

CYBER-ASTRA

Rajasthan Police Hackathon
Problem Statement no. 9

Meet The Group

Name	Year	Role
Jasteg Singh (Leader)	3rd	ML Engineer
Mann Bajpai	3rd	Backend Developer
Nipun Agrawal	3rd	Frontend Developer

Problem Statement

The problem revolves around optimizing the 1930 Helpline's functionality by addressing legal complexities, expanding its reach, increasing awareness and addressing financial constraints to enhance overall efficiency and effectiveness in combating cybercrimes.

Efficiency and Effectiveness of the 1930 Helpline

Challenges in Current System like

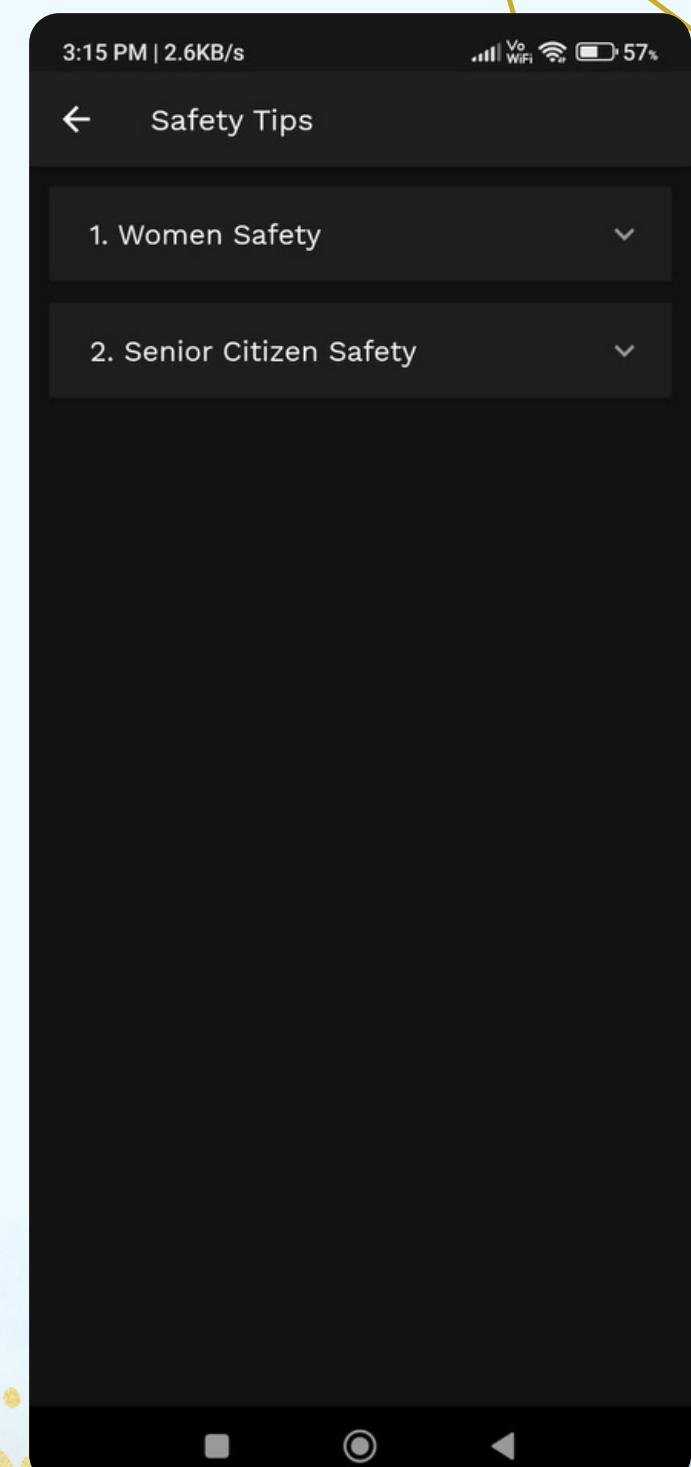
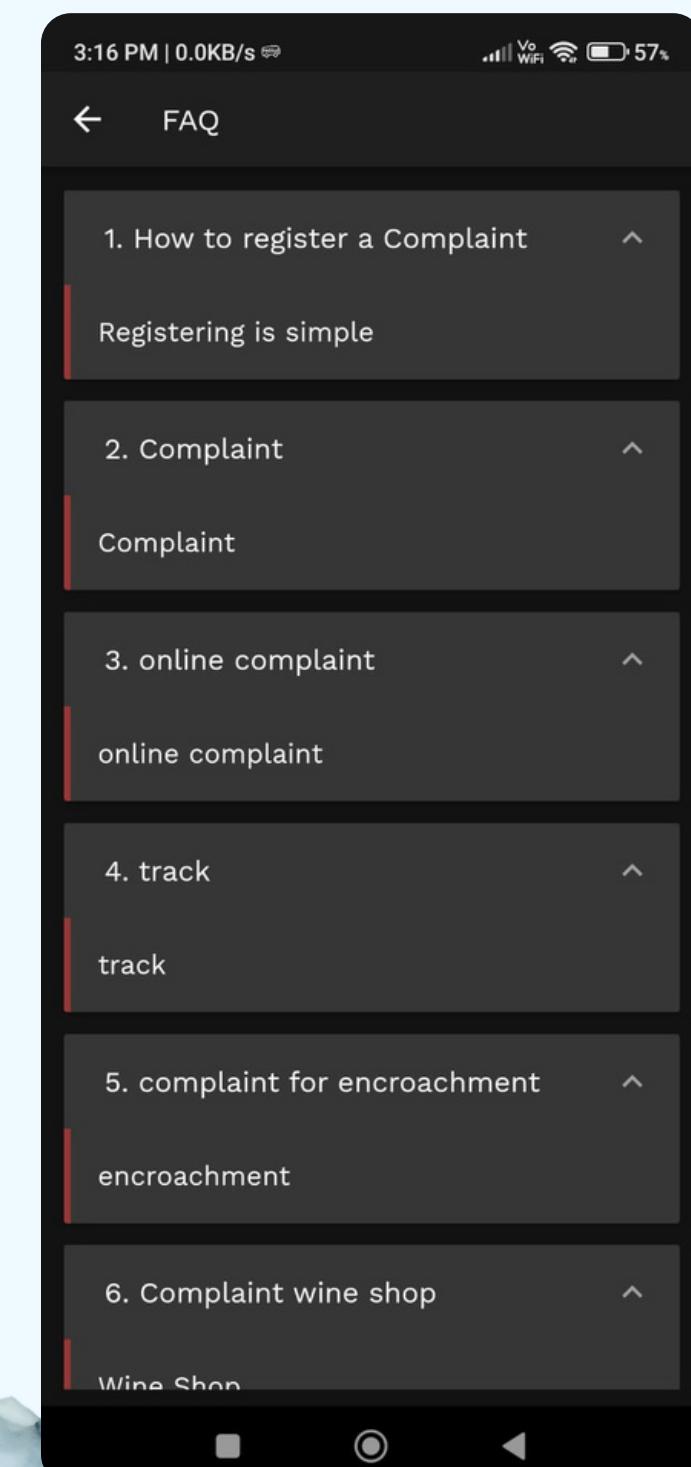
