

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

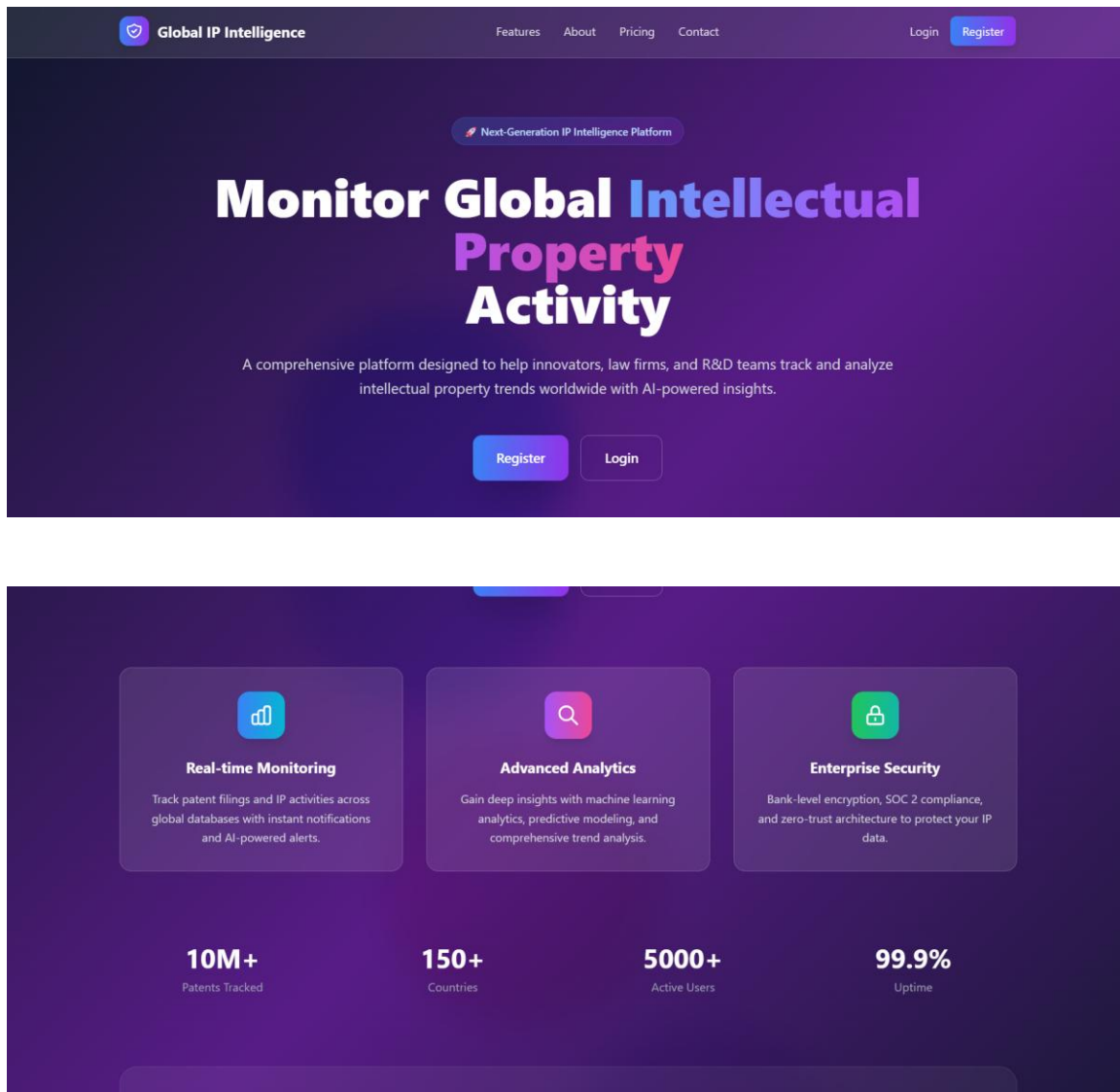
As the frontend developer, my tasks included setting up the React application, creating Login and Register mockups, and implementing them fully with responsive design.

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

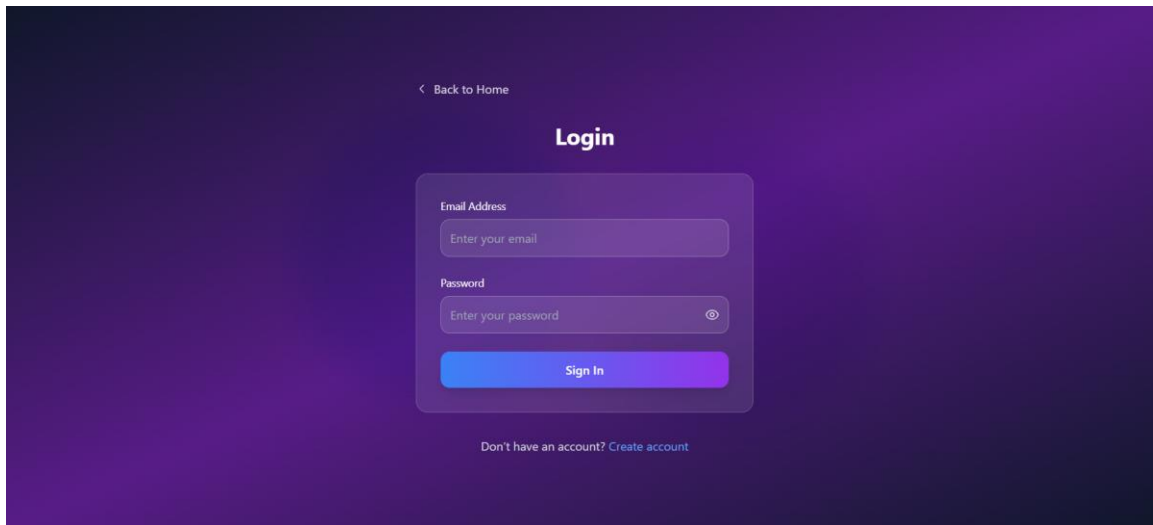
4. UI/UX Design Work (Mockups)

4.1 Landing Page Mockup



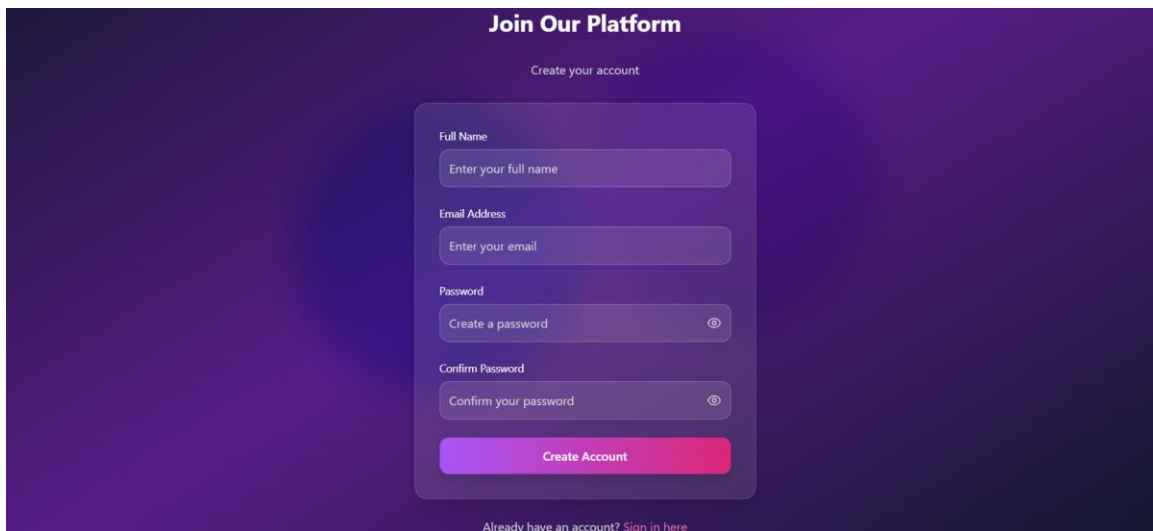
4.1 Login Page Mockup

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 *

Search patent by keyword...

Assignee

Enter assignee name

Inventor

Enter inventor name

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 displays the 'IP Search' interface. At the top, there is a navigation bar with a '< Back to Dashboard' link on the left and the title 'IP Search' on the right. Below this, a central card titled 'Search Patents & Trademarks' contains the subtext 'Search through millions of patents and trademarks worldwide'. Inside the card, there are two tabs: 'Patents' and 'Trademarks', with 'Trademarks' currently selected. A 'Keyword' input field is present with the placeholder text 'Search trademark by keyword...'. Below the keyword field, there are four filter sections: 'Owner' with an input field 'Enter owner name', 'Jurisdiction' with a dropdown menu set to 'All Jurisdictions', 'Status' with a dropdown menu set to 'All Statuses', and 'Date From' with a date input field set to 'dd-mm-yyyy'. Additionally, there is a 'Date To' input field set to 'dd-mm-yyyy'. At the bottom of the filters, there are two buttons: 'Reset' and 'Search'. Below the filters, a 'Search Tips' section provides instructions: '• Use quotation marks for exact phrase matching', '• Use AND, OR, NOT for boolean searches', '• Wildcard (*) can be used for partial matches', and '• 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.

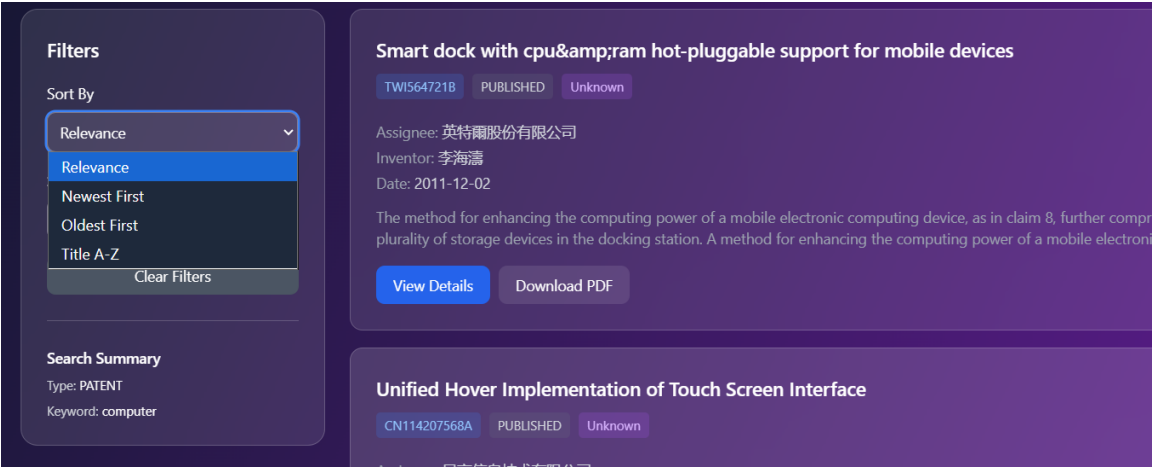
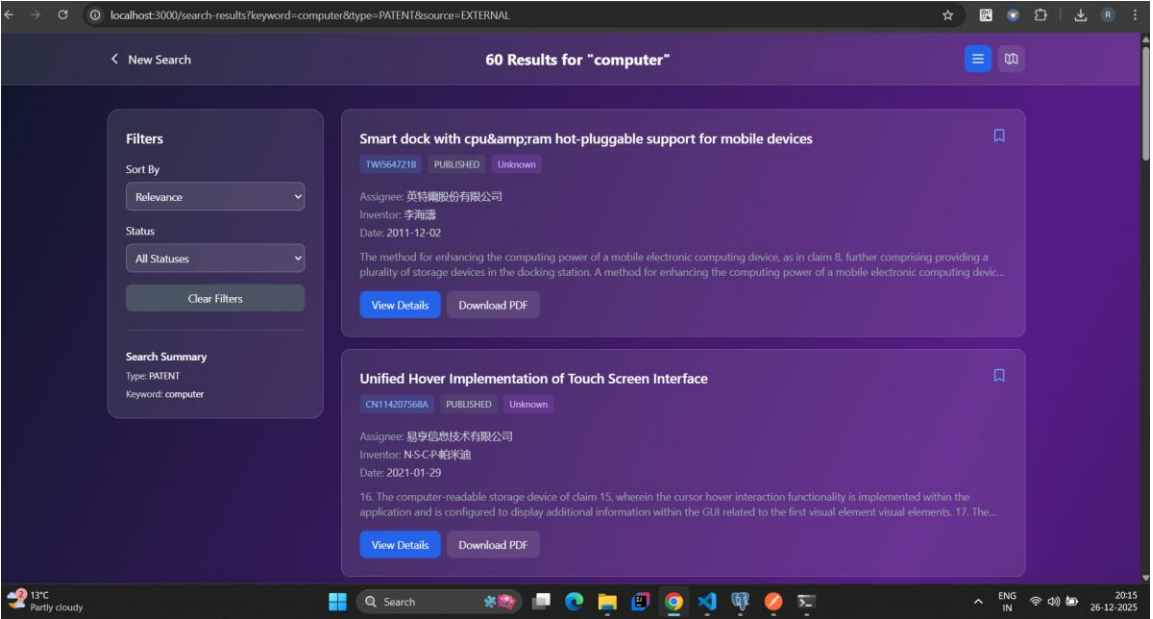
3. Implemented Functionalities:

- 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



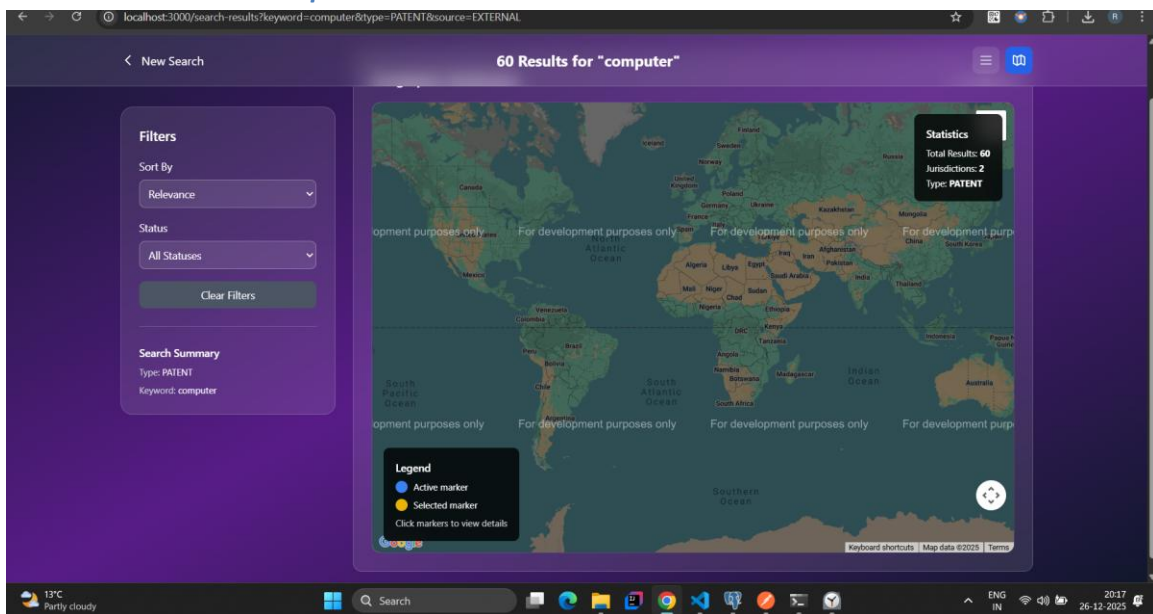
4.3 Geographic Map View (Google Maps Integration)

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

[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?

Get in Touch

Have questions? We'd love to hear from you. Send us a message and we'll respond as soon as possible.

