Designers Consortium and Department of ECE

presents

DESIGN-A-THON '24-25

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Justice Link

Empty Road

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PROBLEM STATEMENT

DST4004 - Tech-Driven Solutions for Undertrial Prisoners in India :

A technology-driven solution for undertrial prisoners in India will provide legal aid, rehabilitation, and access to justice through a **mobile app**, **pro bono lawyer platform, vocational training, and mental health** support programs. It includes real-time status monitoring via a dashboard for legal professionals and prison authorities, along with virtual rights awareness for prisoners. Deliverables include a functional prototype, business plan, and pitch deck. The solution aims to increase legal representation, improve **rehabilitation outcomes**, reduce recidivism, and enhance transparency, fostering a fairer criminal justice system with greater collaboration among stakeholders.

PROPOSED SOLUTION

Justice Link - Your Bridge to Legal Confidence. Innocent until Proven Guilty Justice Link is your all-in-one legal companion, **redefining the legal experience** through a powerful **mobile application**. With seamless multilingual support, it's accessible to users of all backgrounds. Our AI-driven legal assistant, equipped with Embeddings and Vector Databases, offers expert guidance. Your data is fortified with blockchain security, and our digital marketplace connects you with **lawyers, NGOs, and clinics**, tailored to your needs and financial status. The real-time dashboard puts you in control of your legal matters, while an extensive legal library empowers your understanding. **Justice Link** is cross-platformed, ensuring accessibility anytime, anywhere.

Our Features in Justice link

Nyamitra :
Your legal ally, providing a comprehensive platform for seamless communication between lawyers and users . Real-time updates, virtual support and multilingual features for a holistic legal experience
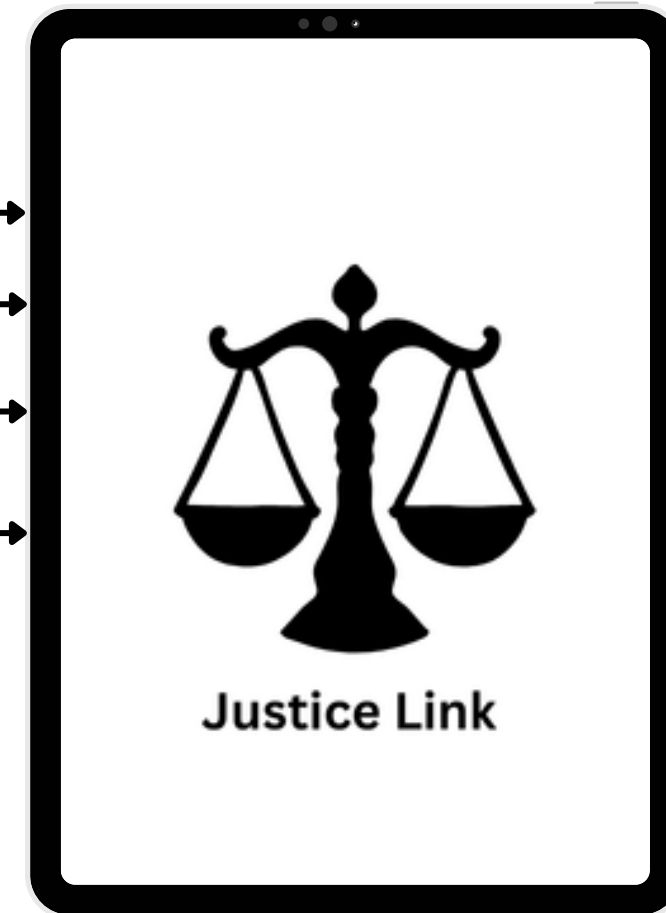
Meeting Requests :

