

Project Design Phase-III
Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	15 November 2023
Team ID	591761
Project Name	Predicting Mental Health Illness of Working Professionals Using Machine Learning
Maximum Marks	8 Marks

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

Sprint	Functional Requirement	User Story Number	User story/Talk	Story Point	Priority	Team Member
Sprint-1	Project setup & Infrastructure	USN-1	Create a version-controlled repository on Git and set up a basic development environment	1	High	Pavani
Sprint-1	Development Environment	USN-2	Set up the development environment with the required tools and frameworks to start the prediction of mental illness in working professional project.	2	High	Sindhu
Sprint-2	Data Collection	USN-3	Gather a diverse dataset containing different types of mental illnesses for training the deep learning model.	2	High	Pavani
Sprint-2	Data Preprocessing	USN-4	Preprocess the collected dataset by data cleaning, handling imbalances and splitting it into training and validation sets.	4	High	Sindhu
Sprint-3	Model Development	USN-5	Explore and evaluate different deep learning architectures (e.g CNNs) to select the most suitable model for mental illness prediction.	4	High	Vishnu
Sprint-3	Training	USN-6	train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set.	4	Medium	Pavan
Sprint-4	Model Deployment & Integration	USN-7	Deploy the trained deep learning model as a web service	1	Medium	Vishnu
Sprint-5	Testing & Quality Assurance	USN-8	Fine-tune the model hyperparameters and optimize its performance	2	Medium	Pavan

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

Sprint	Total Story Point	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint - 1	3	3 days	25 oct 2023	27 oct 2023	20	27 oct 2023
Sprint - 2	6	8 days	28 oct 2023	4 nov 2023		
Sprint - 3	8	4 days	5 nov 2023	8 nov 2023		
Sprint - 4	1	7 days	9 nov 2023	15 nov 2023		
Sprint - 5	2	6 days	16 nov 2023	21 nov 2023		

Velocity:

Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{velocity}}{\text{sprint duration}}$$

$$AV = 20/28 = 0.714$$

Burndown Chart:

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>
<https://www.atlassian.com/agile/tutorials/burndown-charts>

Reference:

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

Backlog

Epic ▾

Epic

Issues without epic

> Model building

+ Create epic

▼ Sprint 4 9 Nov – 15 Nov (1 issue)

Model deployment and integration

SCRUM-9 Deploying the model online by integrating it in website

TO DO ▾

+ Create issue

▼ Sprint 5 16 Nov – 21 Nov (2 issues)

Testing and quality assurance

SCRUM-1 Testing accuracy

TO DO ▾

SCRUM-8 Implementing methods to increase quality of the model

TO DO ▾

+ Create issue

1 issue | Estimate: 0

Quickstart

All sprints

Sprint ▾

0 days remaining Complete sprint

GROUP BY None

TO DO

IN PROGRESS 3

DONE ✓

Testing accuracy

SCRUM-1

Implementing methods to increase quality of the model

SCRUM-8

Deploying the model online by integrating it in website

SCRUM-9

