

Global-IPI-Platform – Project Documentation

(Milestone 1)

Student: Anjali Varshney

Role: Frontend Developer

Project: Global-IPI-Platform – A platform to monitor global intellectual property activity.

1. Introduction

The Global-IPI-Platform is a full-stack web application developed to help innovators, law firms, and R&D teams track and monitor global intellectual property filings. This document describes my frontend contributions: setting up the React application, designing UI mockups, and implementing responsive Landing, Login and Register pages.

2. Project Overview

2.1 Objectives

- Build responsive and user-friendly authentication pages.
- Set up and organize the frontend project structure.
- Implement UI components aligned with the project theme.

2.2 Frontend Tech Stack

React.js

React Router

HTML, CSS, Tailwind

JavaScript ES6

VS Code

Git & GitHub

3. Roles & Responsibilities

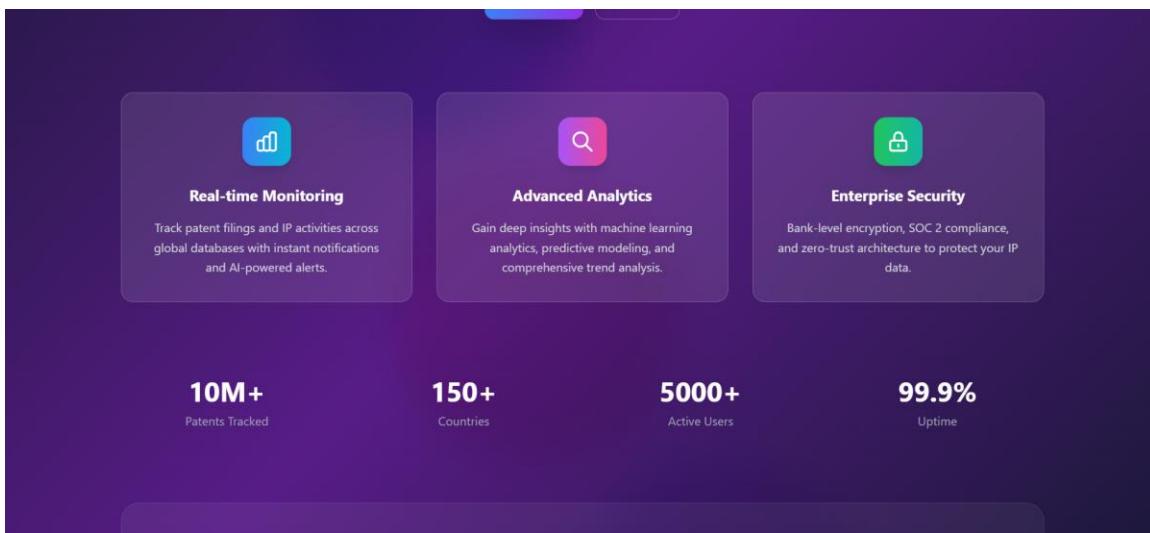
As the frontend developer, my tasks included setting up the React application, creating Login and Register mockups, and implementing them fully with responsive design.

3.1 React Frontend Setup

- Created project using CRA (Create React App)
- Organized folder structure: components, pages, assets, services
- Installed required dependencies such as React Router
- Configured routes for Landing, Login and Register pages

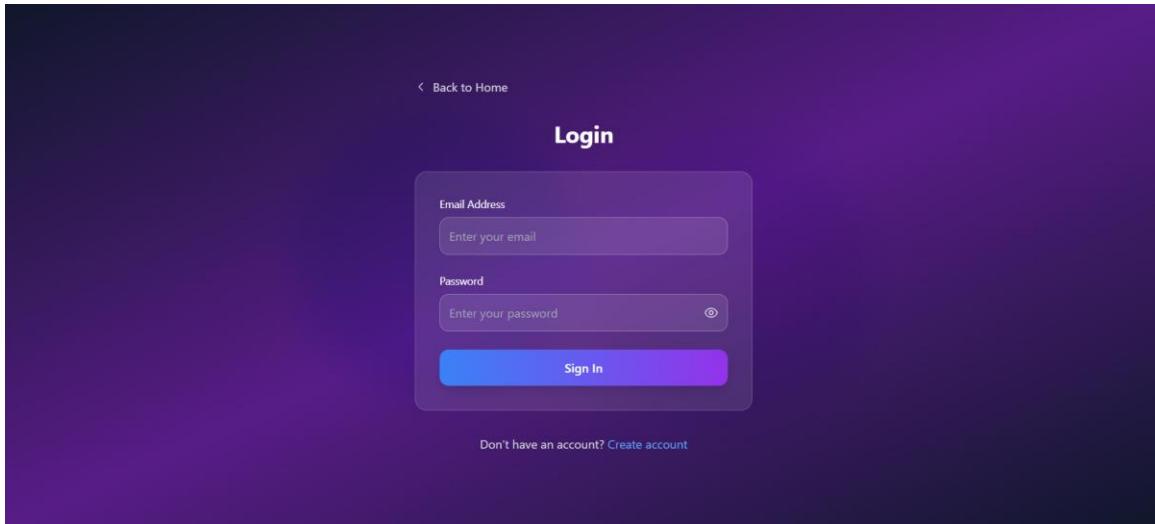
4. UI/UX Design Work (Mockups)

4.1 Landing Page Mockup



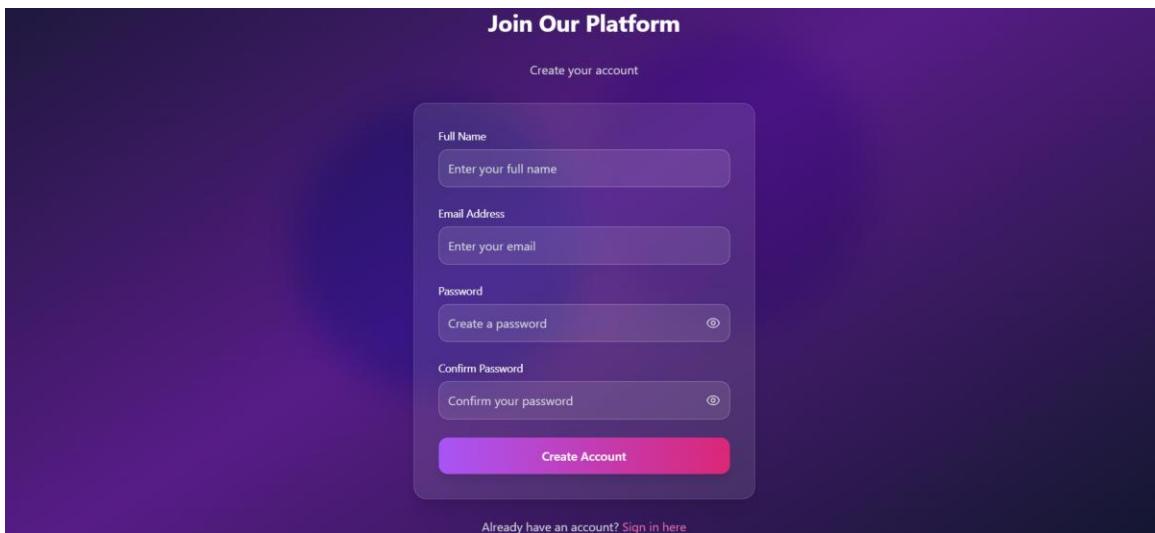
4.1 Login Page Mockup

Designed the login page layout, choosing color scheme, spacing, and fields.



4.2 Register Page Mockup

Designed a responsive registration form layout focusing on user clarity.



5. Actual Implementation

5.1 Login Page Implementation

Implemented a responsive login form with email/password fields, form validation, and error handling.

5.2 Register Page Implementation

Developed responsive register page with validation and user-friendly UI components.

6. Responsiveness Testing

Tested layouts on mobile, tablet, and desktop using Chrome to ensure consistent design.

7. Challenges & Solutions

Challenge	Solution
React setup errors	Resolved by reinstalling dependencies and using correct Node version.
Routing issues	Configured BrowserRouter and correct paths.
Form validation	Added regex and conditional rendering for errors.

8. Daily Work Log

Date	Task Completed
Dec 1	Setup React app and project structure.
Dec 2	Created landing page mockup.
Dec 3	Designed register page mockup.
Dec 4	Created login page mockup.
Dec 5	Developed landing page UI.
Dec 6	Implemented register page.
Dec 7	Made login page responsive.
Dec 8-10	Testing and UI improvements.

“Beyond my designated responsibilities, I proactively handled additional work, including the complete design and development of the Landing Page. This contribution enhanced the overall visual consistency and user experience of the platform.”

9. Conclusion

I successfully completed the frontend setup and implementation of the Landing, Login and Register pages. The UI is fully responsive and follows the project design goals. This work forms the core user authentication flow for the platform.

Milestone 2

Milestone Duration: 15 December – 26 December

1. Introduction

This document describes my contributions during Milestone 2 of the Global-IPI-Platform project. In this phase, the focus was on advanced search functionality, result visualization, map-based IP distribution, and dashboard UI/UX enhancements.

The goal of this milestone was to transform the platform from a basic authentication system into a feature-rich intellectual property intelligence dashboard.

2. Milestone 2 Objectives

- Design and implement a Search Form for patents and trademarks.
- Build a Search Results List Page with filtering, sorting, and pagination.
- Introduce a Map View to visualize geographic distribution of IP assets.

3. Technologies Used

Frontend Technologies

- React.js
- React Router
- JavaScript (ES6)
- Tailwind CSS
- Recharts (for charts & analytics)

External Services & APIs

- Google Maps JavaScript API – for geographic visualization
- Google Patents API (via API key generation) – planned backend integration
- Firebase (Firestore) – feedback & contact form storage

Tools

- VS Code
- Git & GitHub
- Chrome DevTools

4. Features Implemented

4.1 Search Form Page / Section

A comprehensive IP Search interface was designed and implemented to allow users to search Patents and Trademarks using multiple parameters.

1. Search Parameters:

- Keyword
- Assignee
- Inventor
- Jurisdiction (Country/Region)
- Status (Active, Pending, etc.)

2. Key Highlights:

- Clean and intuitive UI
- Toggle between Patent and Trademark search
- Responsive layout for all devices
- Prepared for backend API integration

Screenshot: Search Form Page

Back to Dashboard

IP Search

Search Patents & Trademarks

Search through millions of patents and trademarks worldwide

[Patents](#) [Trademarks](#)

Keyword *

Assignee

Inventor

Jurisdiction

All Jurisdictions

Status

All Statuses

Date From

dd-mm-yyyy

Date To

dd-mm-yyyy

Reset **Search**

Search Tips:

- Use quotation marks for exact phrase matching
- Use AND, OR, NOT for boolean searches
- Wildcard (*) can be used for partial matches
- Combine multiple filters for more precise results

The screenshot shows the 'IP Search' interface. At the top left is a 'Back to Dashboard' button. The title 'IP Search' is at the top right. Below the title is a large rounded rectangular search form titled 'Search Patents & Trademarks' with the sub-instruction 'Search through millions of patents and trademarks worldwide'. The search form has two tabs: 'Patents' (grayed out) and 'Trademarks' (highlighted in blue). The search area contains fields for 'Keyword *' (placeholder 'Search trademark by keyword...'), 'Owner' (placeholder 'Enter owner name'), 'Jurisdiction' (dropdown menu set to 'All Jurisdictions'), 'Status' (dropdown menu set to 'All Statuses'), 'Date From' (date input field 'dd-mm-yyyy'), 'Date To' (date input field 'dd-mm-yyyy'), and a 'Reset' button (green background) and a 'Search' button (blue background). Below the search form is a 'Search Tips' section with the following bullet points:

- Use quotation marks for exact phrase matching
- Use AND, OR, NOT for boolean searches
- Wildcard (*) can be used for partial matches
- Combine multiple filters for more precise results

4.2 Search Results List Page

A dedicated Search Results Page was developed to display fetched patents and trademarks in a structured format.

3. Implemented Functionalities:

- Display results in card/list view
- Sort results by relevance and date
- Apply filters dynamically
- Pagination for large datasets
- Status badges (Active / Pending)

4. Map View Integration:

- The List Page is linked with the Map View
- Selecting a region on the map highlights relevant IP assets
- Both list view and map view respond to the same filters

Screenshot: Search Results

The screenshot shows a search results page for the keyword "computer". The interface includes a sidebar with filters for Sort By (Relevance selected) and Status (All Statuses selected), and a "Search Summary" section indicating Type: PATENT and Keyword: computer. Two patent results are displayed:

- Smart dock with cpu&ram hot-pluggable support for mobile devices**
TW1564721B PUBLISHED Unknown
Assignee: 英特爾股份有限公司
Inventor: 李海濤
Date: 2011-12-02
The method for enhancing the computing power of a mobile electronic computing device, as in claim 8, further comprising providing a plurality of storage devices in the docking station. A method for enhancing the computing power of a mobile electronic computing devic...
- Unified Hover Implementation of Touch Screen Interface**
CN114207568A PUBLISHED Unknown
Assignee: 易享信息技术有限公司
Inventor: NS-C-P 帕米迪
Date: 2021-01-29
16. The computer-readable storage device of claim 15, wherein the cursor hover interaction functionality is implemented within the application and is configured to display additional information within the GUI related to the first visual element visual elements. 17. The...

At the bottom, there is a system tray showing weather (13°C, Partly cloudy), date (26-12-2025), and time (20:15).

This screenshot is identical to the one above, but the "Relevance" option in the Sort By dropdown is highlighted with a blue selection bar.

This screenshot is identical to the ones above, but the "All Statuses" option in the Status dropdown is highlighted with a blue selection bar.

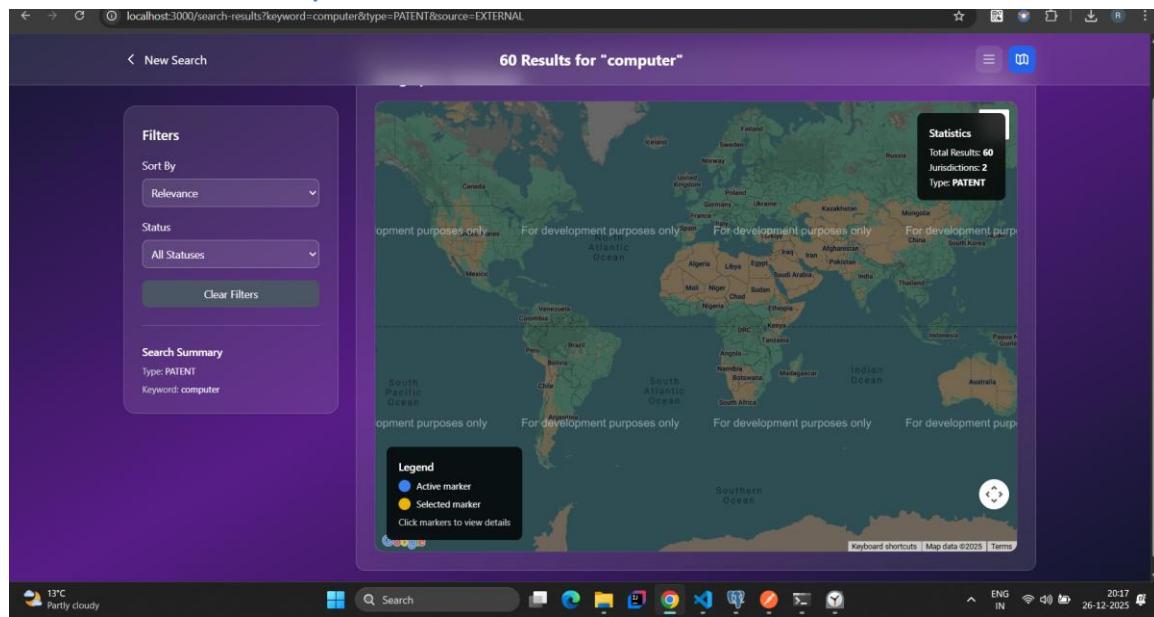
4.3 Geographic Map View (Google Maps Integration)

To enhance data visualization, a Global Map View was integrated using the Google Maps JavaScript API.

5. Map Features:

- World-level map view
- Region-wise IP distribution markers
- Marker count shows number of patents/trademarks in a region
- Clickable markers with information popups
- Side list synchronized with selected region

Screenshot: Global IP Map View



4.4 Feedback & Contact Forms (Firebase Integration)

Two interactive forms were implemented using Firebase Firestore.

6. Forms Implemented:

- Send Us a Message (Landing Page)
- Feedback Form

Screenshot: Feedback & Contact Forms

The screenshot shows a feedback form titled "We Value Your Feedback" with a purple header and a white main content area. At the top right is a "Send Feedback" button. Below it is a sub-header "Help us improve Global IP Intelligence Platform by sharing your thoughts and suggestions." The form includes fields for "Feedback Type" (set to "General Feedback"), "Overall Rating" (5 stars), "Subject" (a placeholder for a brief description of feedback), "Message" (a large text area with placeholder text "Please provide detailed feedback..."), and "Email (Optional)" (a placeholder email address "your.email@example.com"). A note below the email field states, "We'll only use this to follow up on your feedback if needed." At the bottom are "Cancel" and "Send Feedback" buttons. Below the main form is a "Quick Actions" section with three cards: "Report Bug" (with a bug icon), "Suggest Feature" (with a lightbulb icon), and "General Praise" (with a heart icon).

Back to Dashboard

Send Feedback

We Value Your Feedback

Help us improve Global IP Intelligence Platform by sharing your thoughts and suggestions.

Feedback Type

General Feedback

Overall Rating

★★★★★ (5/5)

Subject

Brief description of your feedback:

Message

Please provide detailed feedback...

Email (Optional)

your.email@example.com

We'll only use this to follow up on your feedback if needed.