Seamlessly request and schedule meetings for undertrial prisoners and their families with ease
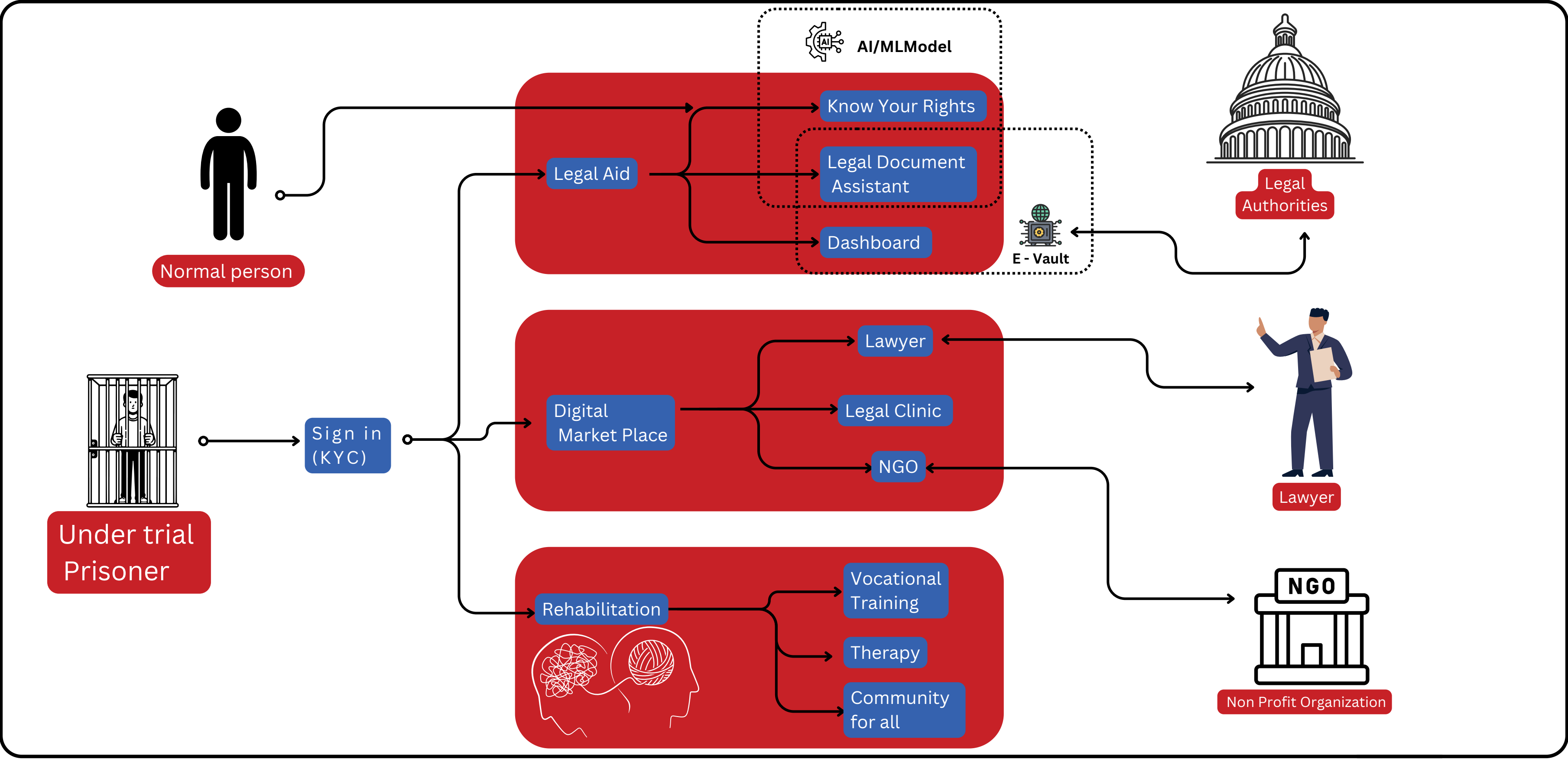
Multilingual :