Contact Information

Address
123 Innovation Drive, Tech Valley, CA 94000

Email
contact@globalipintelligence.com

Phone
+1 (555) 123-4567

Business Hours
Monday - Friday: 9:00 AM - 6:00 PM PST

Send us a Message

Name
Your name

Email
Your email

Message
Your message

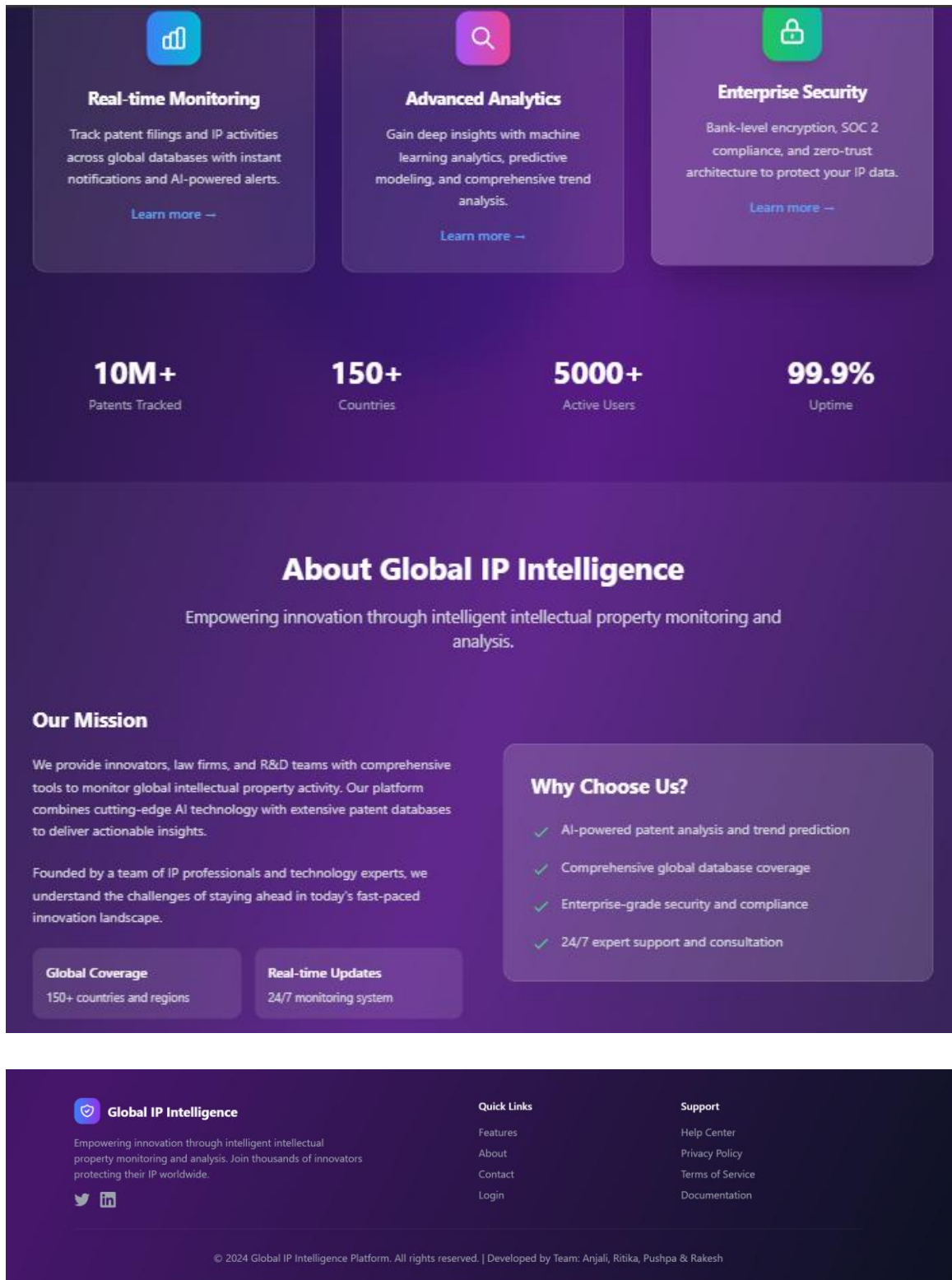
Send Message

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



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

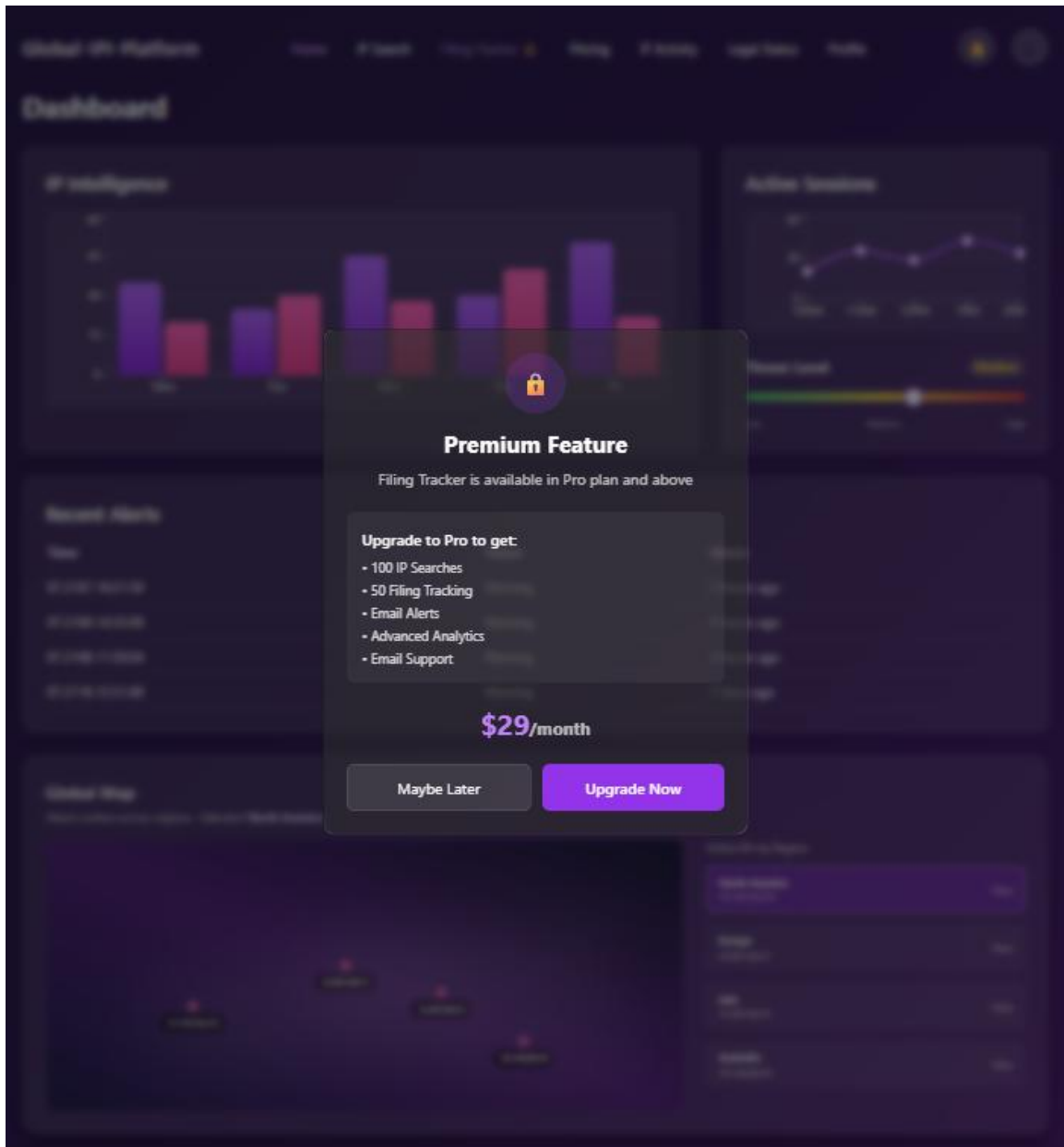
Tools: VS Code, GitHub

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

\$0/month

- ✓ 10 IP Searches
- ✓ 5 Filing Tracking
- ✗ Email Alerts
- ✗ Advanced Analytics
- ✗ API Access
- ✓ Community Support