Cancel

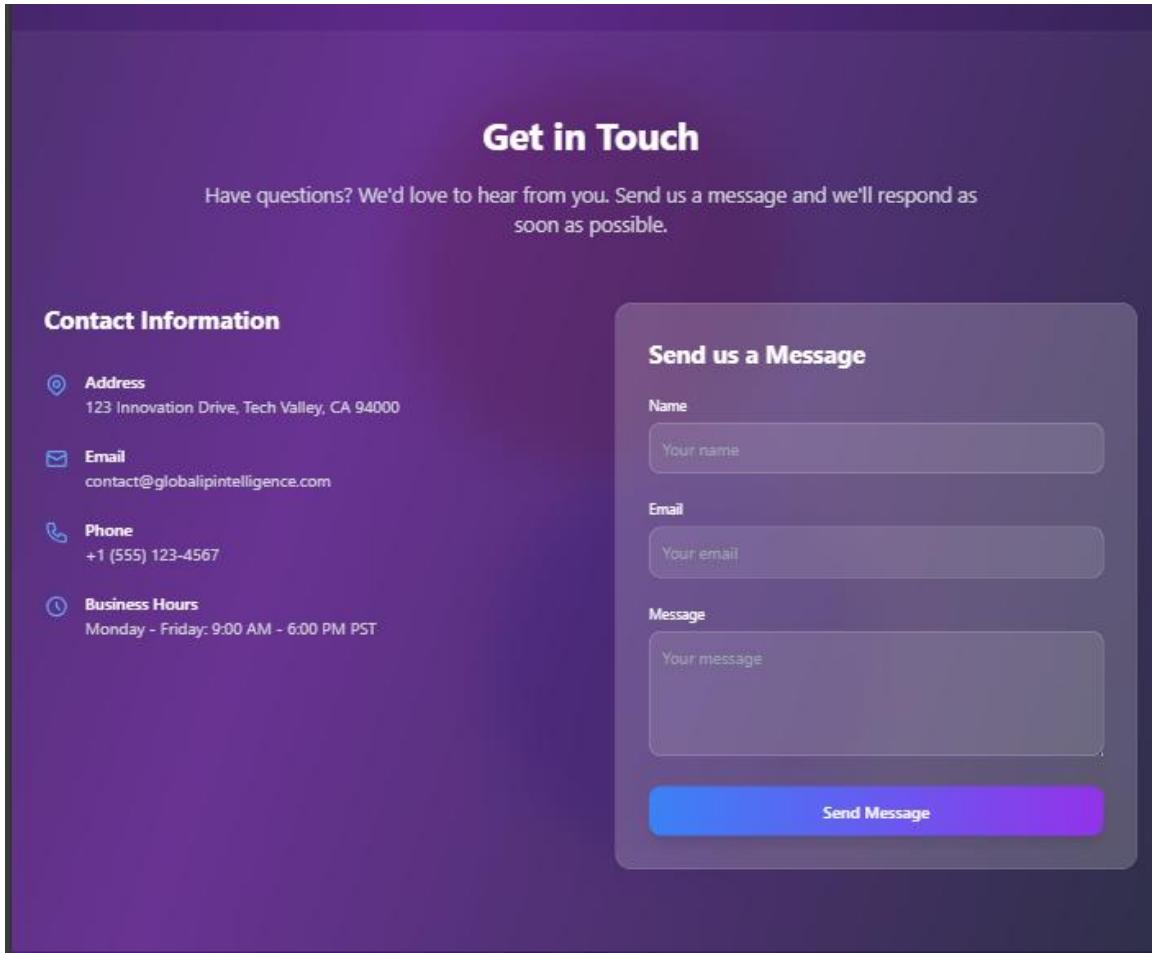
Send Feedback

Quick Actions

Report Bug
Found an issue?

Suggest Feature
Have an idea?

General Praise
Love something?



4.5 Landing Page Enhancements

The landing page was expanded to improve user engagement and professionalism by adding informational sections.

7. New Sections Added:

- About Us
- Contact Us
- Terms of Service
- Privacy Policy
- Help Center
- Feedback



Real-time Monitoring

Track patent filings and IP activities across global databases with instant notifications and AI-powered alerts.

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Advanced Analytics

Gain deep insights with machine learning analytics, predictive modeling, and comprehensive trend analysis.

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Enterprise Security

Bank-level encryption, SOC 2 compliance, and zero-trust architecture to protect your IP data.

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10M+

Patents Tracked

150+

Countries

5000+

Active Users

99.9%

Uptime

About Global IP Intelligence

Empowering innovation through intelligent intellectual property monitoring and analysis.

Our Mission

We provide innovators, law firms, and R&D teams with comprehensive tools to monitor global intellectual property activity. Our platform combines cutting-edge AI technology with extensive patent databases to deliver actionable insights.

Founded by a team of IP professionals and technology experts, we understand the challenges of staying ahead in today's fast-paced innovation landscape.

Global Coverage

150+ countries and regions

Real-time Updates

24/7 monitoring system

Why Choose Us?

- ✓ AI-powered patent analysis and trend prediction
- ✓ Comprehensive global database coverage
- ✓ Enterprise-grade security and compliance
- ✓ 24/7 expert support and consultation



Global IP Intelligence

Empowering innovation through intelligent intellectual property monitoring and analysis. Join thousands of innovators protecting their IP worldwide.



Quick Links

- [Features](#)
- [About](#)
- [Contact](#)
- [Login](#)

Support

- [Help Center](#)
- [Privacy Policy](#)
- [Terms of Service](#)
- [Documentation](#)

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5. Daily Work Log (Milestone 2)

Dec 16 – Designed Search Form UI

Dec 17 – Implemented search filters & parameters

Dec 18 – Created Search Results List view

Dec 19 – Added sorting and pagination

Dec 20 – Integrated Google Maps for IP distribution

Dec 21 – Linked map view with search results

Dec 22 – Dashboard UI/UX enhancements

Dec 23 – Implemented Firebase feedback & contact forms

Dec 24 – Landing page improvements & content sections

Dec 25 – Testing, bug fixing, and UI refinements

6. Challenges & Solutions

Challenge: Handling large search results	Solution: Implemented pagination
Challenge: Map integration complexity	Solution: Used mock data for stability
Challenge: API errors during development	Solution: Deferred backend API integration
Challenge: UI consistency across pages	Solution: Reused components and styles

7. Learning Outcomes

- Hands-on experience with Google Maps API
- Improved understanding of search-driven UI design
- Experience integrating Firebase into React
- Practical knowledge of data visualization
- Better UI/UX decision-making for complex platforms

8. Conclusion

During Milestone 2, I successfully implemented advanced search functionality, result visualization, map-based analytics, and dashboard enhancements for the Global-IPI-Platform. This milestone significantly improved the platform's usability and transformed it into a feature-rich IP intelligence system.

Milestone: 3

Focus Area: Filing Tracker Module & Subscription Module

1. Introduction

In this milestone, the platform was enhanced with advanced SaaS-level features including IP Filing lifecycle tracking and a subscription-based feature access system.

2. Milestone 3 Objectives

- Design and implement Filing Tracker module
- Track IP application, grant, renewal, and expiry status
- Provide alert and reminder UI for filings
- Design subscription plans and pricing page
- Implement test payment flow for subscriptions
- Restrict premium features based on subscription plan