Facilitating communication in multiple languages, ensuring inclusivity and accessibility for diverse users
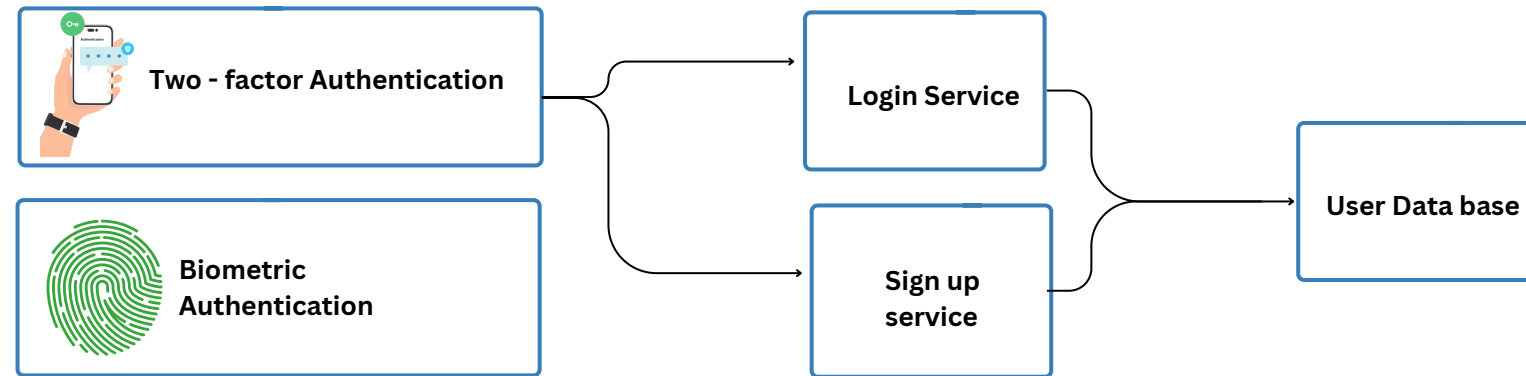
Rehabilitation Program :

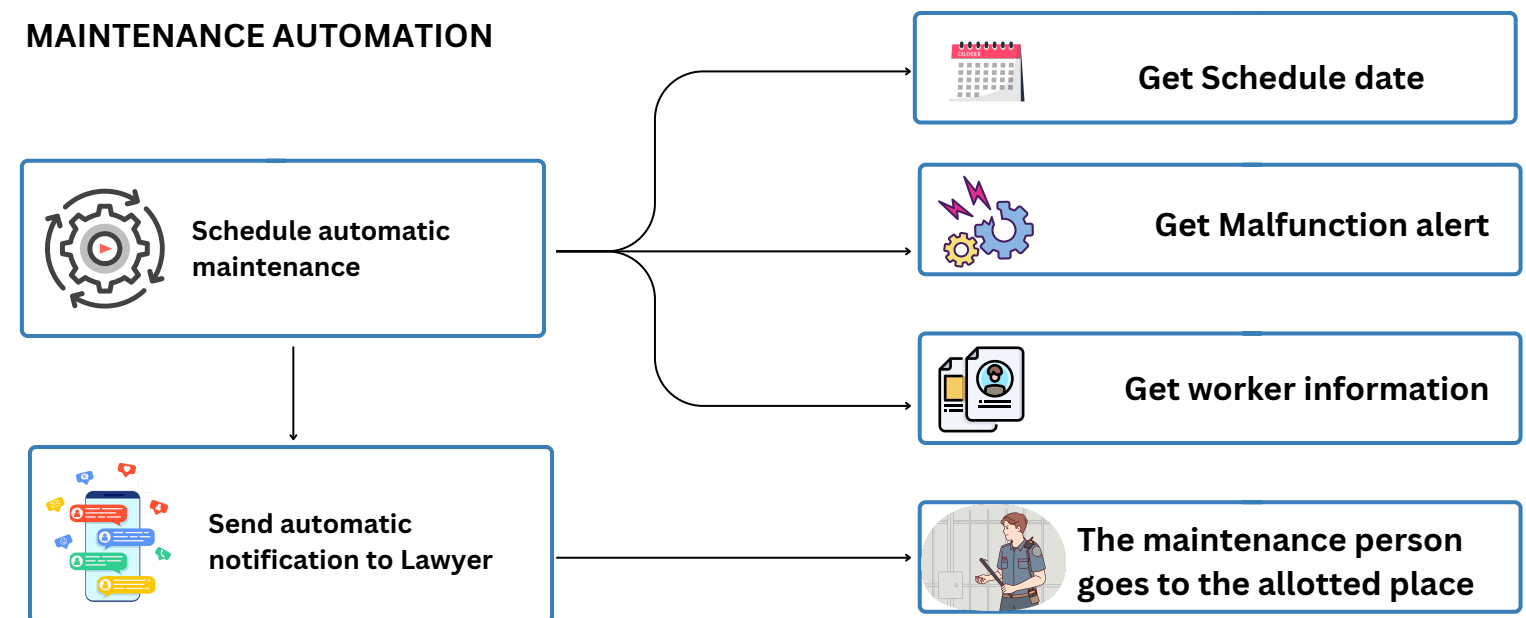Seamlessly request and schedule meetings for undertrial prisoners and their families with ease

Justice Link

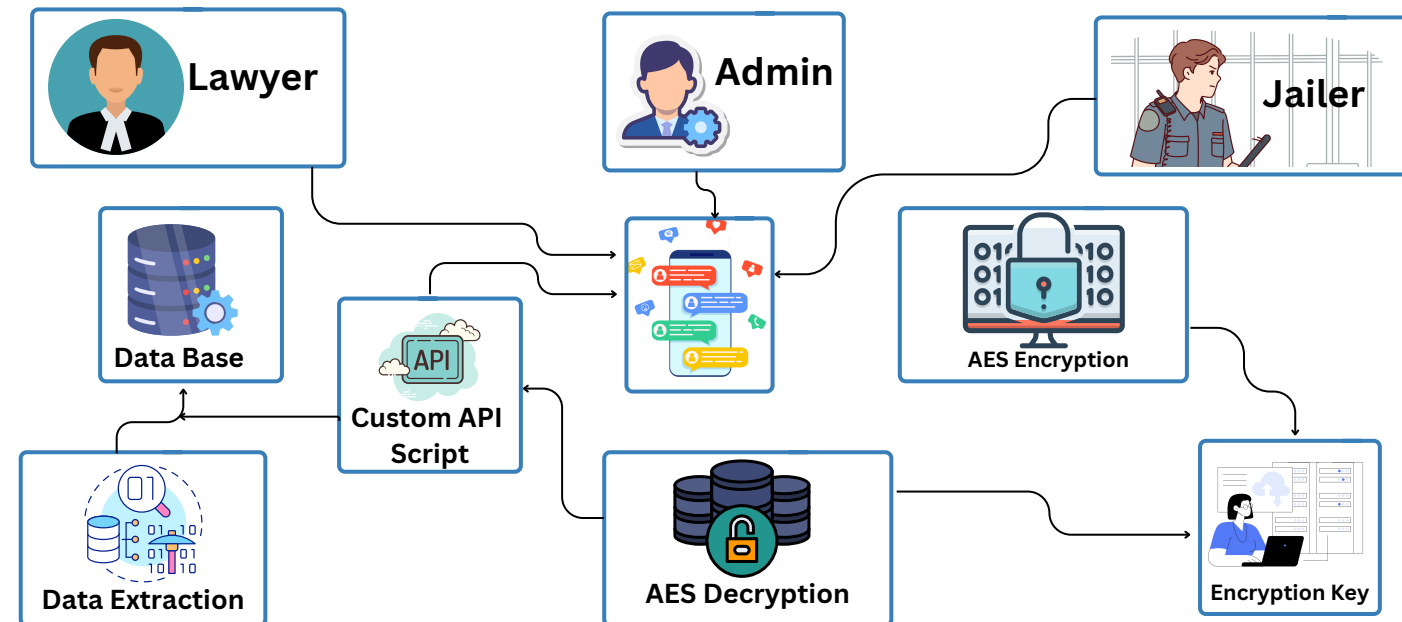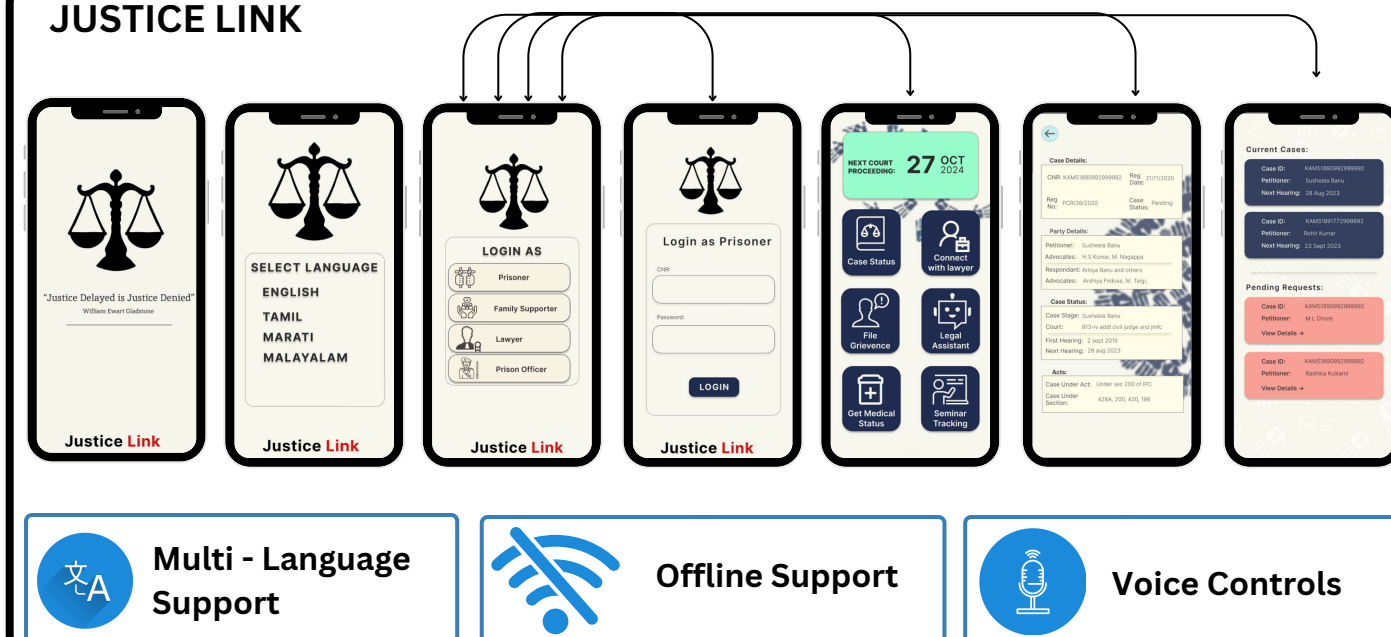# Work Flow

