

Planify Product Requirements Document - Planify

1. Feature Name : Project Creation and Management

Feature Overview

The "Project Creation and Management" feature in Planify allows users to create and manage projects, each with its own set of tasks and deadlines. It also supports project categorization and tagging for easy organization.

User Stories

1. As a user, I want to be able to create new projects in Planify so that I can organize my work efficiently.
2. As a user, I want to define tasks within each project along with their respective deadlines.
3. As a user, I want the ability to categorize projects based on different criteria (e.g., department, priority) for better organization.
4. As a user, I want the option to tag projects with relevant keywords or labels for easier search and filtering.

User Flow

1. Upon logging into Planify, the user is presented with the dashboard.
2. From the dashboard, the user can navigate to the "Projects" section.
3. In the "Projects" section, there is an option to create a new project.
4. When creating a new project, the user is prompted to provide details such as project name, description, start date, and end date.
5. Once created, the project appears in the list of active projects on the dashboard.
6. The user can click on a specific project to view its details and manage tasks within it.
7. Within each project's details page, there is an option to add tasks along with their respective deadlines.
8. The user can categorize projects by assigning them to specific categories (e.g., Marketing, Development).
9. Additionally, tags can be added to projects for easy identification and filtering purposes.

Technical Implementation

- Backend: The backend system needs to store project details, including tasks, deadlines, categories, and tags in a database.
- Frontend: The frontend interface should allow users to interact with the backend system by creating new projects, adding tasks, categorizing projects, and assigning tags.
- Database: A suitable database solution should be chosen to efficiently store and retrieve project-related data.

Success Metrics

1. Number of active projects created per user: This metric indicates user engagement with the project creation feature.
2. Task completion rate across all projects: Tracking the percentage of completed tasks provides insight into user productivity.
3. User feedback on ease of use for project creation and management features.

Dependencies

- User authentication and login functionality must be implemented prior to enabling project creation and management features.
- Database infrastructure needs to be set up for storing project-related data.

2. Feature Name - Task Assignment

The Task Assignment feature aims to enable users to assign tasks to team members, ensuring clear ownership and deadlines. It also ensures that assigned team members are promptly notified of new tasks and updates.

User Stories

1. As a project manager, I want to be able to assign tasks to specific team members within Planify, so that everyone knows their responsibilities.
2. As a team member, I want to receive notifications whenever a task is assigned to me or if there are any updates on the tasks I'm responsible for.
3. As a user, I want the assigned team member's name and deadline to be clearly displayed alongside each task in Planify, so that it's easy to track progress.

Goals

- Enable users to assign tasks with clear ownership and deadlines.
- Ensure timely notifications for assigned team members regarding new tasks and updates.
- Enhance collaboration by providing visibility of assigned tasks within Planify.

Key Features

1. Task Assignment

- Users can create new tasks within Planify and assign them to specific team members.
- Each task should have fields for assigning team member(s) and setting a deadline.
- The assigned team member's name should be prominently displayed alongside each task.

2. Notifications

- Assigned team members should receive real-time notifications (via email or in-app) when a task is assigned to them.
- Team members should also receive notifications when there are updates or changes made to the task they are responsible for.

3. Task Tracking

- Users should be able to view all the tasks they have been assigned in one consolidated list or dashboard within Planify.
- Each task entry should include details such as the task name, description, owner(s), deadline, and status (e.g., in progress, completed).

Technical Requirements

- Ensure backend API endpoints for creating tasks with assigned team members and deadlines.
- Implement real-time notifications using appropriate channels (email, in-app notifications).
- Update the database schema to include task assignments and associated metadata.

Dependencies

- Appropriate email service provider for sending notifications via email.

Acceptance Criteria

1. Users should be able to create tasks and assign them to team members within Planify.
2. Assigned team members must receive notifications when a task is assigned or updated.
3. The assigned team member's name and deadline should be clearly displayed alongside each task in Planify.
4. Team members should be able to view all their assigned tasks in one consolidated list or dashboard within Planify.
5. The implementation of real-time notifications should ensure prompt delivery.

3. Feature Name - Task Tracking

The Task Tracking feature in Planify aims to provide users with a comprehensive dashboard that displays task progress, allowing them to effectively manage their workflow. This feature will enable users to track the status of their tasks, indicating whether they are pending, in progress, or completed. Additionally, users will have the ability to set task dependencies to establish an organised workflow.

Sub Features

3.1 Dashboard Display

The Task Tracking feature will include a user-friendly dashboard that provides an overview of task progress. It should display relevant information at a glance, such as task statuses and completion percentages.