3. Technologies Used

Frontend: React.js, React Router, JavaScript (ES6), Tailwind CSS

Visualization: Recharts

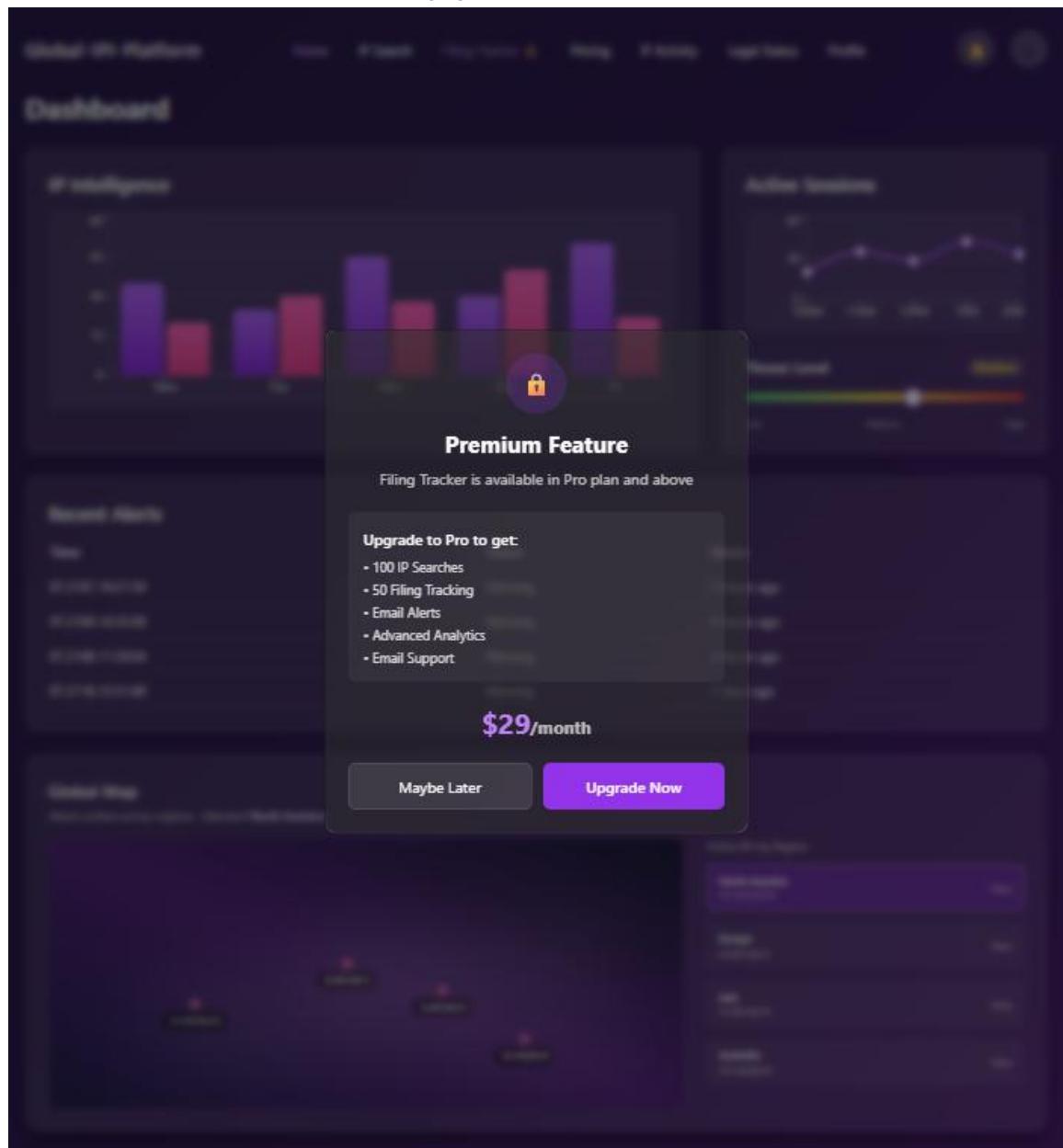
Tools: VS Code, GitHub

4. Features Implemented

4.1 Premium Feature Restriction

Premium features are restricted to Pro and Enterprise plans. Free users are shown an upgrade prompt.

Screenshot: Premium Feature Lock Popup



4.2 Subscription & Pricing Module

A subscription system was implemented with Free, Pro, and Enterprise plans.

Screenshot: Pricing Page & Feature Comparison

Choose Your Plan

Select the perfect plan for your IP management needs

Current Plan	Free	Pro	Enterprise
	\$0 /month	\$29 /month	\$99 /month
	<ul style="list-style-type: none">✓ 10 IP Searches✓ 5 Filing Tracking✗ Email Alerts✗ Advanced Analytics✗ API Access✓ Community Support	<ul style="list-style-type: none">✓ 100 IP Searches✓ 50 Filing Tracking✓ Email Alerts✓ Advanced Analytics✗ API Access✓ Email Support	<ul style="list-style-type: none">✓ Unlimited IP Searches✓ Unlimited Filing Tracking✓ Email Alerts✓ Advanced Analytics✓ API Access✓ Priority Support
	<button>Current Plan</button>	<button>Upgrade</button>	<button>Upgrade</button>

Feature Comparison

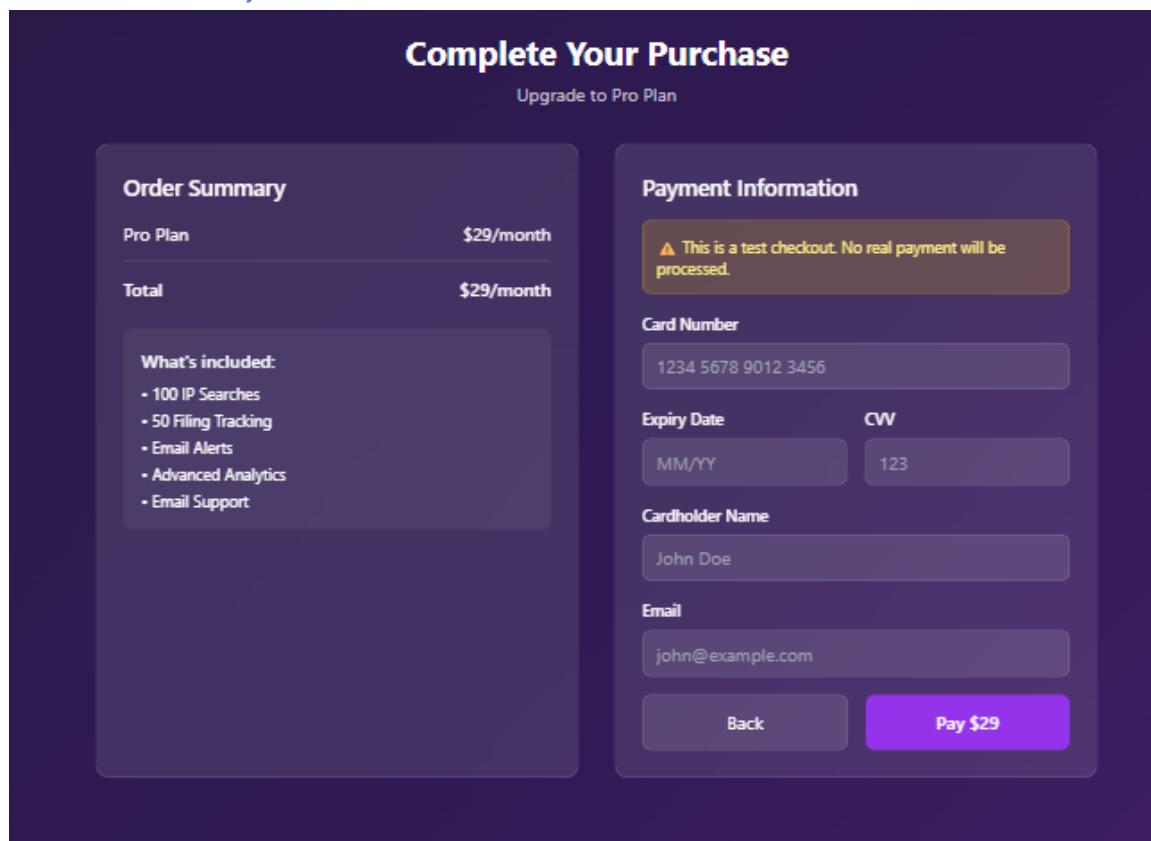
Feature	Free	Pro	Enterprise
IP Searches	10/month	100/month	Unlimited
Filing Tracking	5 filings	50 filings	Unlimited
Email Alerts	✗	✓	✓
Advanced Analytics	✗	✓	✓
API Access	✗	✗	✓
Support	Community	Email	Priority