TECHNOLOGY USED

Two - factor Authentication → **Login Service**

Biometric Authentication → **Sign up service** → **User Data base**

NETWORKING

Load Balancer → **HTTP Endpoints** → **API Gateway**

OFFLINE SMS FUNCTIONALITY

Lawyer

Admin

Jailer

Data Base

Custom API Script

AES Encryption

Data Extraction

AES Decryption

Encryption Key

MAINTENANCE AUTOMATION

Schedule automatic maintenance → **Get Schedule date**

Get Malfunction alert

Get worker information

Send automatic notification to Lawyer → **The maintenance person goes to the allotted place**

JUSTICE LINK

"Justice Delayed is Justice Denied"
William Ewart Gladstone

SELECT LANGUAGE
ENGLISH
TAMIL
MARATI
MALAYALAM

LOGIN AS
Prisoner
Family Supporter
Lawyer
Prison Officer

Login as Prisoner

NEXT COURT PROCEEDING: 27 OCT 2024

Case Status
Connect with lawyer
File Grievance
Legal Assistant
Get Medical Status
Seminar Tracking

Justice Link

Multi - Language Support

Offline Support

Voice Controls

TECH STACK

React JS

Node JS

Python

Mongo DB

Bootstrap

Flutter

DEPENEDENCIES

NOVELTY

Legal and Regulatory Compliance : Legal and regulatory requirements is paramount

Prison Authority Cooperation : Collaboration with prison authorities is essential to access to inmates

Tech Infracture :
The availability and stability of technology infrastructure are sustainability

Funding Availability :
Adequate funding is crucial for both development and long term sustainability

Cloud Services : Harness the power of cloud services for seamless scalability, data storage, and secure access, ensuring optimal performance and flexibility for our appliction

URTC Connection: Establish connection with undertrial rehabilitation centers (UTRCs) through our platform, streamlining the bail process and fostering collaboration for efficient legal representation

Kisok set up in Jails : kiosks enable prisoners to securely access AI-driven legal guidance, case updates, multilingual support, and connect with legal professionals, ensuring informed legal involvement despite restricted external communication.