Current Plan

Pro

\$29/month

- ✓ 100 IP Searches
- ✓ 50 Filing Tracking
- ✓ Email Alerts
- ✓ Advanced Analytics
- ✗ API Access
- ✓ Email Support

Upgrade

Enterprise

\$99/month

- ✓ Unlimited IP Searches
- ✓ Unlimited Filing Tracking
- ✓ Email Alerts
- ✓ Advanced Analytics
- ✓ API Access
- ✓ Priority Support

Upgrade

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

Complete Your Purchase

Upgrade to Pro Plan

Order Summary

Pro Plan	\$29/month
<hr/>	
Total	\$29/month

What's included:

- 100 IP Searches
- 50 Filing Tracking
- Email Alerts
- Advanced Analytics
- Email Support

Payment Information

⚠ This is a test checkout. No real payment will be processed.

Card Number

1234 5678 9012 3456

Expiry Date CW

MM/YY 123

Cardholder Name

John Doe

Email

john@example.com

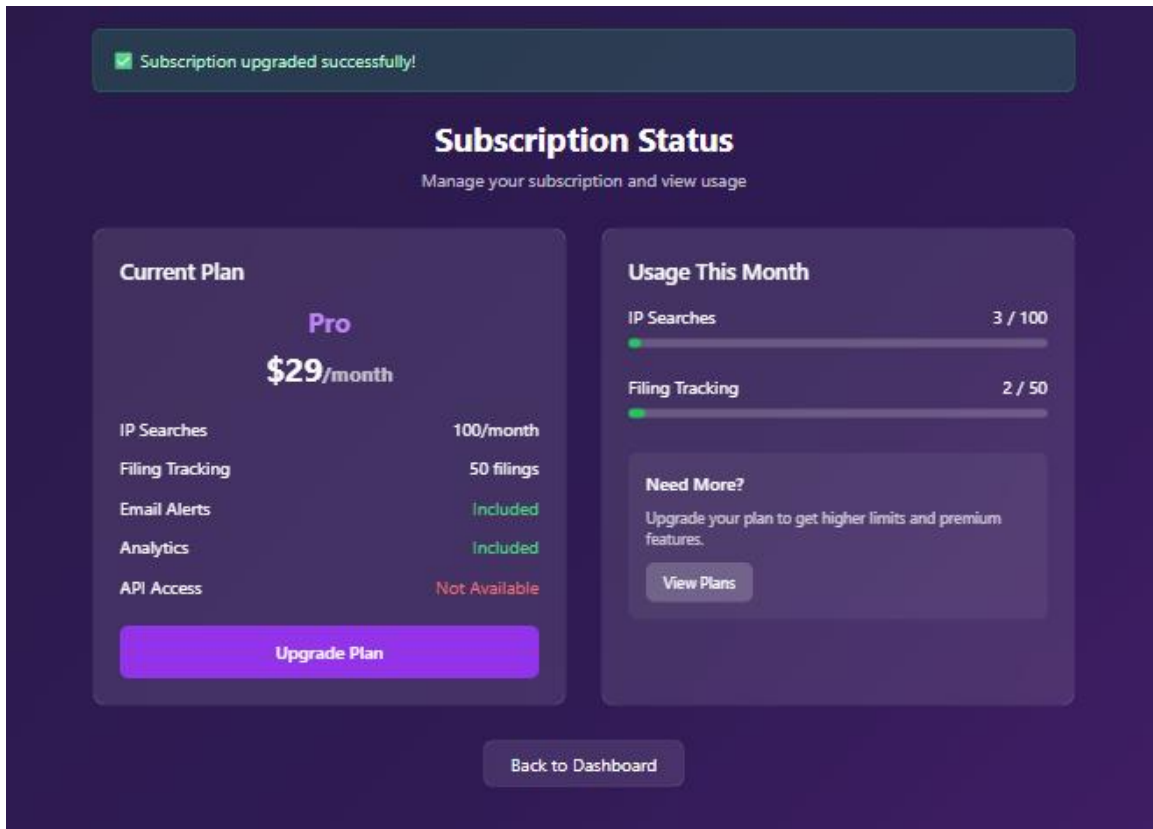
Back

Pay \$29

4.4 Subscription Status Dashboard

Users can view subscription details and monthly usage limits.

