

Project Planning Phase

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

Date	18 October 2022
Team ID	EXT2023TMID592333
Project Name	Microbe Mapper: Visual Recognition Of Micro-Organisms
Maximum Marks	8 Marks

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	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the microbe classification	1	High	
Sprint-1	development environment	USN-2	Gather a diverse dataset of images containing different types of microbes	2	High	
Sprint-2	Data collection	USN-3	Preprocess the collected dataset by resizing images, normalizing pixel values, and splitting it into training and validation sets.	2	High	
Sprint-2	data preprocessing	USN-4	Explore and evaluate different deep learning architectures (e.g., CNNs) to select the most suitable model for microbe classification.	3	High	
Sprint-3	model development	USN-5	train the selected deep learning model using the preprocessed	4	High	

			dataset and monitor its performance on the validation set.			
Sprint-3	Training	USN-6	implement data augmentation techniques like resizing to improve the model's robustness and accuracy.	6	medium	
Sprint-4	model deployment & Integration	USN-7	deploy the trained deep learning model as a web service to make it accessible for microbe classification for users to upload images and get results	1	medium	
Sprint-5	Testing & quality assurance	USN-8	conduct thorough testing of the model and web interface to identify and report any issues or bugs. fine-tune the model hyperparameters and optimize its performance based on user feedback and testing results.	1	medium	

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	3	3 Days	24 Oct 2022	29 Oct 2022	20	20 Nov 2023
Sprint-2	5	5 Days	31 Oct 2022	05 Nov 2022		
Sprint-3	10	7 Days	07 Nov 2022	12 Nov 2022		
Sprint-4	1	7 Days	14 Nov 2022	19 Nov 2022		
Sprint-5	1	7 Days	19 Nov 2023	20 Nov 2023		

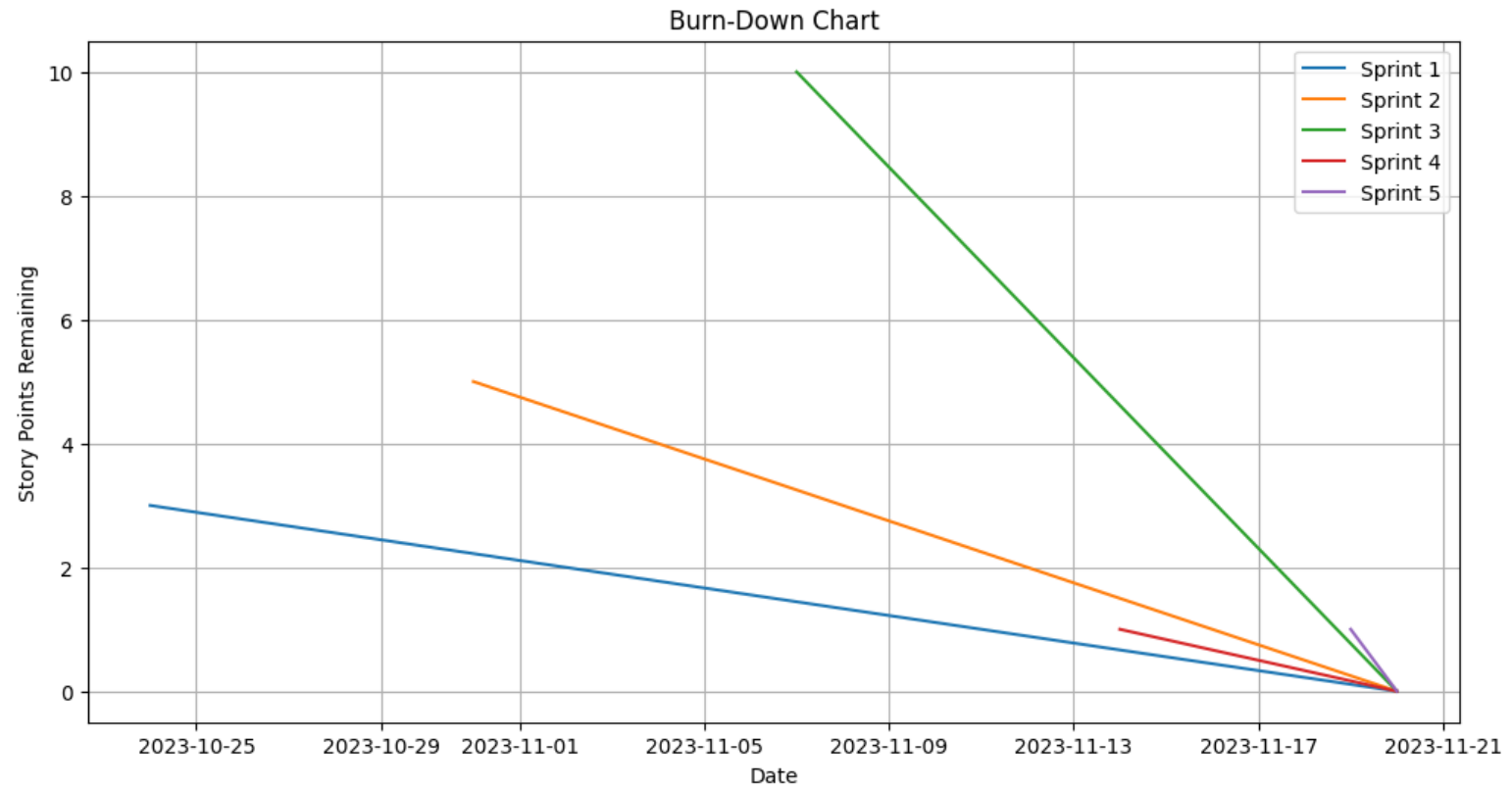
Velocity:

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) per iteration unit (story points per day)

$$\mathbf{AV = Sprint\ Duration\ /\ velocity = 29/20 = 14.5}$$

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.



Microbe Mapper Board



GROUP BY None ▾

TO DO

+ Create issue

IN PROGRESS

DONE 12 ✓

frameworks to start the microbe classification

✓ KAN-7 ✓

CNNs) to select the most suitable model for microbe classification.

✓ KAN-10 ✓

dataset and monitor its performance on the validation set.

✓ KAN-11 ✓

Assign the selected deep learning

+

Quickstart ×

My Kanban Project - Agile board

https://microbemapper.atlassian.net/jira/software/projects/KAN/boards/1/backlog?epics=visible&issueParent=10012%2C10013%2C10014%2...

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PLANNING

Timeline

Backlog

Board

Add view

DEVELOPMENT

Code

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You're in a team-managed project

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Epic 5

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Epic

Issues without epic

> Project setup

> Data

> Model

> Deployment

> Testing

+ Create epic

Board (12 issues)

0012

✓ KAN-7 frameworks to start the microbe classification

MODEL

DONE

👤

✓ KAN-10 CNNs) to select the most suitable model for microbe classifi...

MODEL

DONE

👤

✓ KAN-11 dataset and monitor its performance on the validation set.

DATA

DONE

👤

✓ KAN-8 train the selected deep learning model using the preprocessed

MODEL

DONE

👤

✓ KAN-6 Gather a diverse dataset of images containing different types ...

DATA

DONE

👤

✓ KAN-4 Preprocess the collected dataset by resizing images, normaliz...

DATA

DONE

👤

✓ KAN-9 Set up the development environment with the required tools ...

DEPLOYMENT

DONE

👤

✓ KAN-12 pixel values, and splitting it into traini

DATA

DONE

👤

✓ KAN-5 Explore and evaluate different deep learning architectures (e.g.,

MODEL

DONE

👤

More results

Quickstart

