Project Planning Phase

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

Date	9th November 2023
Team ID	592903
Project Name	Detecting COVID-19 from chest Xrays
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	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the COVID-19 detection.	3	High	Aryan, Sathwik
Sprint 1	Data collection	USN-2	Gather a diverse dataset of images containing different types of X-ray images of lungs(COVID-19 positive, COVID-19 negative, pneumonia etc,.)	3	High	Adarsha, Mansoor
Sprint 2	Data preprocessing	USN-3	Preprocess the collected dataset by resizing images, normalizing pixel values, and splitting it into training and validation sets.	2	High	Adarsha, Mansoor
Sprint 2	Model Selection	USN-4	Explore and evaluate different deep learning architectures to select the most suitable model to detect COVID-19 from Xrays images.	3	High	Aryan, Sathwik
Sprint 3	Model Development	USN-5	Train the selected deep learning model(CNN) using the preprocessed dataset and monitor its performance on the validation set.	4	High	Adarsha, Aryan

Sprint 3	Training	USN-6	Implement data augmentation techniques(e.g., rotation, flipping) to improve the model's robustness and accuracy.	3	High	Mansoor, Sathwik
Sprint 4	Model deployment & Integration	USN-7	Integrate the model's API into a user-friendly web interface for users to upload images and receive classification results.	3	Medium	Aryan, Mansoor
Sprint 5	Testing & quality assurance	USN-8	Conduct thorough testing of the model and web-interface to identify and report any issues or bugs. finetune the model hyperparameters and optimize its performance based on userfeedback and testing results	3	Medium	Sathwik, Adarsha
Sprint 6	Re-designing the web-interface	USN-9	Re-designing the web application to download the result in different formats for easy sharing	2	Low	Adarsha, Aryan, Mansoor, Sathwik
Sprint 6	Re-deploying the model	USN-10	Re-deploying the new web interface and testing it with different scenarios	1	Low	Adarsha, Aryan, Mansoor, Sathwik

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	6	2 Days	24th Oct 2023	25th Oct 2023	6	25th Oct 2023
Sprint 2	5	3 Days	26th Oct 2023	28th Oct 2023	5	28th Oct 2023
Sprint 3	7	13 Days	29th Oct 2023	10th Nov 2023	7	10th Nov 2023
Sprint 4	3	5 Days	8th Nov 2023	12th Nov 2023	3	12th Nov 2023
Sprint 5	3	2 Days	13th Nov 2023	14th Nov 2023	3	14th Nov 2023
Sprint 6	3	5 Days	15th Nov 2023	19th Nov 2023	3	19th Nov 2023

Velocity

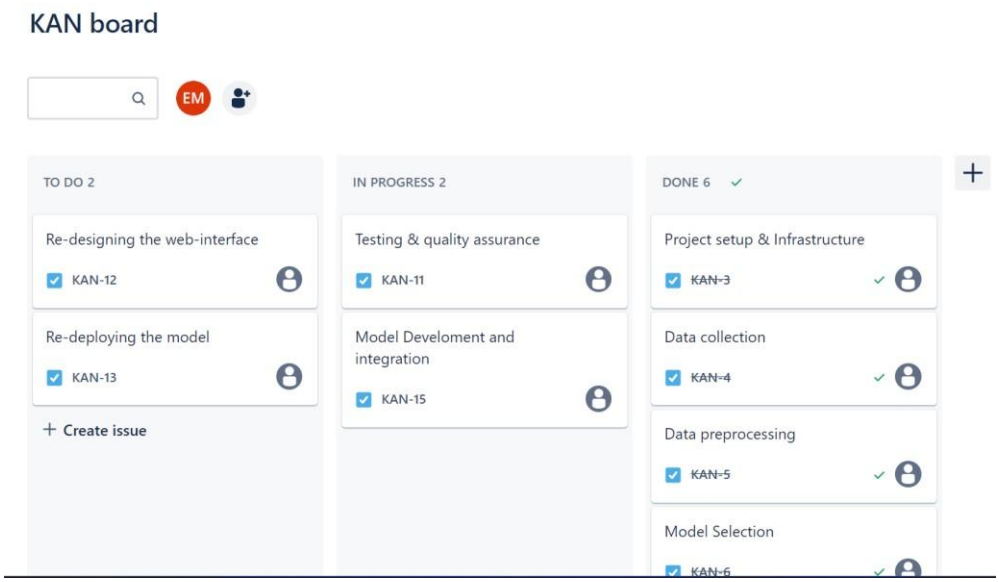
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) periteration unit (story points per day).

