

LEGALTRACK

Submitted By:
Krish Sapra – E23CSEU0883
Mishrita – E23CSEU0880

Subject: Artificial Intelligence and Machine Learning
Subject Code: CSET301

CERTIFICATE

This is to certify that the project report titled "Legal Track" submitted by Krish Sapra (E23CSEU0883) and Mishrita (E23CSEU0880) in partial fulfilment of the requirements for the subject *Artificial Intelligence and Machine Learning (CSET301)* is a record of their own work carried out under my guidance.

Signature of Guide
Name: Dr. Yajnaseni Dash
Designation: Lab Instructor

DECLARATION

We hereby declare that the project titled "Legal Track" is our original work and has not been submitted to any other institution or university for the award of any degree or diploma. All the work has been carried out under the guidance of our project mentor.

Krish Sapra (E23CSEU0883)
Mishrita (E23CSEU0880)

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to our project guide for their valuable guidance and constant support throughout this project. We also extend our thanks to our faculty members, friends, and family who provided us with motivation and assistance.

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1. ABSTRACT

Legal Track is an AI-powered FIR registration system featuring IPC section prediction, voice-to-text, legal chatbot support, and secure dual storage using MySQL and Pinata IPFS. Built with Tailwind CSS, Framer Motion, and ML APIs, its future scope includes lawyer recommendations and mobile access for enhanced legal assistance and justice delivery.

2. INTRODUCTION

Filing a First Information Report (FIR) is a critical step in initiating legal proceedings. However, traditional FIR filing processes are often time-consuming, error-prone, and inaccessible to the general public. LegalTrack addresses these issues by providing an AI-integrated, secure, and user-friendly platform for online FIR registration.

3. LITERATURE REVIEW

Past research and existing systems reveal the lack of automation and AI support in legal documentation. Manual FIR filing systems are prone to human error, legal inaccuracies, and data mishandling. LegalTrack builds on existing research in NLP, AI law assistance, and secure data storage to provide a more reliable solution.

4. METHODOLOGY

LegalTrack uses Machine Learning algorithms to predict relevant IPC sections based on the user's case description. Users can file an FIR by entering personal details and incident information. The system also includes voice-to-text features and a legal chatbot for enhanced user support. Data is stored using a structured SQL database.

5. IMPLEMENTATION

Technologies Used:

- Frontend: HTML, Tailwind CSS, Framer Motion
- Backend: Machine Learning algorithms, API integration, SQL database, Pinata IPFS
- IPC Model: Dense Neural Network

Key Features:

- IPC Section Prediction using AI
- Online FIR Form Submission
- Storage System (SQL)
- Voice-to-Text Conversion
- AI Legal Chatbot

6. RESULTS AND DISCUSSION

LegalTrack enables users to accurately and efficiently file FIRs online. The IPC prediction reduces legal ambiguity, while secure storage ensures data integrity. User testing indicated faster filing times and higher user satisfaction.

7. CONCLUSION

LegalTrack enhances the FIR registration process with AI-driven features and decentralized storage. It makes the process more accessible, accurate, and transparent, thereby contributing to a more efficient legal system.

8. FUTURE SCOPE

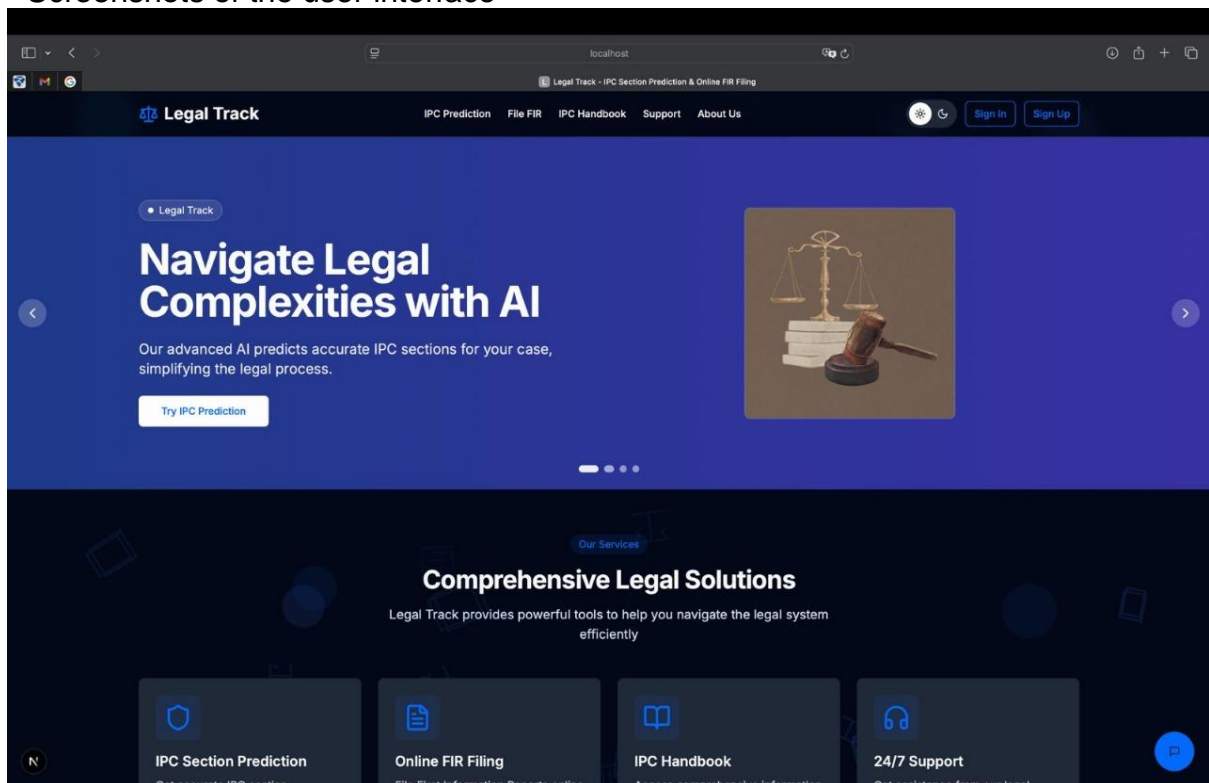
- AI-based lawyer recommendation system
- Mobile application for remote access
- Integration with police databases and court systems

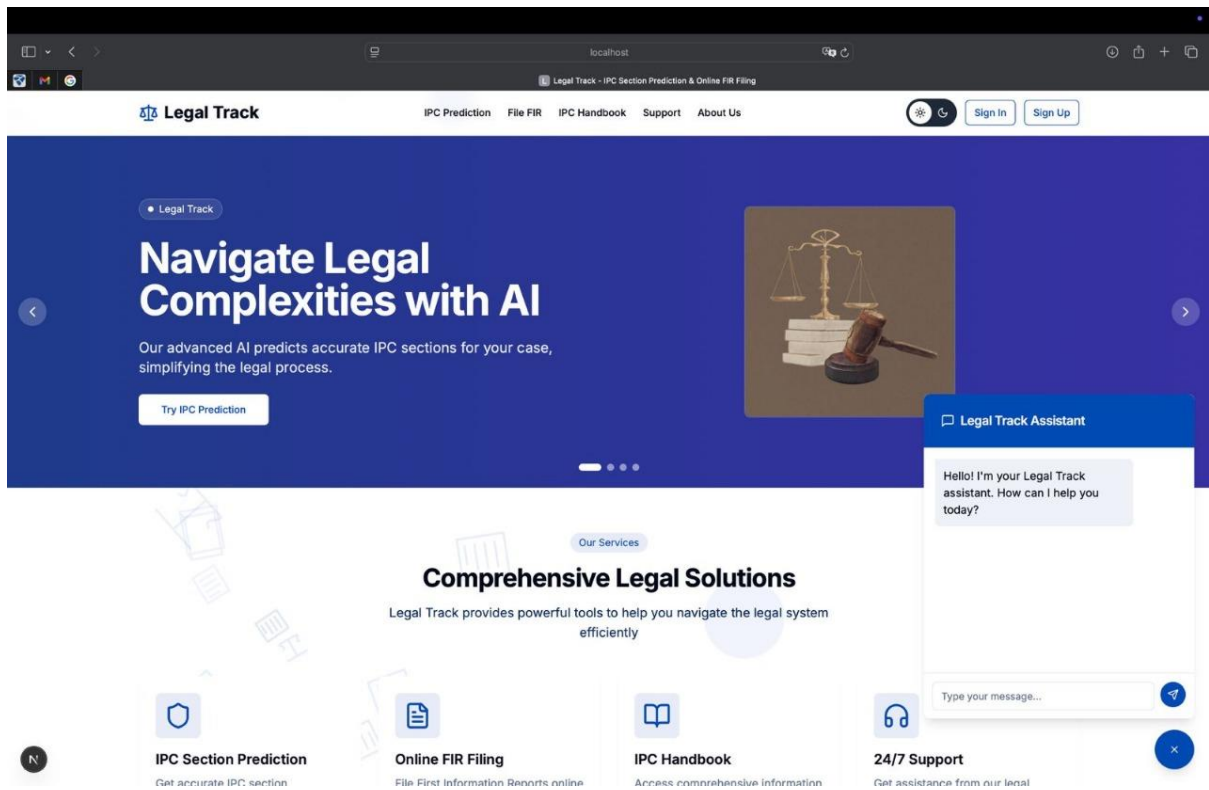
9. REFERENCES

- https://www.indiacode.nic.in
- https://ipfs.io
- https://pinata.cloud
- Research papers on AI and legal tech