User Stories

1. As a user, I want to view my ongoing tasks along with their current statuses on the dashboard.
2. As a user, I want to see the completion percentage of each task to understand its progress.
3. As a user, I want to be able to filter the displayed tasks based on different criteria (e.g., project, priority).
4. As a user, I want the dashboard display to be visually appealing yet straightforward in design.
5. As a user, I want the ability to customize the information displayed on the dashboard according to my preferences.

3.2 Task Dependency Management

Users need the ability to set dependencies between tasks to ensure an organised workflow.

User Stories

1. As a project manager, I want to create task dependencies so that my team can work sequentially on specific activities without any conflicts or delays.

2. As a team member, I want to view task dependencies so that I am aware of which tasks need to be completed before starting or finishing my own work.
3. As a stakeholder, I want to understand the overall project progress through visual representations of task dependencies.

4. Acceptance Criteria

- The dashboard accurately represents task progress with clear indicators for pending, in progress, and completed tasks.
- Task completion percentages are displayed accurately on the dashboard.
- Users can create tasks, assign statuses, and set task dependencies.
- Dependencies between tasks are visually represented on the dashboard.
- The Task Tracking feature integrates smoothly into the existing Planify product.
- Task tracking data is stored securely and persistently.

4. Feature Name: Resource Planning

Feature Overview

The "Resource Planning" feature in Planify empowers users to efficiently allocate team members and resources to tasks and projects. It offers visibility into resource availability and conflicts, ensuring that project managers and team members can make informed decisions for optimal resource allocation.

User Stories

- As a project manager, I want to allocate specific team members to tasks and projects to ensure that roles and responsibilities are clear.
- As a team member, I want to know which tasks I'm assigned to and when to work on them.
- As a user, I want to see the availability of team members and resources to make informed allocation decisions.
- As a project manager, I want to be alerted to any resource conflicts or over-allocations for proactive resolution.

User Flow

- Users can access the "Resource Planning" section from the Planify dashboard.
- Within the "Resource Planning" section, users can allocate team members and resources to specific tasks or projects.
- Resource allocation should include information about team members' availability, skills, and workload.
- Users can view a calendar or timeline that displays the allocation of team members and resources, including any conflicts.
- The system should send alerts or notifications when resource conflicts or over-allocations are detected, allowing for quick resolution.

Technical Implementation

Backend: The backend system needs to store resource allocation details, including team members, task assignments, resource availability, and conflict detection algorithms.

Frontend: The frontend interface should allow users to interact with the backend system by allocating team members and resources visually and providing an intuitive timeline view.

Database: The database should efficiently manage resource allocation data, including historical records and conflict detection.

Success Metrics

- Resource allocation accuracy: Measure the percentage of successful resource allocations without conflicts.
- User feedback on the resource planning interface and its ease of use.
- Reduction in resource-related project delays.

Dependencies

- Availability and workload tracking for team members must be implemented before enabling resource planning features.
- Conflict detection algorithms and alerts need to be integrated to identify and notify users about resource conflicts.

5. Feature Name: Resource Workload Management

Feature Overview

The "Resource Workload Management" feature in Planify provides users with a comprehensive view of individual team members' workloads. It ensures balanced resource allocation and proactively warns of overallocation or conflicts, helping project managers and team leads make informed allocation decisions.

User Stories

- As a project manager, I want to see an overview of each team member's current workload to make informed allocation decisions.
- As a team member, I want to have visibility into my own workload and assignments.
- As a user, I want to receive alerts and warnings if there is an overallocation or conflict with a team member's workload.
- As a project manager, I want to be able to adjust resource allocations to resolve overallocation or conflicts.

User Flow

- Users can access the "Resource Workload Management" section from the Planify dashboard.
- Within this section, users can view individual team members and their current workload, including assigned tasks and projects.
- The system provides a visual representation of workload, such as a bar chart or timeline, to help users quickly assess resource allocation.
- Users receive real-time alerts or warnings if a team member's workload exceeds capacity or if there is a conflict.
- Project managers can make adjustments within the system to resolve overallocation or conflicts.

Technical Implementation

Backend: The backend system needs to collect and maintain data on individual team members' workloads, assigned tasks, projects, and any conflicts or overallocations.

Frontend: The frontend interface should display workload information in an easily understandable format. It should also provide mechanisms for users to adjust allocations.

Database: The database should efficiently store and retrieve workload data and conflict detection.

