**PROJECT PLANNING PHASE**

**PROJECT PLANNING TEMPLATE (PRODUCT BACKLOG, SPRINT PLANNING, STORIES, STORY POINTS)**

| | |
|---|---|
| Date | 21 October 2022 |
| Team ID | PNT2022TMID15455 |
| Project Name | Early Detection of Chronic Kidney Disease Using Machine Learning |
| Maximum Marks | 8 Marks |

**PRODUCT BACKLOG, SPRINT SCHEDULE, AND ESTIMATION (4 MARKS)**

| Sprint | Functional Requirement (Epic) | User Story Number | User Story/Task | Story Points | Priority | Team Members |
|---|---|---|---|---|---|---|
| Sprint-1 | Data Collection | USN-1 | Collect the suitable dataset for predicting the chronic kidney disease. | 10 | High | Kaviya.N |
| Sprint-1 | Data Pre-Processing | USN-2 | Datasets are transformed into useful format. | 7 | Medium | Kaviya.N |
| Sprint-2 | Model Building | USN-3 | Calculate the Index values | 10 | High | Abirami.V |
| Sprint-2 | | USN-4 | Splitting the Model into Training and Testing from the overall dataset. | 7 | Medium | Abirami.V |
| Sprint-3 | Training and Testing | USN-5 | Train the Model using Regression algorithm and testing the performance of the model. | 10 | High | Bhava Dharani.G |
| Sprint-3 | Application Building | USN-6 | Build the HTML and python code | 7 | Medium | Bhava Dharani.G |
| Sprint-4 | | USN-7 | Run Flask App | 10 | High | Pradeep.M.M |
| Sprint-4 | Implementation of the Application | USN-8 | Deploy the model on IBM cloud. | 7 | Medium | Pradeep.M.M |

**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 | 10 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 8 | 29 Oct 2022 |
| Sprint-2 | 10 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 7 | 05 Nov 2022 |
| Sprint-3 | 10 | 6 Days | 06 Oct 2022 | 12 Nov 2022 | 8 | 12 Nov 2022 |
| Sprint-4 | 10 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 7 | 19 Nov 2022 |

**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.

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = 6/10=0.6$$