PROJECT PLAN DOCUMENT
(Updated: April 20, 2025)

Project number	2 (Team number)
Project Title	Finease
Document	Project Plan
Creation date	12/02/2025
Updated on	20/04/2025
Updated By	Nidhi Vaidya
Client	Sarath Chandra Makineni (Kaizen platforms)

Brief problem statement

Finease is a comprehensive platform that streamlines business operations such as data entry, reconciliation, and regulatory compliance for ITR, GST, and PF filings. The platform leverages WhatsApp and a custom chatbot for user interaction, automates document processing, and provides functionalities for generating E-Waybills, delivery challans, and displaying key financial metrics on a dashboard.

Team Members

1. Swam Singla

2. Kushagra Trivedi

3. Nidhi Vaidya

4. Ronak Gaur

5. Ayush Kumar Gupta

Team Communication

Our team follows an Agile Scrum methodology, ensuring effective communication through regular interactions:

- **Daily Stand-up Meetings:** Conducted regularly to discuss progress, roadblocks, and plans for the week.

- **Sprint Planning Sessions:** Held at the beginning of each sprint to define tasks and set priorities.

- **Retrospectives:** Conducted at the end of each sprint to review team performance and identify areas for improvement.

- **Client Collaboration:** Regular meetings with the client to ensure alignment with expectations and evolving requirements.

- **Instant Communication:** Team members stay connected through WhatsApp for quick updates and discussions.

Development Environment

The development of this project utilizes a diverse set of tools and technologies to ensure efficiency, collaboration, and seamless deployment.

Technology Stack

- **Programming Languages & Frameworks:**
  - Backend: Node.js, Express.js
  - Frontend: React.js (Web App), React Native (Mobile App)
  - UI Styling: TailwindCSS

- **APIs & Integrations:**
  - Gemini API (For general tax filing questions)
  - NanoNets (For document classification and data extraction)
  - WhatsApp API with user authentication

- **Database & Storage:**
  - MongoDB (Database)
  - MongoDB Atlas (Cloud Database)

- **Document Processing:**
  - py-tesseract for OCR
  - PIL (Python Imaging Library) for image processing

- **Development Tools:**
  - IDE & Code Editors: Visual Studio Code (VS Code)
  - API Testing: Postman
  - Local Hosting & Tunneling: Ngrok
  - Webhook Integration: Twilio
  - Mobile App Testing: Expo Go

- **Collaboration & Documentation:**
  - GitHub (Version Control)
  - Google Docs (Project Documentation)
  - WhatsApp/Google Meet (Team Communication)

- **Deployment:**
  - Vercel (Frontend Deployment)
  - Render (Backend Deployment)
  - Docker (Containerization)

Feature Implementation Status

No.	User Case Name	Release	Status
1	WhatsApp Integration: Collects invoices, purchase records from users via WhatsApp with added user authentication. Integrated with Gemini API for general tax filing questions	R1	Completed
2	Custom App Chatbot: Guides users through the website for seamless navigation	R1	Completed
3	E-Waybill Generation: Automates E-Waybill creation through API integration	R1	Completed
4	Delivery Challan Management: Generates challans for goods transport	R1	Completed
5	ITR Filing: Displays data in JSON format ready for filing. Direct API integration for filing was not implemented due to API unavailability	R2	Modified
6	GST Filing: Displays data in JSON format ready for filing. Direct API integration for filing was not implemented due to API unavailability	R2	Modified
7	PF Filing: Enables employees to add information about their employees and generate ECR documents	R2	Modified
8	Dashboard Analytics: Displays key metrics such as lifetime earnings and tax saved on a dashboard interface	R2	Added
9	Scanning and uploading Documents: Scan and upload documents for GST/PF/ITR filing and classify them and extract data from them using external API	R1	Completed
10	Notifications: Sending automated notifications through the website interface	R2	Modified
11	React Native App: Cross-platform application that works on both web version and Expo Go	R2	Added

Updated Milestone Schedule

Milestone	Due Date	Release	Deliverable?
Create draft requirements	07/02/25	R1	No
Finalize requirements	14/02/25	R1	Yes
Complete Backend Development	10/03/25	R1	Yes
Implement API Integrations (WhatsApp, Gemini, NanoNets)	20/03/25	R1	Yes
R1 Features Completion (WhatsApp Integration, Chatbot, E-Waybill, Document Upload)	25/03/25	R1	Yes
Frontend Development Completion	30/03/25	R2	Yes
R2 Features Implementation (ITR/GST/PF Filing, Dashboard, Mobile App)	05/04/25	R2	Yes
Testing & Bug Fixing	10/04/25	R2	Yes
Final Deployment	15/04/25	R2	Yes

Risk Management Plan

Risk	Impact	Mitigation Strategy	Priority
Government API Unavailability	Unable to implement direct filing for ITR, GST, and PF	Implement JSON data export functionality as an alternative solution	High
Document Processing Accuracy	Incorrect data extraction could lead to compliance issues	Implement validation checks and manual review options for extracted data	High
Cross-Platform Compatibility	Inconsistent user experience across web and mobile platforms	Extensive testing on multiple platforms and browsers	Medium
Data Security Concerns	Financial and compliance data requires strict security measures	Implement encryption, secure authentication, and access controls	High
Integration Complexity	Multiple API integrations could lead to development delays	Prioritize core integrations and implement progressive development	Medium

Testing Strategy

- **Unit Testing:** Individual components and functions testing

- **Integration Testing:** Testing API integrations and data flow between components

- **User Acceptance Testing:** Involving client and end-users for feedback

- **Cross-platform Testing:** Ensuring compatibility across web and mobile platforms

- **Security Testing:** Validating authentication and data protection measures