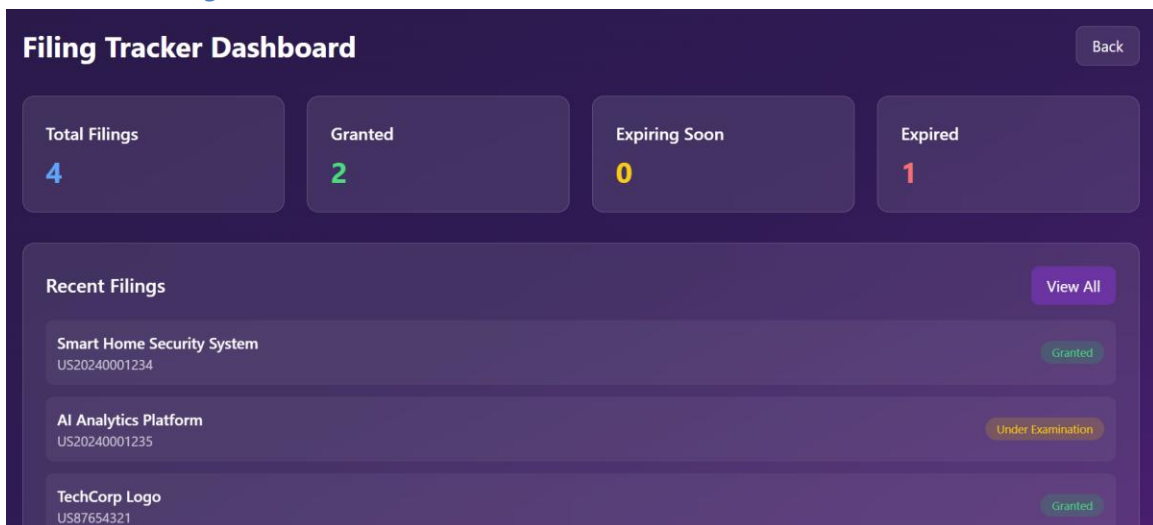
Screenshot: Subscription Status Page



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
US2023123456	Mobile App for Design	Patent	Pending	2023-03-01	2034-03-01	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
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

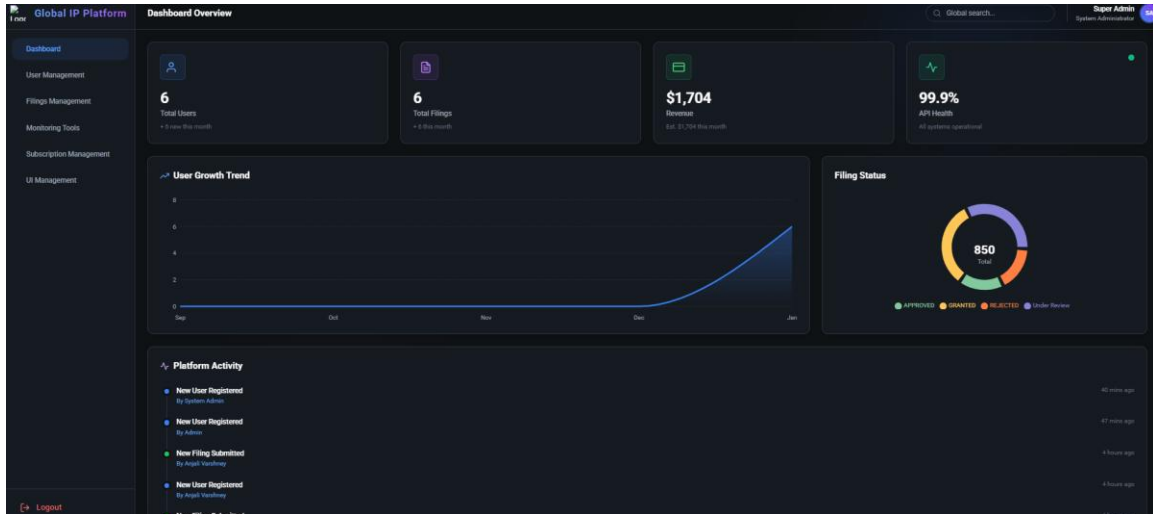
- Spring Boot
- Spring Security (JWT)
- REST APIs
- PostgreSQL

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

Individual

▼

Nationality

Address (Street)

City

State

Postal Code

ID Type

Select ID

▼

ID Number

☒ Correspondence address same as applicant address

☒ Are you the inventor?

Filing Role

Inventor

▼

Clear Draft

Next

My Filings

All filings you created from the filing form.