Success Metrics

- Reduction in resource-related project delays due to overallocation or conflicts.
- User feedback on the resource workload management interface and its ease of use.
- Percentage of conflicts or overallocations resolved within a set timeframe.

Dependencies

- Availability and workload tracking for team members must be implemented to enable resource workload management features.
- Real-time conflict detection algorithms and alerts should be integrated to identify and notify users about workload conflicts and overallocations.

6. Feature Name: Resource Skill Matching

Feature Overview

The "Resource Skill Matching" feature in Planify enhances resource allocation by matching team members' skills with task requirements. It ensures that projects are staffed with the right individuals, optimising resource allocation for maximum efficiency.

User Stories

- As a project manager, I want to identify team members whose skills align with the requirements of a task to ensure the most suitable resources are allocated.
- As a team member, I want to see tasks that match my skills and expertise.
- As a user, I want to receive notifications or recommendations for suitable resource allocations based on skills.
- As a project manager, I want to review and approve skill-matched resource allocations.

User Flow

- Users can access the "Resource Skill Matching" section from the Planify dashboard.
- Within this section, users can view tasks and projects with skill requirements.
- The system matches team members' skills with task requirements, offering suggestions for optimal resource allocation.
- Users receive real-time notifications or recommendations for skill-matched resource allocations.
- Project managers can review and approve the suggested resource allocations, ensuring alignment with project goals.

Technical Implementation

Backend: The backend system needs to collect, store, and match team members' skills with task requirements. It should provide recommendations for skill-matched allocations.

Frontend: The frontend interface should display skill-matched allocations clearly and offer a user-friendly way for project managers to approve or modify allocations.

Database: The database should efficiently store and retrieve skill and task requirement data, as well as maintain a history of approved allocations.

Success Metrics

- Increase in resource allocation efficiency and project performance due to skill-matched assignments.
- User feedback on the resource skill matching interface and its effectiveness.
- Percentage of recommended skill-matched allocations that are approved by project managers.

Dependencies

- A skills database or system is required to collect and track team members' skills and expertise.
- Real-time notification mechanisms are necessary to deliver skill-matched allocation recommendations promptly.

7. Feature Name: File Sharing

Feature Overview

The "File Sharing" feature in Planify enables users to seamlessly share project-related files and documents within the platform. It also offers robust version control for documents, ensuring that teams can collaborate efficiently while maintaining a record of document revisions.

User Stories

- As a project manager, I want to share project-related files and documents with my team directly within Planify.
- As a team member, I want to access and download project-related documents without needing external file-sharing tools.
- As a user, I want to maintain a clear version history for shared documents to track changes.
- As a stakeholder, I want to view, comment on, and track updates to project documents for effective collaboration.

User Flow

- Users can access the "File Sharing" section from the Planify dashboard.
- Within this section, users can upload and share project-related files and documents.
- The system provides an organized file repository where users can access and download documents.
- Document version control ensures that each change is tracked, with clear records of revisions.
- Stakeholders can view and comment on documents, fostering collaboration and feedback.

Technical Implementation

Backend: The backend system should handle document storage, version control, and access permissions.

Frontend: The frontend interface should provide an intuitive file sharing and document management experience.

Database: The database should efficiently store and retrieve files, versions, and document-related data.

Success Metrics

- Increased use of the platform for document sharing and collaboration.
- User feedback on the file sharing interface and version control features.
- Reduction in the use of external file-sharing tools for project-related documents.

Dependencies

- Version control mechanisms should be implemented to ensure a clear and reliable version history.
- Access control and permission settings must be in place to manage who can view, edit, and comment on shared documents.

8. Feature Name: Feedback and Comments

Feature Overview

The "Feedback and Comments" feature in Planify empowers users to provide feedback and comments on tasks, projects, and other elements within the platform. This feature enhances collaboration and issue resolution by facilitating open and constructive communication.

User Stories

- As a team member, I want to provide feedback and comments on tasks to communicate issues and suggestions.
- As a project manager, I want a centralized location for tracking and addressing feedback from team members.
- As a user, I want to receive notifications when comments or feedback are provided on elements I'm involved in.
- As a stakeholder, I want visibility into ongoing discussions and issue resolutions.

User Flow

- Users can access the "Feedback and Comments" section from the Planify dashboard.
- Within this section, users can provide comments and feedback on tasks, projects, or other relevant elements.
- The system allows users to view and track all feedback and comments related to their tasks or projects.
- Users receive real-time notifications for new comments or feedback on elements they are associated with.
- Stakeholders can access a dashboard to view ongoing discussions and issue resolutions.

