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

Date	15 February 2025
Team ID	
Project Name	DocuQuery: AI-Powered PDF Knowledge Assistant Using Google PALM
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

A Product Backlog, Sprint Schedule, and Estimation for the project, DocuQuery: AI-Powered PDF Knowledge Assistant Using Google PALM. This template includes functional requirements (epics), user stories, story points, priority, and team member assignments.

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	User Authentication	US-01	As a user, I want to sign up using my email and password so that I can access the app.	5	High	NIKITA
Sprint 1	User Authentication	US-02	As a user, I want to log in using my credentials so that I can use the app.	3	High	KESHAV
Sprint 1	User Authentication	US-03	As a user, I want to reset my password if I forget it.	3	Medium	PRATYKSHA
Sprint 2	PDF Upload and Processing	US-04	As a user, I want to upload a PDF file so that I can interact with its content.	8	High	NILESHWAR
Sprint 2	PDF Upload and Processing	US-05	As a user, I want to see a preview of the uploaded PDF.	5	Medium	NIKITA

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint 2	PDF Upload and Processing	US-06	As a user, I want the system to extract text from the PDF for processing.	8	High	KESHAV
Sprint 3	Natural Language Query	US-07	As a user, I want to ask questions about the PDF content using natural language.	13	High	PRATYKSHA
Sprint 3	Natural Language Query	US-08	As a user, I want to receive accurate answers to my questions from the PDF.	8	High	NILESHWAR
Sprint 3	Natural Language Query	US-09	As a user, I want to see highlighted text in the PDF that answers my question.	5	Medium	NIKITA
Sprint 4	Summarization	US-10	As a user, I want to generate a summary of the PDF content.	8	High	KESHAV
Sprint 4	Summarization	US-11	As a user, I want to adjust the length of the summary (short, medium, long).	5	Medium	PRATYKSHA
Sprint 4	Summarization	US-12	As a user, I want to download the summary as a text file.	3	Low	NILESHWAR
Sprint 5	Accessibility Features	US-13	As a user, I want to use voice commands to interact with the app.	8	High	NIKITA
Sprint 5	Accessibility Features	US-14	As a user, I want the app to read the PDF content aloud using text-to-speech.	5	High	KESHAV
Sprint 5	Accessibility Features	US-15	As a user, I want to adjust the speed of the text-to-speech feature.	3	Medium	PRATYKSHA
Sprint 6	Deployment and Testing	US-16	As a developer, I want to deploy the app to a cloud platform for user access.	8	High	NILESHWAR

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint 6	Deployment and Testing	US-17	As a developer, I want to conduct user acceptance testing (UAT) before launch.	5	High	NIKITA
Sprint 6	Deployment and Testing	US-18	As a developer, I want to fix bugs identified during UAT.	8	High	KESHAV

Sprint Schedule

Sprint	Duration	Focus Area	Key Deliverables
Sprint 1	2 Weeks	User Authentication	User sign-up, login, and password reset functionality.
Sprint 2	2 Weeks	PDF Upload and Processing	PDF upload, preview, and text extraction features.
Sprint 3	2 Weeks	Natural Language Query	Natural language query and answer generation with highlighted text.
Sprint 4	2 Weeks	Summarization	PDF summarization with adjustable length and download options.
Sprint 5	2 Weeks	Accessibility Features	Voice commands and text-to-speech functionality.
Sprint 6	2 Weeks	Deployment and Testing	Deployed application, UAT, and bug fixes.

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Template for Project Tracker:

Sprint	Task	Assigned To	Status	Start Date	End Date	Remarks
Sprint 1	User Sign-Up Feature	Member 1	Completed	Week 1	Week 1	Tested and deployed.
Sprint 1	User Login Feature	Member 2	Completed	Week 1	Week 1	Tested and deployed.
Sprint 1	Password Reset Feature	Member 3	Completed	Week 1	Week 2	Tested and deployed.
Sprint 2	PDF Upload Feature	Member 4	In Progress	Week 3	Week 4	Integration in progress.
Sprint 2	PDF Preview Feature	Member 1	Not Started	Week 4	Week 5	Pending backend completion.
Sprint 2	Text Extraction Feature	Member 2	In Progress	Week 3	Week 4	Testing in progress.
Sprint 3	Natural Language Query Feature	Member 3	Not Started	Week 5	Week 6	Awaiting AI integration.
Sprint 3	Answer Generation Feature	Member 4	Not Started	Week 5	Week 6	Awaiting AI integration.

Velocity:

The **Velocity Chart** measures the team's productivity by tracking the number of story points completed in each sprint. It helps predict how much work the team can handle in future sprints.

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)

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

Sprint	Total Story Points	Completed Story Points	Velocity
Sprint 1	11	11	11
Sprint 2	21	16	16
Sprint 3	26	0	0
Sprint 4	16	0	0
Sprint 5	16	0	0
Sprint 6	21	0	0

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	Total Story Points	Story Points Remaining
Sprint 0	91	91
Sprint 1	91	80
Sprint 2	91	64
Sprint 3	91	64
Sprint 4	91	64
Sprint 5	91	64
Sprint 6	91	64

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