Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	26 october 2023
Team ID	Team - 592309
Projecct Name	Project – Predicting Mental Health Illness Of Working Professionals Using Machine Learning
MAximum marks	8 Marks

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

Item ID	User Story / Task Description	Priority	Acceptance Criteria
PB-01	Data Collection Setup	high	- Gather data from surveys and wearables
PB-02	Feature Engineering	high	- Select relevant features from data
PB-03	Data Preprocessing	high	- Handle missing data, normalize features
PB-04	Model Development	high	- Develop machine learning models
PB-05	Model Evaluation	high	- Metrics: Accuracy, Precision, Recall
PB-06	Cross-Validation Implementation	medium	- Implement k-fold cross-validation
PB-07	Hyperparameter Tuning	medium	- Optimize model parameters
PB-08	Real-time Data Streaming Setup	high	- Set up data streaming for real-time data
PB-09	Natural Language Processing (NLP)	medium	- Analyze text data using NLP techniques
PB-10	User Interface Development	high	- Create web UI for users to interact
PB-11	Privacy and Security Measures	high	- Implement data encryption and access controls
PB-12	Feedback Mechanism	nedium	- Allow users to provide feedback on predictions
PB-13	Support Resources Integration	medium	- Integrateealth support resources
PB-14	Compliance with Regulations	high	- Ensure legal and ethical compliance
PB-15	Cloud Deployment	medium	- Deploy application on the cloud platform
PB-16	User Training Materials	low	- Provide training resources for professionals
PB-17	Emergency Response Protocol	high	- Establish a protocol for emergency situations

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint Number	Sprint Duration	Sprint Goal
1	2 weeks	Data Collection and Feature Engineering
2	2 weeks	Model Development and Evaluation
3	2 weeks	Real-time Data Streaming and NLP Integration
4	2 weeks	User Interface and Feedback Mechanism
5	2 weeks	Privacy Measures and Compliance

User Story ID	User Story Description	Story Points	Velocity	
US-01	As a data scientist, I want to collect data from various sources to build predictive models.		5	0.33
US-02	As a user, I want the system to provide accurate mental health predictions based on collected data.		8	0.45
US-03	As a developer, I want to implement real-time data streaming for instant updates.		5	0.33
US-04	As a user, I want a user-friendly web interface to access my mental health predictions.		8	0.45
US-05	As a compliance officer, I want the system to adhere to all relevant data protection regulations.		5	0.33

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per
iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$