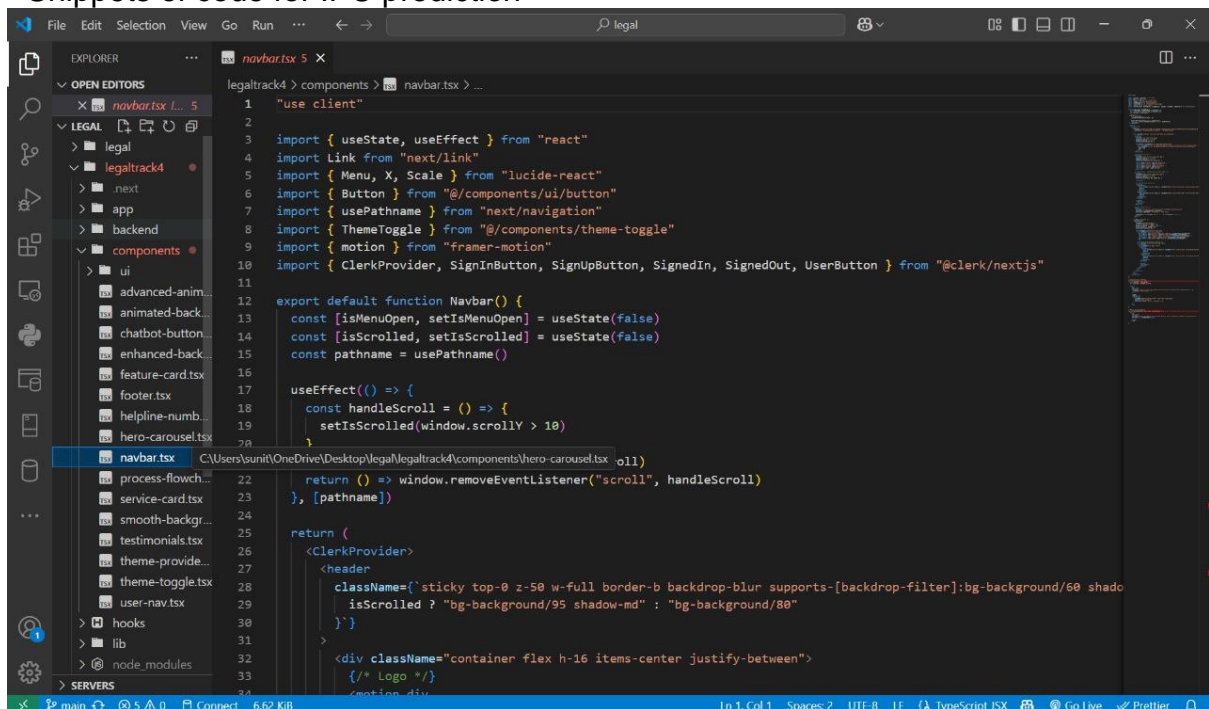
10. APPENDIX

- Screenshots of the user interface





- Snippets of code for IPC prediction



The screenshot shows the VS Code editor with the Explorer sidebar on the left. The Explorer sidebar shows the project structure: legaltrack4 > app > components > navbar.tsx. The navbar.tsx file is open in the editor. The code is as follows:

```
1 "use client"
2
3 import { useState, useEffect } from "react"
4 import Link from "next/link"
5 import { Menu, X, Scale } from "lucide-react"
6 import { Button } from "@components/ui/button"
7 import { usePathname } from "next/navigation"
8 import { ThemeToggle } from "@components/theme-toggle"
9 import { motion } from "framer-motion"
10 import { ClerkProvider, SignInButton, SignUpButton, SignedIn, SignedOut, UserButton } from "@clerk/nextjs"
11
12 export default function Navbar() {
13   const [isMenuOpen, setIsMenuOpen] = useState(false)
14   const [isScrolled, setIsScrolled] = useState(false)
15   const pathname = usePathname()
16
17   useEffect(() => {
18     const handleScroll = () => {
19       setIsScrolled(window.scrollY > 10)
20     }
21     window.addEventListener("scroll", handleScroll)
22     return () => window.removeEventListener("scroll", handleScroll)
23   }, [pathname])
24
25   return (
26     <ClerkProvider>
27       <header>
28         <div className={isScrolled ? "bg-background/95 shadow-md" : "bg-background/80"}>
29           <div className="container flex h-16 items-center justify-between">
30             <div>
31               <img alt="Logo" />
32             </div>
33           </div>
34         </div>
35       </ClerkProvider>
36     )
37   )
38 }
```

The screenshot shows the VS Code editor with the Explorer sidebar on the left. The Explorer sidebar shows the project structure: legaltrack4 > app > file-fir > page.tsx. The page.tsx file is open in the editor. The code is as follows:

```
1 // Add animations to the FIR filing page
2
3 "use client"
4
5 import { useState } from "react"
6 import { Button } from "@components/ui/button"
7 import { Card, CardContent, CardDescription, CardFooter, CardHeader, CardTitle } from "@components/ui/card"
8 import { Textarea } from "@components/ui/textarea"
9 import { Input } from "@components/ui/input"
10 import { Label } from "@components/ui/label"
11 import { RadioGroup, RadioGroupItem } from "@components/ui/radio-group"
12 import { Tabs, TabsContent, TabsList, TabsTrigger } from "@components/ui/tabs"
13 import { motion } from "framer-motion"
14 import Navbar from "@components/navbar"
15 import Footer from "@components/footer"
16 import ChatbotButton from "@components/chatbot-button"
17 import jsPDF from "jspdf"
18 import axios from "axios"
19
20 export default function FileFIRPage() {
21   const [activeTab, setActiveTab] = useState("personal")
22
23   const [firstName, setFirstName] = useState("")
24   const [lastName, setLastName] = useState("")
25   const [email, setEmail] = useState("")
26   const [phone, setPhone] = useState("")
27   const [address, setAddress] = useState("")
28   const [idType, setIdType] = useState("aadhar")
29   const [idNumber, setIdNumber] = useState("")
30
31   const [incidentDate, setIncidentDate] = useState("")
32   const [incidentTime, setIncidentTime] = useState("")
33   const [incidentLocation, setIncidentLocation] = useState("")
34   const [incidentDescription, setIncidentDescription] = useState("")
35 }
```

```
legaltrack4 > app > file-fir > page.tsx > ...
1 // Add animations to the FIR filing page
2
3 "use client"
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26   const [phone, setPhone] = useState("")
27   const [address, setAddress] = useState("")
28   const [idType, setIdType] = useState("aadhar")
29   const [idNumber, setIdNumber] = useState("")
30
31   const [incidentDate, setIncidentDate] = useState("")
32   const [incidentTime, setIncidentTime] = useState("")
33   const [incidentLocation, setIncidentLocation] = useState("")
34   const [incidentDescription, setIncidentDescription] = useState("")
35 }
```