

Project Planning Phase

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

Date	01 November 2023
Team ID	Team-593005
Project Name	AI-enabled car parking system using OpenCV
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	Install and configure cameras and hardware components in the parking lot for real-time video feed.	1	High	Harsha
Sprint-1	Development environment	USN-2	Set up the development environment with the required tools and frameworks to start the car parking project	1	High	Vignesh
Sprint-2	Object Detection	USN-3	Develop an object detection model to identify cars in real-time using OpenCV and a pre-trained CNN architecture	5	High	Revanth

			(e.g., YOLO)			
Sprint-2	Parking Space Detection	USN-4	Implement a parking space detection model to identify vacant and occupied parking spaces using OpenCV	6	High	Siva
Sprint-3	Real-time Parking Lot Occupancy Detection	USN-5	Integrate the object detection and parking space detection models into the OpenCV pipeline for real-time analysis of parking lot occupancy	6	High	Revanth
Sprint-3	Updating model to keep count of vacant parking spaces	USN-6	Develop an algorithm to maintain a count of available parking spaces based on real-time data	3	Medium	Vignesh
Sprint-4	Testing & quality assurance	USN-7	Conduct extensive testing under different lighting and weather conditions to ensure system accuracy	5	Medium	Siva
Sprint-5	Model deployment and integration	USN-8	Deploy the AI-enabled car parking system in a real-world parking lot and monitor its performance.	4	Medium	Harsha

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	27 Oct 2023	29 Oct 2023	3	29 Oct 2022
Sprint-2	10	3 Days	30 Oct 2023	1 Nov 2023	10	1 Nov 2023
Sprint-3	9	6 Days	2 Nov 2023	7 Nov 2023	9	7 Nov 2023
Sprint-4	5	4 Days	8 Nov 2023	11 Nov 2023	5	11 Nov 2023
Sprint-5	4	3 Days	12 Nov 2023	14 Nov 2023	4	14 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.

Sprint burndown

BETA ? v

0 points done, 10 points to go



Board Section:

The screenshot displays the Jira Software interface for a project titled "AI Enabled Car Parking Technology Using OpenCV". The top navigation bar includes "Jira Software", "Your work", "Projects", "Filters", "Dashboards", "Teams", "Plans", "Apps", and a "Create" button. A search bar is located on the right. The main content area shows the "All sprints" view for the current sprint, which is "0 days remaining". A "Complete sprint" button is visible. The board is organized into three columns: "TO DO 4", "IN PROGRESS 2", and "DONE 4". Each column contains task cards with descriptions, labels, and assignees. A "Quickstart" sidebar on the right provides a checklist of tasks: "Create a project", "Customize your board", "Create an issue", "Start with the basics", and "Invite your teammates".

Projects / AI Enabled Car Parking Technology Using OpenCV

All sprints

0 days remaining [Complete sprint](#)

Search

GR MS

GROUP BY: None [Import work](#) [Insights](#) [View settings](#)

TO DO 4

Conduct extensive testing under different lighting and weather conditions to ensure system accuracy.

TESTING & QUALITY ASSURANCE

AECPTUO-15

Deploy the AI-enabled car parking system in a real-world parking lot and monitor its performance.

MODEL DEPLOYMENT AND INTEGRATION

AECPTUO-16

Develop an object detection model to identify cars in real-time using OpenCV and a pre-trained CNN architecture.

IN PROGRESS 2

Integrate the object detection and parking space detection models into the OpenCV pipeline for real-time analysis of parking lot occupancy.

REAL-TIME PARKING LOT OCCUPANCY DE...

AECPTUO-13

Develop an algorithm to maintain a count of available parking spaces based on real-time data.

UPDATING MODEL TO KEEP COUNT OF V...

AECPTUO-14

DONE 4

Install and configure cameras and hardware components in the parking lot for real-time video feed.

PROJECT SETUP & INFRASTRUCTURE

AECPTUO-9

Set up the development environment with the required tools and frameworks to start the car parking project.

DEVELOPMENT ENVIRONMENT

AECPTUO-10

Develop an object detection model to identify cars in real-time using OpenCV and a pre-trained CNN architecture.

Quickstart

- ✓ Create a project
- ✓ Customize your board
- ✓ Create an issue

Issues are individual pieces of work that you assign to teammates.

Issues can be tasks or stories.