[Back to Dashboard](#)

4.3 Test Payment Flow

A mock payment checkout was implemented for subscription upgrades.

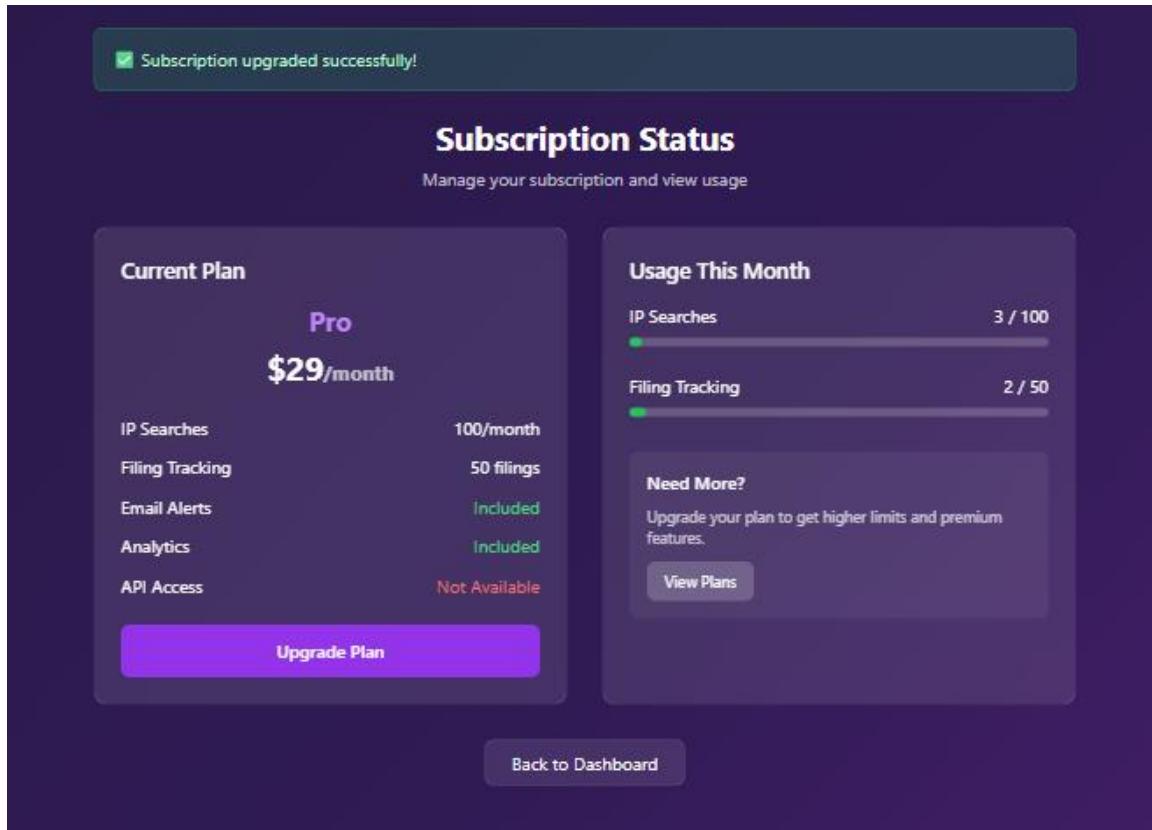
Screenshot: Test Payment Checkout



4.4 Subscription Status Dashboard

Users can view subscription details and monthly usage limits.

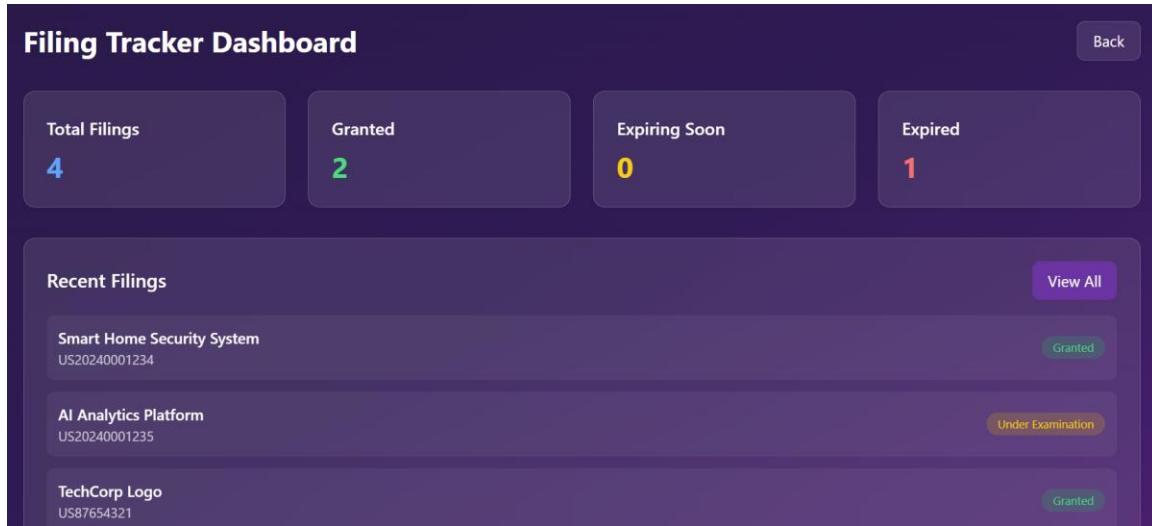
Screenshot: Subscription Status Page



4.5 Filing Tracker Dashboard

A dashboard summarizing IP filings including granted, expiring, and expired filings.

Screenshot: Filing Tracker Dashboard



4.6 Filing List & Filters

Detailed filing list with filtering by status, type, and jurisdiction.

Screenshot: Filing List Page

Filing List							Back to Dashboard
Filters							
All Statuses		All Types		All Jurisdictions			
Filings (4)							
Application Number	Title	Type	Status	Filing Date	Expiry Date	Actions	
US20240001234	Smart Home Security System	Patent	Granted	2023-01-15	2044-01-15	View	
US20240001235	AI Analytics Platform	Patent	Under Examination	2023-08-20	2043-08-20	View	
US87654321	TechCorp Logo	Trademark	Granted	2022-05-10	2025-05-10	View	
US20240001236	Mobile Data Privacy App	Patent	Pending	2023-02-01	2044-02-01	View	

4.7 Filing Details & Timeline

Detailed filing information with visual status timeline.

Screenshot: Filing Details Page

Filing Details		Back to List
Filing Information		
Title	Smart Home Security System	
Application Number	US20240001234	
Type	Patent	Jurisdiction
	US	
Status	Granted	
Filing Date	2023-01-15	Expiry Date
	2044-01-15	
Alert Notifications	<input checked="" type="checkbox"/> Get notified about renewals and expiry	

Status Timeline

- Filed 2023-01-15
- Under Examination 2023-06-15
- Granted 2024-01-15
- Expiry

5. Challenges & Solutions

Complex filing lifecycle → Implemented timeline-based UI

Subscription logic → Used mock payment system

Feature restriction → Conditional rendering

6. Learning Outcomes

- SaaS subscription architecture
- IP filing lifecycle understanding
- Advanced UI/UX design

- Frontend access control

7. Conclusion

Milestone 3 elevated the platform to a professional SaaS-level solution by introducing filing management and subscription-based feature control.

Milestone 4

Milestone Duration: 12 January – 21 January

Focus Area: Admin Dashboard, Backend Integration, Filing Management

1. Introduction

This document describes the work completed during Milestone 4 of the Global-IPI-Platform project. The primary focus of this milestone was the design, development, and integration of the Admin Dashboard, along with full frontend-backend integration for administrative and filing management functionalities.

2. Milestone 4 Objectives

- Design and implement a complete Admin Dashboard
- Integrate frontend with backend APIs for admin functionalities
- Develop monitoring and management sections for administrators
- Implement Filing Form with frontend and backend integration
- Enable detailed filing tracking and lifecycle visualization
- Enhance UI/UX consistency across the entire platform

3. Technologies Used

Frontend Technologies

- React.js
- React Router
- JavaScript (ES6)
- Tailwind CSS
- Recharts

Backend Technologies

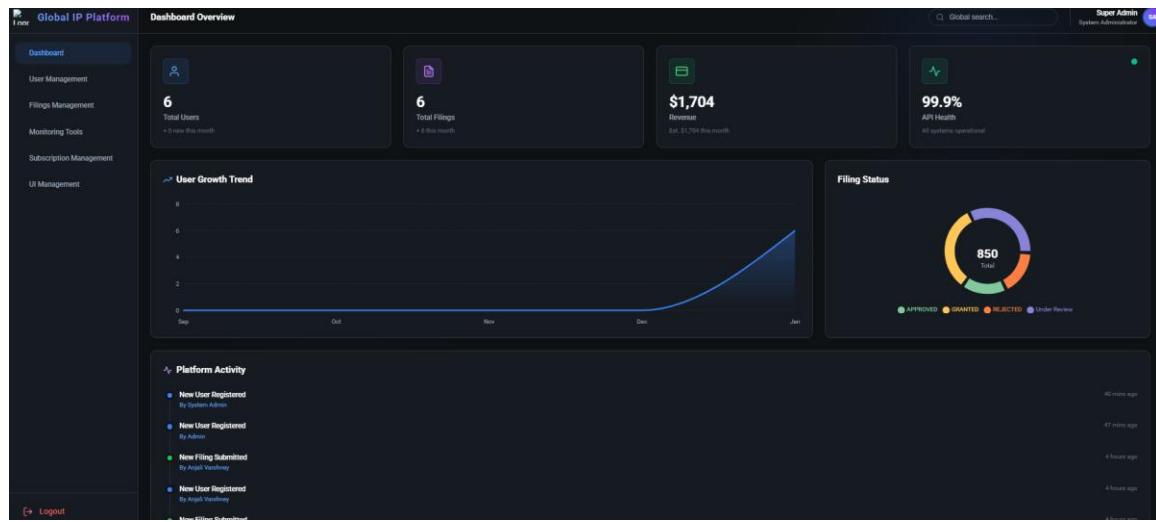
- Spring Boot
- Spring Security (JWT)
- REST APIs
- PostgreSQL

4. Features Implemented

4.1 Admin Dashboard

A comprehensive Admin Dashboard was developed including analytics, monitoring, and management features.

Screenshot: Admin Dashboard Overview



4.2 Frontend–Backend Integration

All admin modules were fully integrated with backend APIs.

4.3 Filing Form & Management

A full filing management system including form submission, listing, and detailed views was implemented.

Screenshot: Filing Form

File a New Patent

A guided multi-step filing wizard to prepare your application.

Estimated time: ~10 min

1 Applicant Details 2 Patent Details 3 Fees & Payment 4 Review & Submit

Applicant Details

Applicant Name

Applicant Email

Phone

Applicant Type

Nationality

Address (Street)

City

State

Postal Code

ID Type

ID Number

Correspondence address same as applicant address

Are you the inventor?

Filing Role

Clear Draft Next

My Filings

All filings you created from the filing form.

[Back to Dashboard](#)
[New Filing](#)

Automated device provisioning and activation GRANTED

APP-1769004438621 • India

Filing Date: 2026-01-21 **Expiry Date:** 2046-01-21

Tracked: 1/21/2026, 7:37:18 PM View

ShareBite APPROVED

APP-1769002950188 • WIPO

Filing Date: 2026-01-21 **Expiry Date:** 2046-01-21

Tracked: 1/21/2026, 7:12:30 PM View

Artificial Intelligence11 GRANTED

APP-1769000380233 • India

Filing Date: 2026-01-21 **Expiry Date:** 2046-01-21

Tracked: 1/21/2026, 6:29:40 PM View

Gesture Under Review

APP-1768844406571 • India

Filing Date: 2026-01-19 **Expiry Date:** 2046-01-19

Tracked: 1/19/2026, 11:10:06 PM View

← Automated device provisioning and activation

App #: APP-1769004438621 • India • Last Updated: 1/21/2026

GRANTED
 Download Dossier

Corrections Submitted & Pending Review

{"feedback": "Please provide drawings", "requestedFields": ["title", "abstract", "applicantName"]}

Application Timeline

- Filed 2026-01-21
- Under Review
- Approved
- Granted 2026-01-21
- EXPIRED 2046-01-21

Applicant & Inventors

APPLICANT NAME
Anjali Varshney
India

INVENTORS
Anjali Ritika Pushpa

Filing Metadata

Filing Date 2026-01-21	Applicant Type Individual
---------------------------	------------------------------

Abstract

There is provided a wireless end-user device including a wireless wide area network (WWAN) modem, a memory storing a WWAN network access policy including one or more first policy instructions associated with a first software application, and one or more processors to provide, using the WWAN modem, one or more network data traffic

Documents

Specification: aadharID.pdf Ref

Detailed Description

TECHNICAL FIELD
AI

PROBLEM STATEMENT
XYZ

NOVELTY CLAIMS & INVENTION
XYZ

4.4 Filing Tracker & Lifecycle

Filing lifecycle tracking with visual timelines was implemented.