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

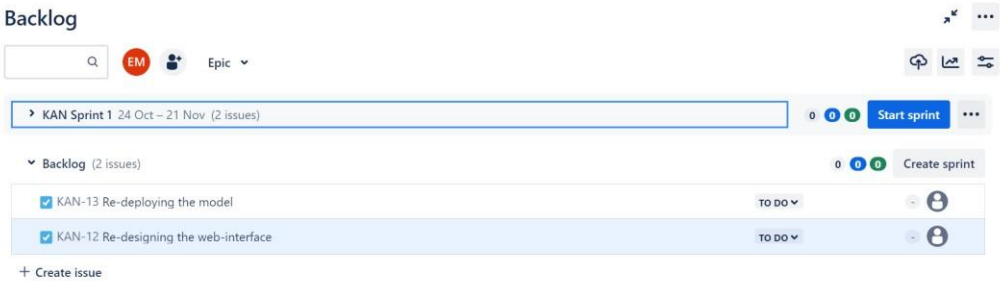
$$= \frac{27}{27}$$

$$= 1$$

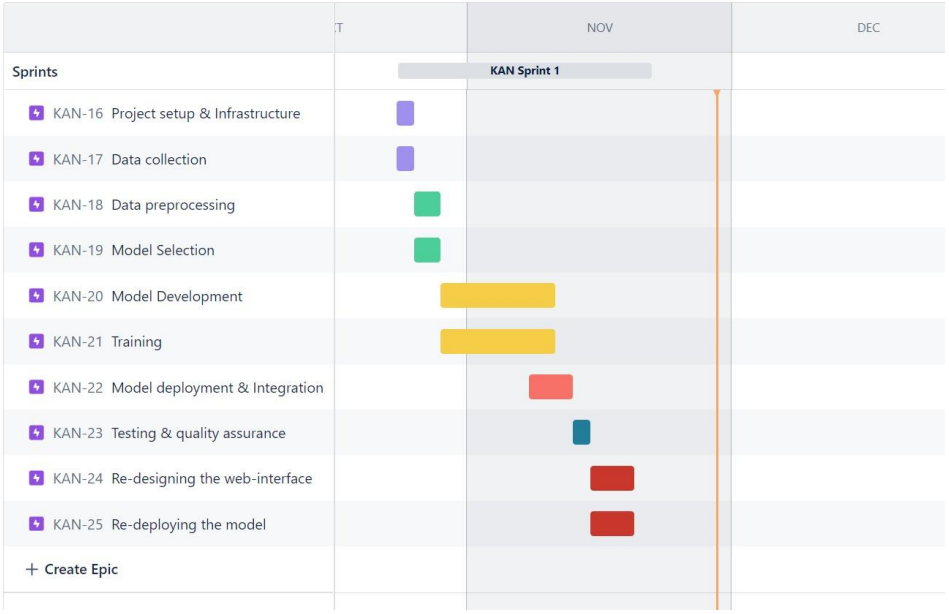
Board



Backlogs



TimeLine


NOV
DEC
Sprints
KAN Sprint 1
KAN-16 Project setup & Infrastructure
KAN-17 Data collection
KAN-18 Data preprocessing
KAN-19 Model Selection
KAN-20 Model Development
KAN-21 Training
KAN-22 Model deployment & Integration
KAN-23 Testing & quality assurance
KAN-24 Re-designing the web-interface
KAN-25 Re-deploying the model
Create Epic