[Show me](#) [View issue tutorial](#)

- ✓ Start with the basics
- ✓ Invite your teammates

[Dismiss Quickstart](#)

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All sprints

⚡ ☆ ⌚ 0 days remaining ↗ Complete sprint ⋮

🔍 [GR] [MS] [] More ▾

GROUP BY None ▾ Import work Insights View settings

TO DO 4

AECTUO-16 MS

Develop an object detection model to identify cars in real-time using OpenCV and a pre-trained CNN architecture

AECTUO-17 GR

Implement a parking space detection model to identify vacant and occupied parking spaces using OpenCV

AECTUO-18

IN PROGRESS 2

UPDATING MODEL TO KEEP COUNT OF V...

AECTUO-14

DONE 4 ✓

AECTUO-10 ✓

Develop an object detection model to identify cars in real-time using OpenCV and a pre-trained CNN architecture

OBJECT DETECTION

AECTUO-11 ✓ GR

Implement a parking space detection model to identify vacant and occupied parking spaces using OpenCV

PARKING SPACE DETECTION

AECTUO-12 ✓

Quickstart

✓ Create a project ▾

✓ Customize your board ▾

✓ Create an issue ▴

Issue

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Show me View issue tutorial

✓ Start with the basics ▾

✓ Invite your teammates ▾

Dismiss Quickstart

Backlog Section:

psivassp.atlassian.net/jira/software/projects/AECTUO/boards/3/backlog?epics=visible

Gmail YouTube Maps Vpropel Vtop Moodle Login - CodeTantra Module-1 - Google... Cloud Bootcamp -... Learn Java - CodeC... Upgrade ChatGPT SmartInternz

Jira Software Your work Projects Filters Dashboards Teams Plans Apps Create

Search

Projects / AI Enabled Car Parking Technology Using OpenCV

Backlog

MS GR Epic

Import work Insights View settings

Epic

Issues without epic

- Project setup & Infrastructure
- Development environment
- Object Detection
- Parking Space Detection
- Real-time Parking Lot Occupancy Detection

+ Create epic

▼ AECTUO Sprint 1 27 Oct – 29 Oct (2 issues)

Setting up the environment

- AECTUO-9 Install and configure cameras and hardware com... PROJECT SET... DONE MS
- AECTUO-10 Set up the development environment with the r... DEVELOPMEN... DONE

+ Create issue

2 Issues | Estimate: 0

Start sprint

▼ AECTUO Sprint 2 30 Oct – 1 Nov (2 issues)

- AECTUO-11 Develop an object detection model to identify cars... OBJECT DETE... DONE GR
- AECTUO-12 Implement a parking space detection model to ide... PARKING SPA... DONE

+ Create issue

2 Issues | Estimate: 0

Start sprint

Quickstart

- ✓ Create a project
- ✓ Deliver more often with scrum
- ✓ Create an issue

Issue

Issues are individual pieces of work that you assign to teammates.

Issues can be tasks or stories.

Show me View issue tutorial

- ✓ Start with the basics
- ✓ Invite your teammates

Dismiss Quickstart

Waiting for psivassp.atlassian.net...

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Backlog

Q



Epic ▾

Import work

Insights

View settings

- Epic x
- Issues without epic
- > Project setup & Infrastructure
 - > Development environment
 - > Object Detection
 - > Parking Space Detection
 - > Real-time Parking Lot Occupancy Detection
- + Create epic

▼ AECTUO Sprint 3 2 Nov – 7 Nov (2 issues) 0 0 0 Start sprint ⋮

- AECTUO-13 Integrate the object detection and parking space ... REAL-TIME P... IN PROGRESS ▾ GR
- AECTUO-14 Develop an algorithm to maintain a count of avail... UPDATING M... IN PROGRESS ▾ 👤

+ Create issue

2 issues | Estimate: 0

▼ AECTUO Sprint 4 8 Nov – 11 Nov (1 issue) 0 0 0 Start sprint ⋮

- AECTUO-15 Conduct extensive testing under different lighting ... TESTING & Q... TO DO ▾ 👤

+ Create issue

1 issue | Estimate: 0

▼ AECTUO Sprint 5 12 Nov – 14 Nov (1 issue) 0 0 0 Start sprint ⋮

- AECTUO-16 Deploy the AI-enabled car parking system in a real... MODEL DEPL... TO DO ▾ MS

Quickstart

- ✓ Create a project ▾
 - ✓ Deliver more often with scrum ▾
 - ✓ Create an issue ▴
- Issue
- Issues are individual pieces of work that you assign to teammates.
- Issues can be tasks or stories.
- Show me View issue tutorial
- ✓ Start with the basics ▾
 - ✓ Invite your teammates ▾

Dismiss Quickstart

Waiting for psivassp.atlassian.net...

Timeline:

