

Project Planning Phase

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

Date	18 November 2023
Team ID	PNT2023TMID592248
Project Name	Potato Disease Classification
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	To set up a potato disease classification system Seed and Soil Treatment, Selection of Healthy Seed Tubers.	1	High	Pavan
Sprint-1	Development environment	USN-2	Gather a diverse dataset of images containing different types of potato leaves for training the deep learning model.	2	High	Chaitanya
Sprint-2	Data collection	USN-3	the use of technology for potato disease classification has been positive, as it enables them to identify diseases at very early stages and take necessary actions to improve crop yield.	3	High	Jayanth
Sprint-2	data preprocessing	USN-4	Explore and evaluate different deep learning architectures (e.g., CNNs) to select the most suitable model for potato disease classification.	4	High	Chaitanya
Sprint-3	model development	USN-5	train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set.	5	High	Jayanth
Sprint-3	Training	USN-6	Incorporate data augmentation methods, such as rotation and flipping, to enhance the model's resilience and boost its accuracy.	6	Medium	Pavan
Sprint-4	model deployment & Integration	USN-7	deploy the trained deep learning model as an API or web service to make it accessible for garbage classification. integrate the model's API into a user-friendly web interface for users to upload images and receive garbage classification results.	2	Medium	Jayanth
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	Pavan

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	7 Nov 2023	10 Nov 2023	20	11 Nov 2023
Sprint-2	7	4 Days	9 Nov 2023	13 Nov 2023		
Sprint-3	11	4 Days	15 Nov 2023	19 Nov 2023		
Sprint-4	2	4 Days	16 Nov 2023	20 Nov 2023		
Sprint-5	1	4 Days	17 Nov 2023	21 Nov 2023		

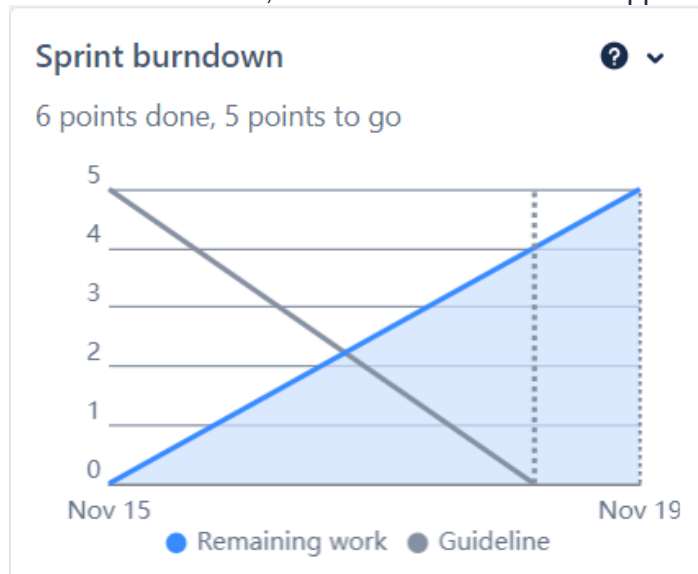
Velocity:

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)

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

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.



<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

Reference:

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

Board Section:

The screenshot displays the Jira Board interface for a project named "My Scrum Project". The interface is divided into several sections:

- Left Sidebar:** Contains navigation links for "My Scrum Project" (Software project), "You're on the Free plan" with an "UPGRADE" button, and a list of views: "PLANNING" (Timeline, Backlog, Board - selected), "DEVELOPMENT" (Code), "Project pages", "Add shortcut", and "Project settings". At the bottom, it states "You're in a team-managed project" with a "Learn more" link.
- Breadcrumb:** Shows "Projects / My Scrum Project".
- Section Header:** "All sprints".
- Search and Filters:** Includes a search bar, user avatars, and filters for "Epic" and "Sprint".
- Grouping and Actions:** A "GROUP BY" dropdown set to "None", and buttons for "Import work", "Insights", "View settings", and a "Complete sprint" button.
- Board Columns:**
 - TO DO 2:** Contains two tasks:
 - Task 1: "deploy the trained deep learning model as an API or web service to make it accessible for garbage classification. integrate the model's API into a user-friendly web interface for users to upload images and receive garbage classification results." It is categorized under "MODEL DEPLOYMENT AND INTEGRATION" and is item "SCRUM-22" with a count of 2.
 - Task 2: "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." It is categorized under "TESTING AND QUALITY ASSURANCE" and is item "SCRUM-23" with a count of 1.
 - IN PROGRESS 2:** Contains two tasks:
 - Task 1: "train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set." It is categorized under "MODEL DEVELOPMENT AND TRAINING" and is item "SCRUM-20" with a count of 5.
 - Task 2: "Incorporate data augmentation methods, such as rotation and flipping, to enhance the model's resilience and boost its accuracy." It is categorized under "MODEL DEVELOPMENT AND TRAINING" and is item "SCRUM-21" with a count of 6.
 - DONE ✓:** An empty column for completed tasks.

Backlog section:

Epic ▾

Import work

Insights

View settings

Epic

Issues without epic

> Project setup and infrastructure

> Data collection and Data preprocessing

> Model development and training

> Model deployment and integration

> Testing and quality assurance

+ Create epic

▼ SCRUM Sprint 3 15 Nov – 19 Nov (2 issues) 0 11 0 Complete sprint

SCRUM-20 train the selected deep learning model using the preprocessed data... MODEL DEVE... IN PROGRESS 5 J

SCRUM-21 Incorporate data augmentation methods, such as rotation and flippi... MODEL DEVE... IN PROGRESS 6

+ Create issue

▼ SCRUM Sprint 4 16 Nov – 20 Nov (1 issue) 2 0 0 Complete sprint

SCRUM-22 deploy the trained deep learning model as an API or web service to ... MODEL DEPL... TO DO 2 J

+ Create issue

▼ SCRUM Sprint 5 17 Nov – 21 Nov (1 issue) 1 0 0 Complete sprint

SCRUM-23 conduct thorough testing of the model and web interface to identif... TESTING AND... TO DO 1

+ Create issue

Timeline:

