Initial Project Planning Template

Date	15 March 2024
Team ID	738193
Project Name	Hospital Readmission Prediction Using Machine Learning
Maximum Marks	4 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create a product backlog and sprint schedule

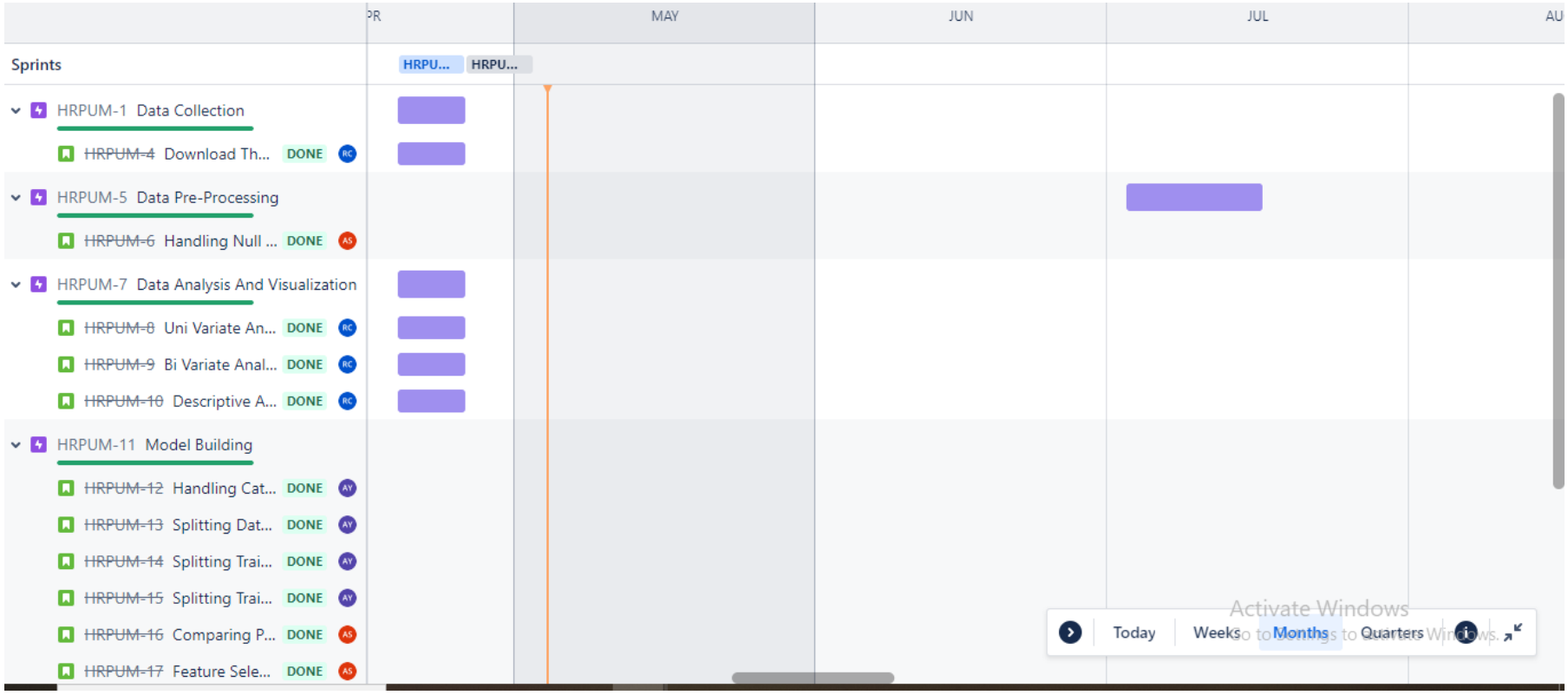
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members	Sprint Start Date	Sprint End Date (Planned)
Data Collection	Download The Dataset	USN-1	As a user, I've download the dataset as the from the given link.	1	Low	Roshan Chauhan	19-04-2024	19-04-2024
Data Pre-Processing	Handling Null Values And Removing Unnecessary Columns	USN-2	As a user, I received the data set after will clean our data for better accuracy and good prediction, so will remove all null values and Unnecessary Columns.	2	High	Sayyed Asjad	20-04-2024	22-07-2024
Data Analysis And Visualization	Uni Variate Analysis	USN-3	Univariate analysis helps us understand each piece of information in the dataset on its own, before we start trying to put all the pieces together to see the bigger picture.	1	Low	Roshan Chauhan	23-04-2024	24-04-2024
Data	Bi Variate	USN-4	Bivariate analysis helps us see how two different factors might be linked in our	1	Low	Roshan	23-04-2024	24-04-2024

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members	Sprint Start Date	Sprint End Date (Planned)
Analysis And Visualization	Analysis		dataset. It's like connecting the dots between two pieces of information to understand how they influence each other in the hospital readmission scenario.			Chauhan		
Data Analysis And Visualization	Descriptive Analysis	USN-5	With this describe function we can understand the unique, top, and frequent values of categorical features. Also, we can find mean, std, min, max and percentile values of numerical features.	2	Medium	Roshan Chauhan	25-04-2024	25-04-2024
Model Building	Handling Categorical Values	USN-6	As we can see our dataset has categorical data. Before training our model, we must convert the categorical data into a numeric form. We will be encoding some features manually and some others using OnehotEncoding()	2	High	Abhishek	26-04-2024	26-04-2024
Model Building	Splitting Data Into Train And Test Sets	USN-7	For splitting the data into train and test sets, we are using the train_test_split() function from sklearn. As parameters, we are passing X, y,stratify, test_size, random_state.	2	High	Abhishek	26-04-2024	26-04-2024