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

Automated device provisioning and activation

APP-1769004438621 • India

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

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

GRANTED

View

ShareBite

APP-1769002950188 • WIPO

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

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

APPROVED

View

Artificial Intelligence11

APP-1769000380233 • India

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

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

GRANTED

View

Gesture

APP-1768844406571 • India

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

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

Under Review

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\"]]"

Applicant & Inventors

APPLICANT NAME

Anjali Varshney

India

INVENTORS

Anjali Ritika Pushpa

Application Timeline

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

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.

Detailed Description

TECHNICAL FIELD

AI

PROBLEM STATEMENT

XYZ

NOVELTY CLAIMS & INVENTION

XYZ

Filing Metadata

Filing Date	Applicant Type
2026-01-21	Individual

Documents

Specification: aadharID.pdf	Ref
-----------------------------	-----

4.4 Filing Tracker & Lifecycle

Filing lifecycle tracking with visual timelines was implemented.

Screenshot: Filing Tracker

Filing Tracker Dashboard

[File New Patent](#)[Back](#)

Total Filings
3

Granted
3

Expiring Soon
0

Expired
0

Recent Filings

All Statuses

View All

Artificial intelligence (AI) based cyber threat analyst to support a cyber ...
US11463457B2
Type: Patent
Jurisdiction: US
Filed: 2020-07-29
Expiry: 2040-07-29

View Edit Copy# Alerts

... for fuzzy concept mapping, voting ontology crowd sourcing, and technology ...
US11762912B2
Type: Patent
Jurisdiction: US
Filed: 2021-05-10
Expiry: 2041-05-10

View Edit Copy# Alerts

Systems and methods for data processing and enterprise AI applications
US11954112B2
Type: Patent
Jurisdiction: US
Filed: 2020-10-02
Expiry: 2040-10-02

View Edit Copy# Alerts

Filing List

[Back to Dashboard](#)

Filters

All Statuses

All Types

All Jurisdictions

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

[Back to List](#)

Filing Information

Title

Artificial intelligence (AI) based cyber threat analyst to support a cyber ...

Application Number

US11463457B2

Type

Patent

Jurisdiction

US

Status

GRANTED

Filing Date

2020-07-29

Expiry Date

2040-07-29

Alert Notifications

Get notified about renewals and expiry

☒

Status Timeline

● Filed

2020-07-29

● Under Examination

● Granted

2022-10-04

○ Expiry

2040-07-29

4.5 UI/UX Enhancements

UI/UX improvements were applied across the entire platform.

Dashboard Overview

Global search...

Super Admin
System Administrator

Filing Management

Export Report

Filings

Analytics

Total Filings
6

Under Review / Filed
1

Approved / Granted
5

Pending Response
0

Patent Filings

Search...

All Status

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

Dashboard Overview

Global search...

Super Admin
System Administrator

Patent Filings

Search...

All Status

Filing Details

X

Title

ShareBite

Application #

APP-1768563665678

Applicant

Anjali Varshney

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

This feedback will be visible to the user on their dashboard.

under examination you

Request Field Corrections:

Title

Tech Field

Applicant Name

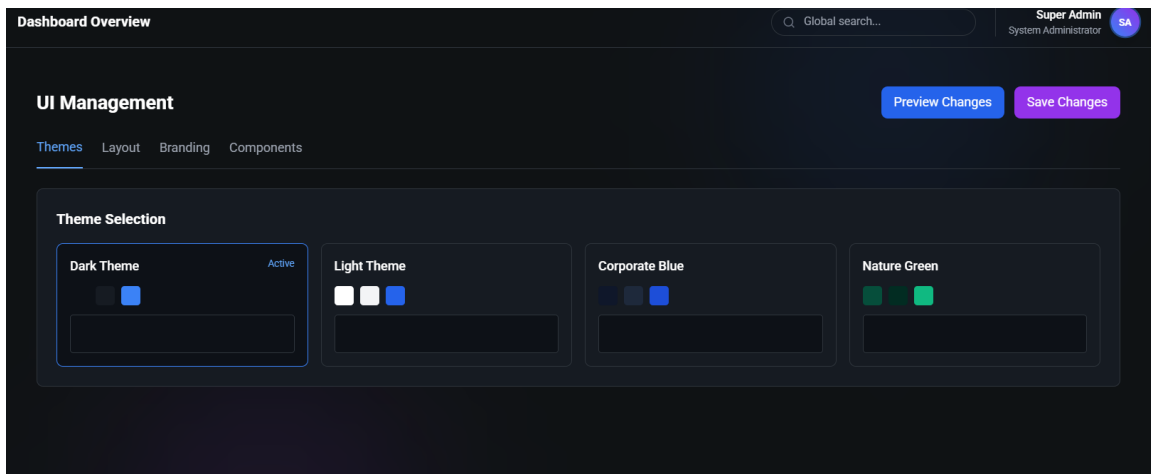
Abstract

Novelty

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.