# **Project Planning Phase**

Date	22 October 2022
Team ID	PNT2022TMID13778
Project Name	Project – 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	Dataset	USN-1	Downloading the dataset	10	High	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-1		USN-1	Visualizing the dataset	4	Low	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-1		USN-1	Pre-process the dataset	6	Medium	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-2	User Interface	USN-2	Random Forest Regressor model building, Linear Regressor model building	10	High	Abitha R Agalya M Gugapriya M Harshithaa A S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2		USN-2	Model Integration with flask	5	High	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-2		USN-2	Build HTML Pages	5	Medium	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-3	Required inputs from User	USN-3	Dashboard accessibility	7	High	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-3		USN-3	Select the causes of chronic kidney disease	3	Low	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-3		USN-3	Required required attributes for prediction of chronic kidney disease	10	High	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-4	Deploy the website	USN-4	Register on IBM Cloud	2	Low	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-4		USN-4	Train the ML model on IBM Cloud	8	Medium	Abitha R Agalya M Gugapriya M Harshithaa A S
Sprint-4		USN-4	Deploy the website on IBM Cloud	10	High	Abitha R Agalya M Gugapriya M Harshithaa A S

# 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	25 Oct 2022	30 Oct 2022	20	30 Oct 2022
Sprint-2	13	6 Days	01 Nov 2022	06 Nov 2022	20	06 Nov 2022
Sprint-3	11	6 Days	08 Nov 2022	13 Nov 2022	20	13 Nov 2022
Sprint-4	11	6 Days	15 Nov 2022	19 Nov 2022	20	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)

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

### **VELOCITY OF THE PROJECT – CHRONIC KIDNEY DISEASE PREDICTION**

Sprint-1 = 20/5 = 4

Sprint-2 = 20/6 = 3.3

Sprint-3 = 20/5 = 4

Sprint-4 = 20/4 = 5

Total Velocity = 16.3/4 = 4.07

### **Burndown Chart:**

A burn down 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.

	OCT NOV						NOV											NOV										
	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CKDP-1 Download dataset																												
CKDP-2 Visualize dataset																												
CKDP-3 Pre-process the dataset																												
CKDP-4 Random forest regressor model building																												
CKDP-5 Linear regressor model building																												
CKDP-6 Model integration - Flask																												
CKDP-7 Build HTML pages																												
CKDP-8 Dashboard Accessibility																												
CKDP-9 Select the cause of chronic kidney disease																												
CKDP-10 Required attributes for prediction of chroni																												
CKDP-11 Register on IBM cloud																												
CKDP-12 Train the ML model on IBM cloud																												
CKDP-13 Deploy the website on IBM cloud																												