ability of manual input the data into the database so that I can have quality control over the data.	<ul style="list-style-type: none">Create entry for manual data input and parsing AAKO8220-45 - Authenticate to see issue details	0.5
6	As a user, I want to export the graphs generated so that I can attach them to the audit reports.	<ul style="list-style-type: none">Export graphics in specified path AAKO8220-46 - Authenticate to see issue details	0.5

Sprint 2 user stories

ID	User Story	Tasks	Story Points
1	As a user, I want to have a relational database so that querying data can be more structured and efficient.	<ul style="list-style-type: none">Investigate the data pipeline of the subset IMRT of the dataset AAKO8220-25 - Authenticate to see issue detailsData modelling for the subset IMRT of the dataset AAKO8220-34 - Authenticate to see issue details	15

2	As a user, I want remote access to the database so that I can access data anywhere within the organisation.	<ul style="list-style-type: none"> Create data model on backend AAKO8220-55 - Authenticate to see issue details Service interface for plotting graph and save graph informations AAKO8220-56 - Authenticate to see issue details Service interface for accepting result data splitting and storing them in corresponding database tables AAKO8220-57 - Authenticate to see issue details Service interface for modifying IMRT data AAKO8220-59 - Authenticate to see issue details Service interface for deleting IMRT data AAKO8220-58 - Authenticate to see issue details 	35
3	As a user, I want to generate benchmarking graphs automatically so that I can be free from the complicated excel graph generation.	<ul style="list-style-type: none"> Code for IMRT plots AAKO8220-26 - Authenticate to see issue details Decide input arguments for IMRT plot and package IMRT plotting code into a separate class AAKO8220-27 - Authenticate to see issue details 	15
4	As a user, I want to retain the ability of manual input the data into the database so that I can have quality control over the data.	<ul style="list-style-type: none"> Local program functions for IMRT result functions AAKO8220-36 - Authenticate to see issue details Local program functions for IMRT graph functions AAKO8220-37 - Authenticate to see issue details 	10
5	As a user, I want to deploy the service with docker so that I can deploy it with less effort.	<ul style="list-style-type: none"> Investigate docker AAKO8220-23 - Authenticate to see issue details Dockerise Django Rest Framework backend AAKO8220-28 - Authenticate to see issue details Dockerise MySQL database AAKO8220-29 - Authenticate to see issue details 	25
6	As a user, I want to have a reliable service so that I do not need to worry about service unavailability and data loss.	<ul style="list-style-type: none"> Unit tests for 3DCRT result requests AAKO8220-30 - Authenticate to see issue details Unit tests for 3DCRT graph requests AAKO8220-31 - Authenticate to see issue details Unit tests for IMRT result requests AAKO8220-32 - Authenticate to see issue details Unit tests for IMRT graph requests AAKO8220-33 - Authenticate to see issue details 	20
7	As a user, I want to have a document so that I can have instructions to follow.	<ul style="list-style-type: none"> Write local program document AAKO8220-48 - Authenticate to see issue details Write backend document AAKO8220-49 - Authenticate to see issue details Write database document AAKO8220-50 - Authenticate to see issue details Write deployment document AAKO8220-51 - Authenticate to see issue details 	40