Screenshot: Filing Tracker

Filing Tracker Dashboard

Total Filings: 3 Granted: 3 Expiring Soon: 0 Expired: 0

Recent Filings

Artificial intelligence (AI) based cyber threat analyst to support a cyber for fuzzy concept mapping, voting ontology crowd sourcing, and technology ...		Systems and methods for data processing and enterprise AI applications	
Type:	Patent	Type:	Patent	Type:	Patent
Jurisdiction:	US	Jurisdiction:	US	Jurisdiction:	US
Filed:	2020-07-29	Filed:	2021-05-10	Filed:	2020-10-02
Expiry:	2040-07-29	Expiry:	2041-05-10	Expiry:	2040-10-02
View	Edit	View	Edit	View	Edit
Copy#	Alerts	Copy#	Alerts	Copy#	Alerts

Filing List

Filings (3)

Application Number	Title	Type	Status	Filing Date	Expiry Date	Actions
US11463457B2	Artificial intelligence (AI) based cyber threat analyst to support a cyber ...	Patent	GRANTED	2020-07-29	2040-07-29	View
US11762912B2	... for fuzzy concept mapping, voting ontology crowd sourcing, and technology ...	Patent	GRANTED	2021-05-10	2041-05-10	View
US11954112B2	Systems and methods for data processing and enterprise AI applications	Patent	GRANTED	2020-10-02	2040-10-02	View

Filing Details

Filing Information

Title: Artificial intelligence (AI) based cyber threat analyst to support a cyber ...
 Application Number: US11463457B2
 Type: Patent
 Status: GRANTED
 Filing Date: 2020-07-29
 Expiry Date: 2040-07-29

Status Timeline

- Filed: 2020-07-29
- Under Examination: 2022-10-04
- Granted: 2022-10-04
- Expiry: 2040-07-29

Alert Notifications
 Get notified about renewals and expiry

4.5 UI/UX Enhancements

UI/UX improvements were applied across the entire platform.

Dashboard Overview

Global search... Super Admin System Administrator SA

Filing Management

Filings Analytics

Total Filings 6	Under Review / Filed 1	Approved / Granted 5	Pending Response 0
---------------------------	----------------------------------	--------------------------------	------------------------------

Patent Filings

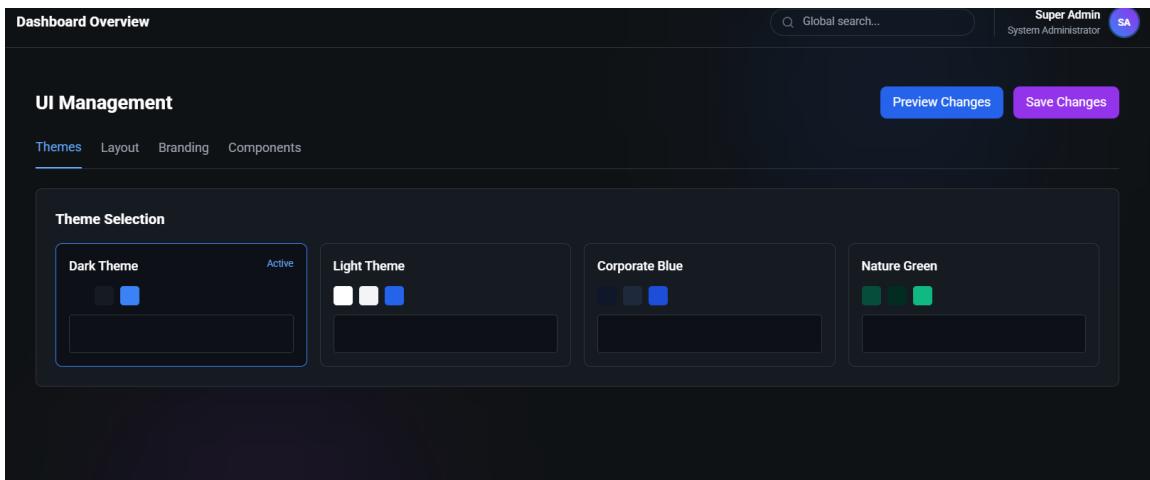
FILING DETAILS	STATUS	DATE	APP NUMBER	ACTIONS
ShareBite Anjali Varshney (Individual)	GRANTED	2026-01-16	APP-1768563665678	View / Feedback GRANTED
Gesture Anjali (Individual)	Under Review	2026-01-19	APP-1768844406571	View / Feedback Under Review
ShareBite jsdj (Individual)	APPROVED	2026-01-21	APP-1769002950188	View / Feedback APPROVED
Automated device provisioning and activation Anjali Varshney (Individual)	GRANTED	2026-01-21	APP-1769004438621	View / Feedback GRANTED

Dashboard Overview Super Admin System Administrator

Filing Details

Patent Filings	FILING DETAILS	Application #
ShareBite	Anjali Varshney	APP-1768563665678
Gesture	Anjali (Individual)	Type Design
Abstract	This is a website that helps donor and receiver to connect with each other so that donor can donate leftover food.	
Admin Feedback	under examination you	
Request Field Corrections:	<input type="checkbox"/> Title <input type="checkbox"/> Tech Field <input type="checkbox"/> Applicant Name <input type="checkbox"/> Abstract <input type="checkbox"/> Novelty <input type="checkbox"/> Inventors	

[Close](#) [Save & Send Feedback](#)



5. Challenges & Solutions

Admin data complexity → Modular APIs

Integration consistency → DTO-based contracts

Large datasets → Pagination & filters

6. Learning Outcomes

- Admin dashboard development
- Full-stack integration
- Filing lifecycle management
- UI/UX optimization

7. Additional Contributions

I independently completed filing form development, backend integration, and enhanced UI/UX consistency.

8. Conclusion

Milestone 4 delivered a fully integrated admin system and filing management module, making the platform enterprise-ready.