Chat Support : Swiftly resolve concerns in grievance chat, connect families with doctors, discuss rehabilitation and access legal awareness in virtual support chat

Justice Link

SOCIAL RELEVANCE

Access to Justice for the Underprivileged: Provides legal aid to undertrial prisoners who lack representation.

Rehabilitation & Reintegration: Offers vocational training and mental health support to help prisoners reintegrate into society and reduce recidivism.

Transparency & Accountability: Blockchain-backed processes ensure transparency in legal proceedings and case management.

Empowerment: Enhances prisoners' understanding of their rights and legal processes, fostering equality in the justice system.

Idea Impact :

Justice Link ensures that even the most marginalized individuals have access to legal resources and representation.
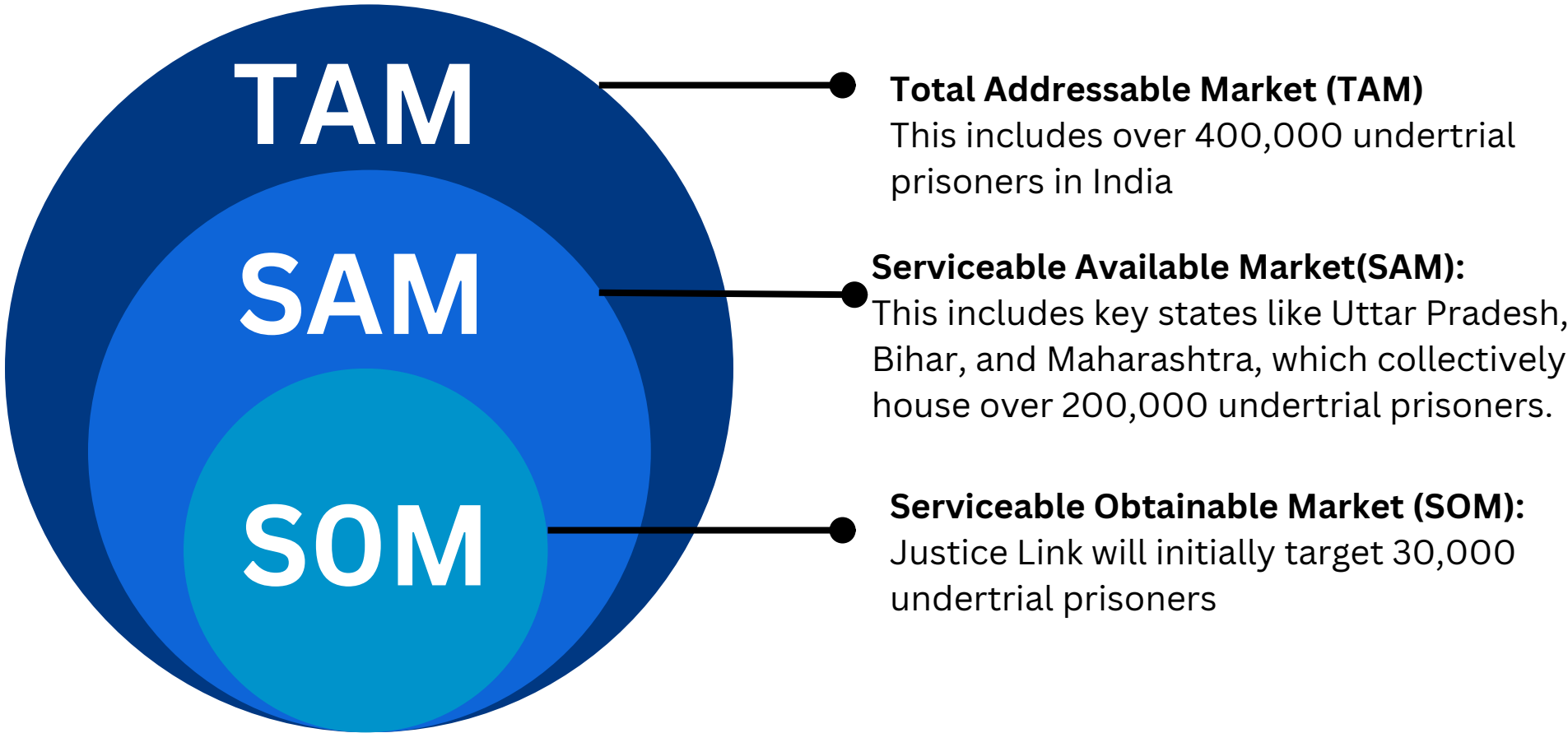
By integrating technology, the platform enhances the efficiency of the judicial process, reducing backlogs and improving overall trust in the justice system.