Technical Implementation

Backend: The backend system should store feedback and comments, manage notifications, and ensure security and privacy of data.

Frontend: The frontend interface should offer an intuitive and user-friendly experience for providing and reviewing feedback and comments.

Database: The database should efficiently store and retrieve feedback, comments, and related data.

Success Metrics

- Increased user engagement and collaboration within the platform due to the availability of feedback and comments.
- User feedback on the effectiveness and user-friendliness of the feedback and comments interface.
- Reduction in external communication tools for issue resolution and feedback exchange.

Dependencies

- Notification mechanisms should be in place to ensure real-time notifications for new feedback and comments.
- Access control and permission settings must be implemented to manage who can provide, view, and respond to feedback and comments.

9. Feature Name: Data Logging

Feature Overview

The "Data Logging" feature in Planify facilitates the comprehensive capture of project data, including task completion times, resource allocation, and project milestones. This feature offers a robust system for tracking and analyzing project progress and performance.

User Stories

- As a project manager, I want to capture and analyze data related to task completion times to improve project planning and efficiency.
- As a team member, I want a historical record of my resource allocations to understand past workloads and contributions.
- As a user, I want a detailed log of project milestones achieved to celebrate team accomplishments and track progress.
- As a stakeholder, I want access to project data for performance evaluation and decision-making.

User Flow

- Users can access the "Data Logging" section from the Planify dashboard.
- Within this section, users can capture and input data related to task completion times, resource allocations, and project milestones.
- The system provides an organized log for easy access and analysis of historical project data.
- Users can generate reports and visual representations of the captured data for in-depth analysis.
- Stakeholders can access project data for performance evaluation and decision-making.

Technical Implementation

Backend: The backend system should store and manage project data, provide data capture forms, and support data retrieval for analysis.

Frontend: The frontend interface should offer an intuitive and user-friendly data logging experience, along with reporting and visualization tools.

Database: The database should efficiently store and retrieve project data, including task completion times, resource allocation records, and milestones.

Success Metrics

- Improved project planning and efficiency based on the analysis of task completion time data.
- User feedback on the effectiveness and user-friendliness of the data logging interface.
- Enhanced decision-making and performance evaluation due to access to project data.

Dependencies

- Data capture forms and user interfaces should be implemented for users to log project-related data.
- Reporting and visualization tools should be integrated to provide meaningful insights from the captured data.

10. Feature Name: Data Analytics

Feature Overview

The "Data Analytics" feature in Planify empowers users to gain insights into past project performance through data analysis tools. It provides robust reporting and visualization capabilities for historical project data, enhancing informed decision-making and continuous improvement.

User Stories

- As a project manager, I want to access data analysis tools to understand past project performance and make data-driven decisions.
- As a team member, I want access to reports and visualizations for my past contributions and workloads.
- As a user, I want to generate customizable reports to tailor insights to my specific needs.
- As a stakeholder, I want to access data analytics for in-depth performance evaluation and strategic planning.

User Flow

- Users can access the "Data Analytics" section from the Planify dashboard.
- Within this section, users can select specific projects or timeframes for data analysis.
- The system offers data analysis tools, including reports and visualizations, to provide insights into project performance.
- Users can customize and generate reports tailored to their specific needs and preferences.
- Stakeholders can access data analytics for performance evaluation and strategic planning.

Technical Implementation

Backend: The backend system should support data analysis and reporting tools, as well as data retrieval for analysis.

Frontend: The frontend interface should offer an intuitive and user-friendly experience for data analysis, reporting, and visualization.

Database: The database should efficiently store historical project data for analysis and reporting.

Success Metrics

- Improved decision-making and project performance based on insights gained from data analytics.
- User feedback on the effectiveness and user-friendliness of the data analytics tools and reporting capabilities.
- Enhanced strategic planning and performance evaluation due to access to historical project data.

Dependencies

- Data analysis and reporting tools should be implemented to support users in gaining insights from historical data.
- Data capture mechanisms need to be in place to ensure the availability of historical project data for analysis.

11. Feature Name: Feature Creation

Feature Overview

The "Feature Creation" feature in Planify empowers users to define and create project features that align with project goals and customer needs. This feature facilitates efficient and structured feature management, enhancing project planning and execution.

User Stories

- As a project manager, I want to create and define features that align with project objectives and customer requirements.
- As a team member, I want to access a centralized feature creation tool to streamline the process.
- As a user, I want to categorize features based on priority, complexity, and other criteria for effective organization.
- As a stakeholder, I want visibility into the feature creation process to ensure alignment with business goals.