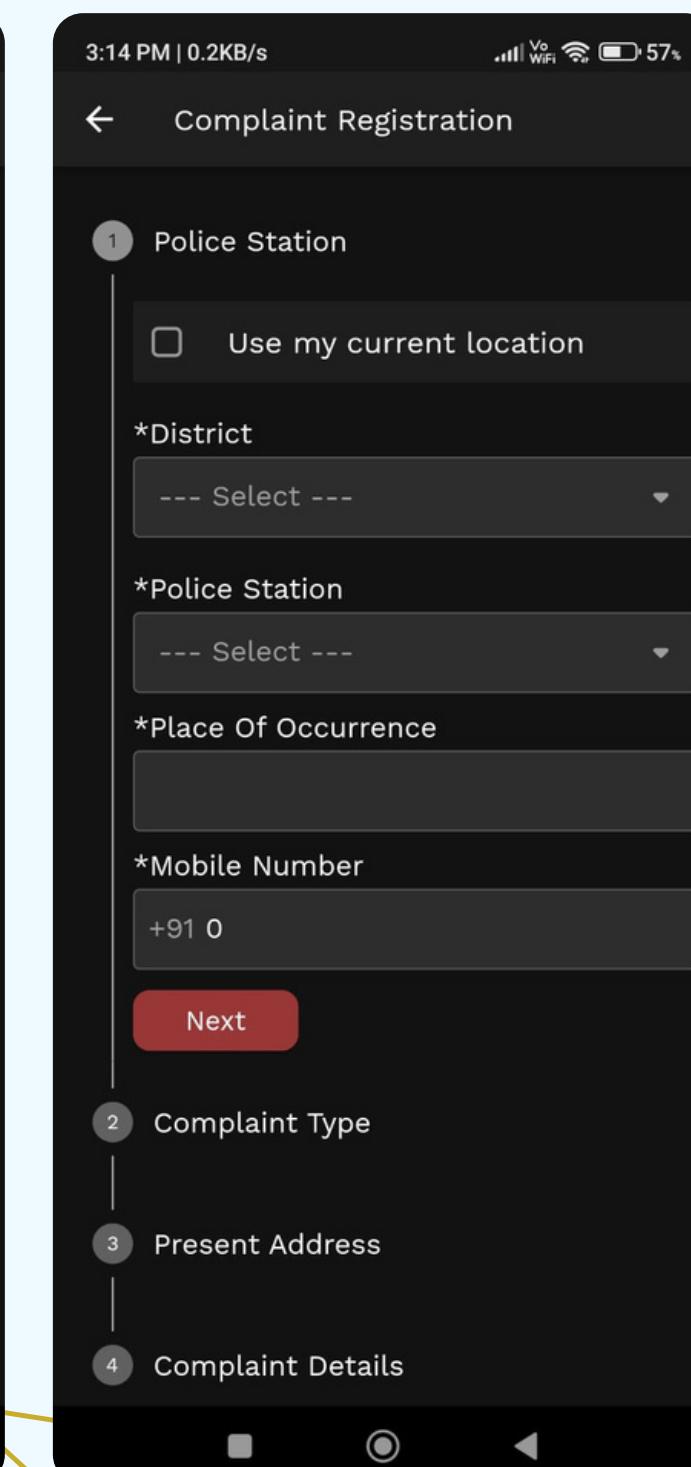
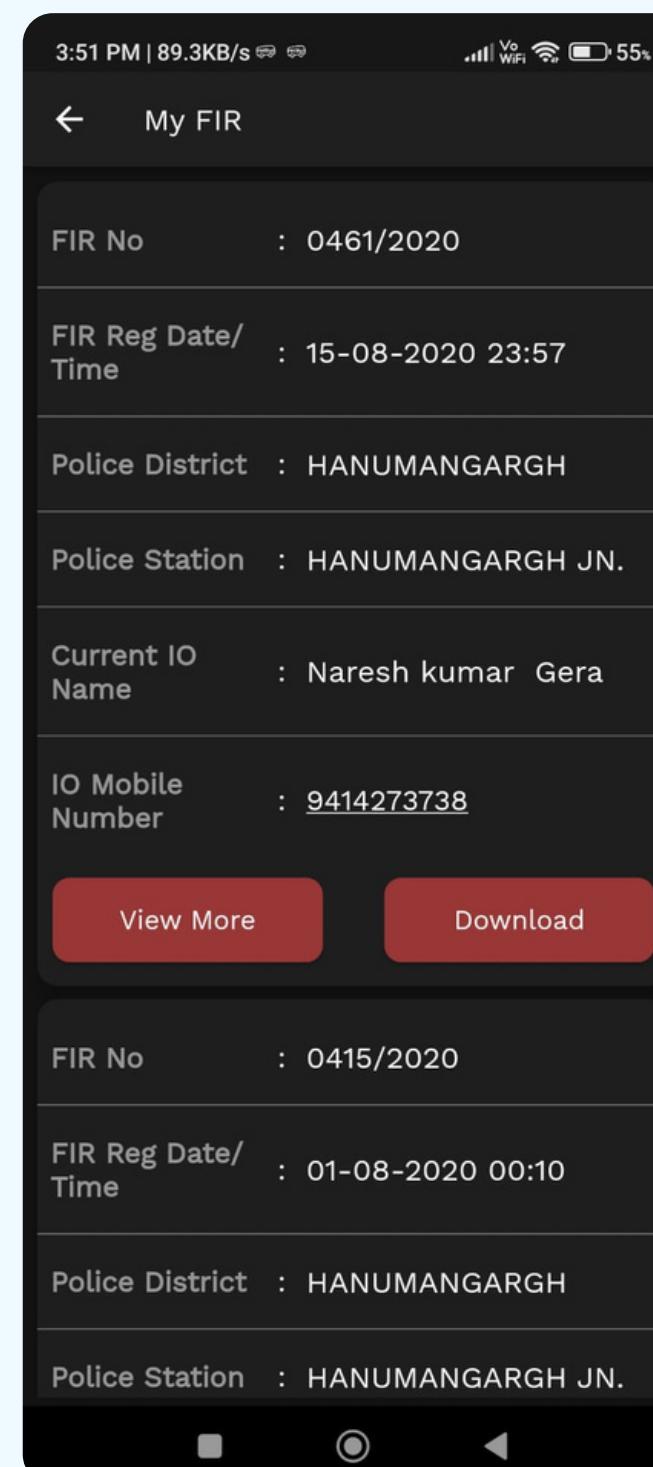
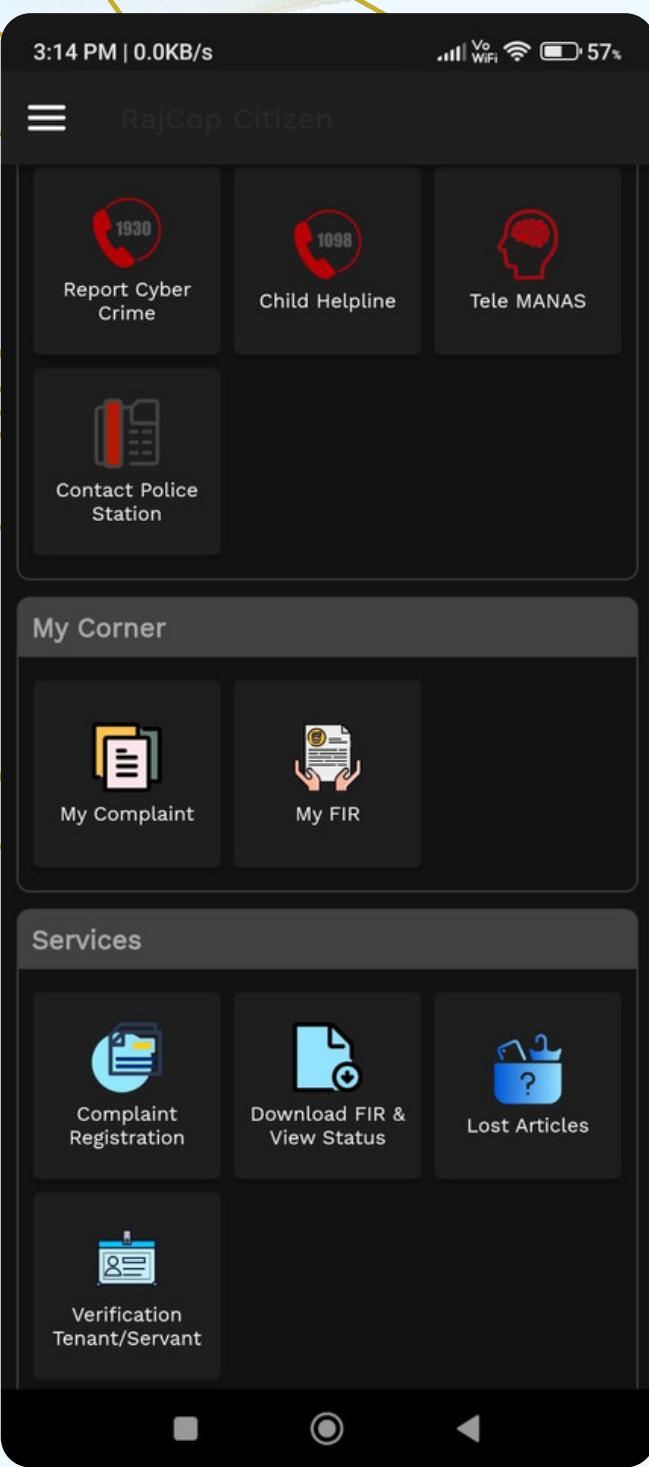
- Complex Legal Provisions
- Limited Reach
- Lack of Awareness
- Financial Constraints