Benefits :

Connects prisoners with a network of pro bono lawyers, ensuring they receive representation regardless of financial status.

Real-Time Case Updates: Provides prisoners and their families with real-time information about case progress, reducing uncertainty and stress.

Conclusion and Future Development

TAM

SAM

SOM

Total Addressable Market (TAM)
This includes over 400,000 undertrial prisoners in India

Serviceable Available Market(SAM):
This includes key states like Uttar Pradesh, Bihar, and Maharashtra, which collectively house over 200,000 undertrial prisoners.

Serviceable Obtainable Market (SOM):
Justice Link will initially target 30,000 undertrial prisoners

Software Cost - Subscription Model

ITEM DESCRIPTION	PRICE
Software Development	₹ 17,000
Hosting	₹ 10000
Post Deployment Support	₹ 3000

₹ 30,000 billed annually

Progress Report : 95% **Completed**
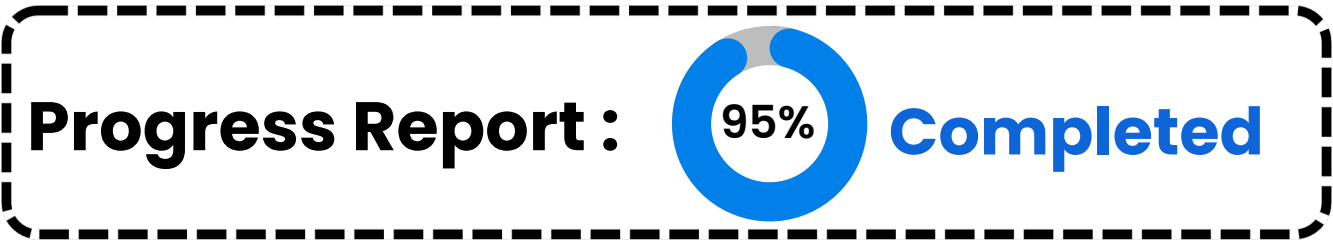
Conclusion:

Justice Link is a platform that transforms legal aid for undertrial prisoners by offering access to justice, rehabilitation, and transparency. Through AI-powered tools, a pro bono lawyer network, and blockchain security, it provides real-time case updates and legal support to underprivileged individuals. By enhancing legal representation, reducing overcrowding, and promoting rehabilitation, Justice Link contributes to a more fair and efficient legal system.

Future Development :

- 24/7 real-time legal assistance for prisoners and families through AI-driven chatbots.

- VR-based rehabilitation sessions for immersive skill-building and counseling.

- Secure, tamper-proof evidence management through blockchain technology.

REFERENCES

Type	Reference	Summary/Annotation
Research Paper	[Under-trial Prisoners through the Video-conferencing System](#)	This article discusses the current challenges faced by undertrial prisoners in India regarding access to legal aid. It highlights the gap between the legal framework, such as Article 39A, and the actual implementation of legal aid services
Research Paper	[AN ANALYSIS OF THE PLIGHT OF UNDER TRIAL PRISONERS](#)	This article explores the systemic issues in India's legal aid framework, detailing how a lack of resources and awareness prevents effective legal support for marginalized groups. It discusses the need for reforms, increased funding
Research Paper	[Prisoners in India -Rights, Conditions](#)	This research paper provides an overview of the legal aid system in India, analyzing its historical context, present challenges, and the role of various stakeholders. It examines the legal provisions for free legal aid and critiques their implementation, advocating for reforms to make legal aid more accessible and effective for those in need.

THANK YOU