User Flow

- Users can access the "Feature Creation" section from the Planify dashboard.
- Within this section, users can create and define features, including descriptions, priority levels, and customer requirements.
- The system allows for the categorization and tagging of features based on various criteria.
- Users can view and manage created features, including editing and archiving options.
- Stakeholders can access a feature creation dashboard for visibility into the process.

Technical Implementation

Backend: The backend system should support feature creation, storage, and retrieval. It should allow for the categorization and tagging of features.

Frontend: The frontend interface should provide an intuitive and user-friendly experience for creating, editing, and managing features.

Database: The database should efficiently store feature data, including descriptions, priority levels, customer requirements, and categorization.

Success Metrics

- Improved project alignment with customer needs and business goals through structured feature creation.
- User feedback on the effectiveness and user-friendliness of the feature creation interface.
- Enhanced project planning and execution due to organized and well-defined features.

Dependencies

- User authentication and access control mechanisms should be in place to manage who can create and manage features.
- Collaboration and communication tools need to support discussions and feedback on feature creation and alignment.

12. Feature Name: Feature Progress Tracking

Feature Overview

The "Feature Progress Tracking" feature in Planify enables users to track the development progress of features within projects. It provides essential tools for updating feature statuses, monitoring completion percentages, and estimating delivery times, contributing to efficient project management.

User Stories

- As a project manager, I want to track the development progress of features to ensure timely project delivery.
- As a team member, I want to provide status updates for the features I'm working on to keep the team informed.
- As a user, I want to view real-time completion percentages and estimated delivery times for project features.
- As a stakeholder, I want access to feature progress tracking for informed decision-making and project planning.

User Flow

- Users can access the "Feature Progress Tracking" section from the Planify dashboard.
- Within this section, users can select specific features and provide status updates, completion percentages, and estimated delivery times.
- The system displays real-time completion percentages and estimated delivery times for each feature.
- Users can set notifications and alerts for critical feature updates.
- Stakeholders can access a feature progress tracking dashboard for insight into the project's status.

Technical Implementation

Backend: The backend system should support feature progress tracking, including data storage and real-time updates.

Frontend: The frontend interface should offer an intuitive and user-friendly experience for tracking feature progress and viewing updates.

Database: The database should efficiently store feature progress data, including status updates, completion percentages, and estimated delivery times.

Success Metrics

- Improved project delivery and project management through real-time tracking of feature progress.
- User feedback on the effectiveness and user-friendliness of the feature progress tracking interface.
- Enhanced decision-making and project planning based on access to real-time feature progress data.

Dependencies

- Real-time notification mechanisms should be in place to ensure prompt alerts for significant feature updates.
- User authentication and access control mechanisms need to be implemented to manage who can update and view feature progress data.

13. Feature Name: Feature Dependencies

Feature Overview

The "Feature Dependencies" feature in Planify provides users with the ability to link features to specific tasks and requirements. This feature enables users to identify dependencies between features, enhancing project planning and execution by ensuring that tasks are aligned and completed in the right order.

User Stories

- As a project manager, I want to identify dependencies between features to plan and execute projects more efficiently.
- As a team member, I want to see how my work on a feature relates to other project components.
- As a user, I want to have a clear view of the impact of feature dependencies on project timelines.
- As a stakeholder, I want to understand the project's overall structure and dependencies for informed decision-making.

User Flow

- Users can access the "Feature Dependencies" section from the Planify dashboard.
- Within this section, users can select specific features and identify their dependencies by linking them to tasks or requirements.
- The system visually displays feature dependencies, including their relationships and the impact on project timelines.
- Users receive notifications or alerts for critical changes to feature dependencies.
- Stakeholders can access a feature dependency dashboard for a holistic view of project structure.

Technical Implementation

Backend: The backend system should support feature dependency management, including data storage, notifications, and real-time updates.

Frontend: The frontend interface should offer an intuitive and user-friendly experience for managing and viewing feature dependencies.

Database: The database should efficiently store feature dependency data, including links, relationships, and impact analysis.

Success Metrics

- Improved project planning and execution through better management of feature dependencies.
- User feedback on the effectiveness and user-friendliness of the feature dependency management interface.
- Enhanced decision-making and project planning based on a clear view of feature dependencies.

Dependencies

- Real-time notification mechanisms should be in place to ensure prompt alerts for significant changes to feature dependencies.
- User authentication and access control mechanisms need to be implemented to manage who can create, update, and view feature dependencies.