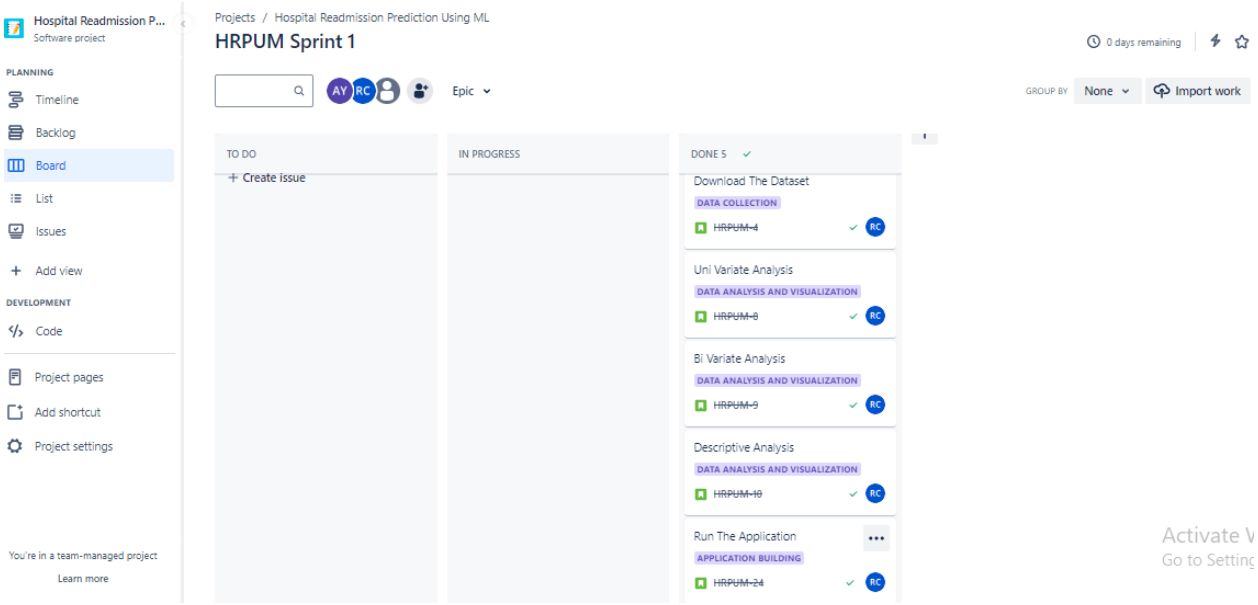
Model Building	Splitting Train Data Into Train And Validation Sets	USN-8	As a user, I've spitted the data into train and test for the further implementation.	2	High	Abhishek	26-04-2024	26-04-2024
Model Building	Comparing Performance Of Various Models	USN-9	We will be considering multiple models to train our data and choose the one that performs the best. So, we need to import the necessary libraries and create a dictionary of our models. From the results, it is clear that XGboost Classifier provides the best accuracy.	2	High	Sayyed Asjad	26-04-2024	26-04-2024
Model Building	Feature Selection	USN-10	We have trained our model with 32 features. Those features may not be important for prediction we have already removed.	2	High	Sayyed Asjad	26-04-2024	26-04-2024
Model Building	Repeat Process From Dividing Data Into Train And Test Sets	USN-11	After Dividing Data Into Train And Test Sets we have apply some different feature to find better accuracy for good prediction.	2	Low	Sayyed Asjad	27-04-2024	27-04-2024
Sprint	**Functional Requirement (Epic)**	**User Story Number**	**User Story / Task**	**Story Points**	**Priority**	**Team Members**	**Sprint Start Date**	**Sprint End Date (Planned)**
Model Building	Evaluating Final Model Performance	USN-12	As per different features will compare all and select those who have provide the better accuracy compare to all.	2	High	Abhishek	27-04-2024	27-04-2024

Model Building	Splitting Train Data Into Train And Validation Sets	USN-8	As a user, I've spitted the data into train and test for the further implementation.	2	High	Abhishek	26-04-2024	26-04-2024
Model Building	Saving The Final Model	USN-13	he final step is saving our model. We can do it by using pickle.dump().	2	High	Sayyed Asjad	28-04-2024	30-04-2024
Application Building	Building Html Pages	USN-14	We have crate html file on spyder and we have save the file as index.html	2	High	Sayyed Asjad	28-04-2024	30-04-2024
Application Building	Build Python Code	USN-15	As user, we have crate the joblib and pickle file and also importing some necessary libraries to build the file and we save the file as app.py	2	High	Abhishek	28-04-2024	30-04-2024
Application Building	Run The Application	USN-16	As user, we have Open anaconda prompt from the start menu and Click on the proceed button, enter the inputs, click on the predict button, and see the result/prediction on the web. localhost: 5000 will redirect us to the below home page:	2	High	Roshan Chauhan	30-04-2024	30-04-2024

Jira Timeline:



Jira Board:


Hospital Readmission P...
Software project
PLANNING
Timeline
Backlog
Board
List
Issues
Add view
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Projects / Hospital Readmission Prediction Using ML
HRPUM Sprint 1
0 days remaining
Epic
GROUP BY
None
Import work
TO DO
IN PROGRESS
DONE 5
Create issue
Download The Dataset
DATA COLLECTION
HRPUM-4
Uni Variate Analysis
DATA ANALYSIS AND VISUALIZATION
HRPUM-8
Bi Variate Analysis
DATA ANALYSIS AND VISUALIZATION
HRPUM-9
Descriptive Analysis
DATA ANALYSIS AND VISUALIZATION
HRPUM-10
Run The Application
APPLICATION BUILDING
HRPUM-24
Activate V
Go to Setting