

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

Date	1 December 2023
Team ID	591674
Project Name	<b>Predicting Mental Health Illness Of Working Professionals Using Machine Learning</b>
Maximum Marks	8 Marks

## LITERATURE SURVEY

### Objectives:

- Analyze existing research on mental illness prediction using machine learning.
- Identify relevant features and machine learning techniques used for prediction.
- Assess the accuracy and limitations of existing solutions. Scope:
  - Research papers published in the last 5 years focusing on predicting mental health in working professionals using machine learning.
  - Focus on features derived from online activity, self-reported information, and wearable data.
  - Include studies utilizing various machine learning algorithms and architectures.

### Methodology:

1. Conduct a comprehensive literature search using academic databases (e.g., PubMed, Google Scholar) with relevant keywords.
2. Screen and select relevant research papers based on inclusion/exclusion criteria.
3. Analyze the selected papers to extract key information, including:

- Data sources and features used
- Machine learning algorithms employed
- Prediction accuracy and performance metrics
- Limitations and challenges identified

4. Synthesize the findings and identify common trends, gaps, and opportunities in existing research. Expected Outcomes:

- A comprehensive understanding of existing research on mental illness prediction using machine learning.
- Identification of promising features and machine learning techniques for predicting mental health risk in working professionals.
- Critical insights into the strengths, weaknesses, and limitations of current approaches.

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

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	2
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	2
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	2
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	2
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	2
	Dashboard					

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		

**Velocity:**

**Eg:** Imagine the team's velocity is 20 points per sprint (story points per day)

$$AV = \frac{\textit{Sprint Duration}}{\textit{Velocity}} = \frac{6 \textit{ Days}}{20 \textit{ points}}$$

**Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. Unfortunately, specific values for work completed are not available for Sprints 2, 3, and 4, so the chart cannot be generated at this point.

Note: In practice, team members and their availability would need to be considered for more accurate estimations and planning. This table assumes a simple case with predefined story points and priorities and a team of 2 members.