Streamlined Fund Recovery Process

User Experience and Satisfaction

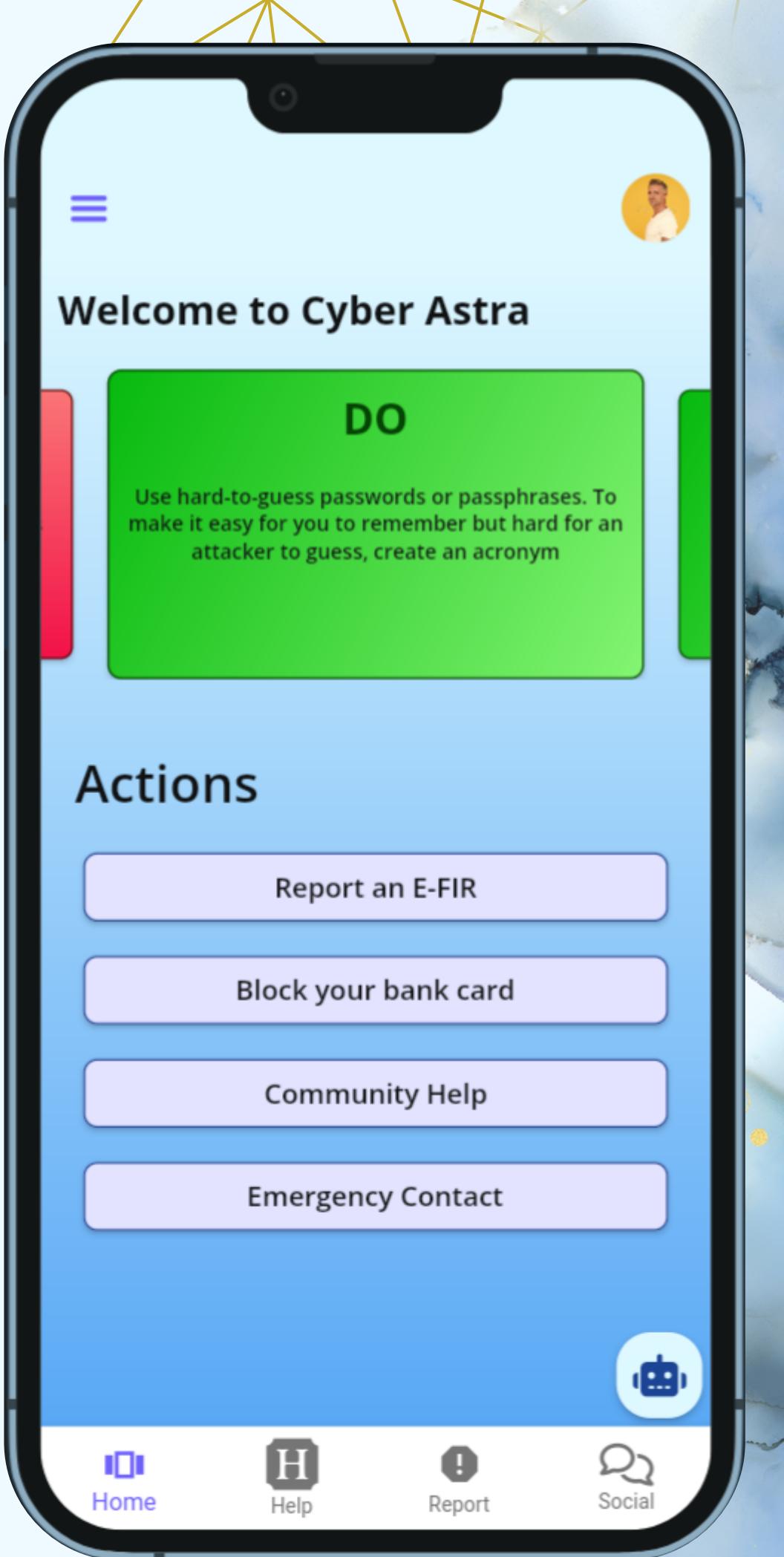
Holistic Approach Required

Problem with existing solution



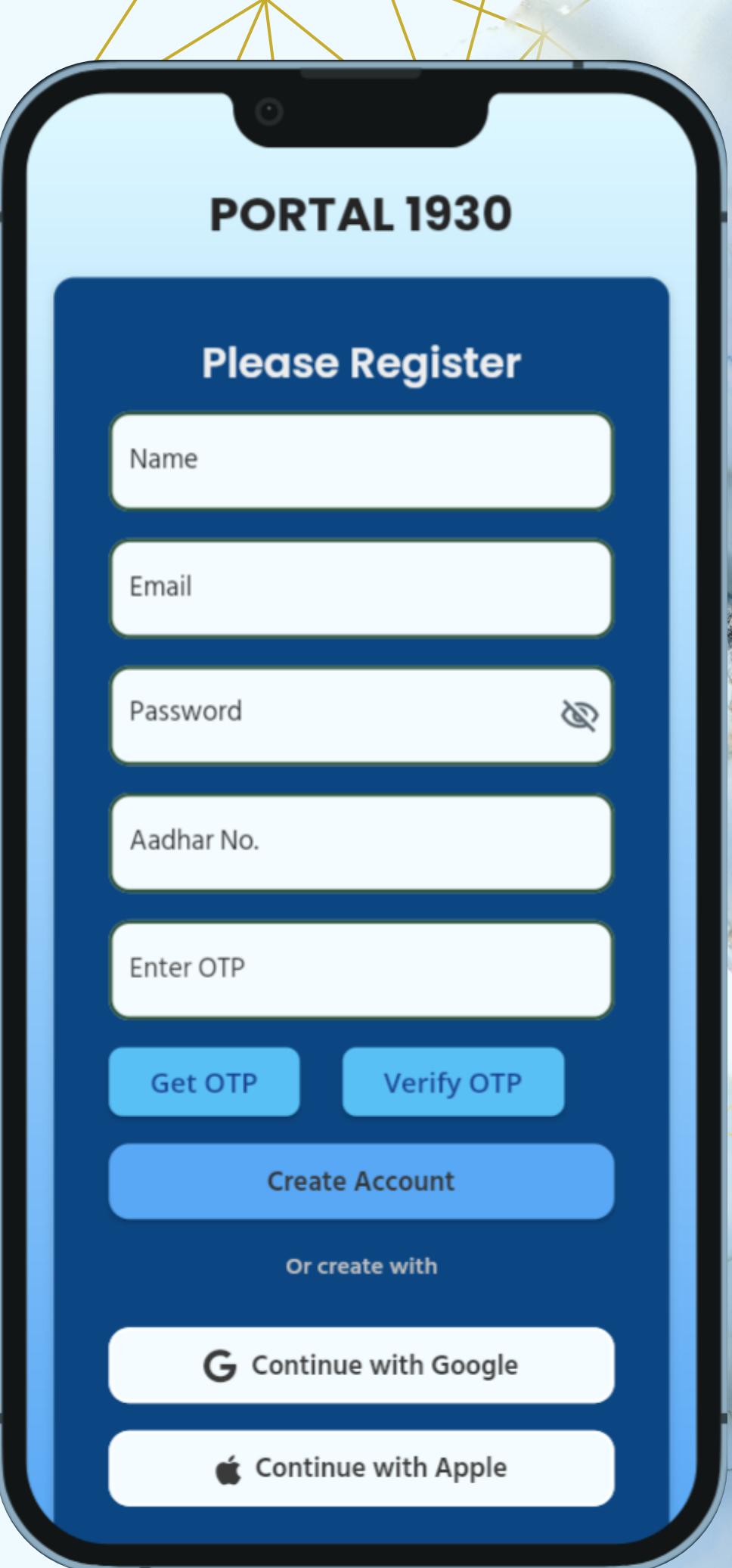
Our Solution

- Introducing "Cyber Astra" - Empowering Your Cybersecurity Journey!
- Our app revolutionizes the 1930 Helpline experience, making it easier to report cybercrimes and secure your digital life.
- With a user-friendly interface, a chatbot for guidance, and features like legal insights, quick card-blocking, and a dynamic community platform, Cyber Astra is your go-to solution for a safer online experience.
- Join us in creating a resilient digital community with Cyber Astra – Defending Digital Frontiers!

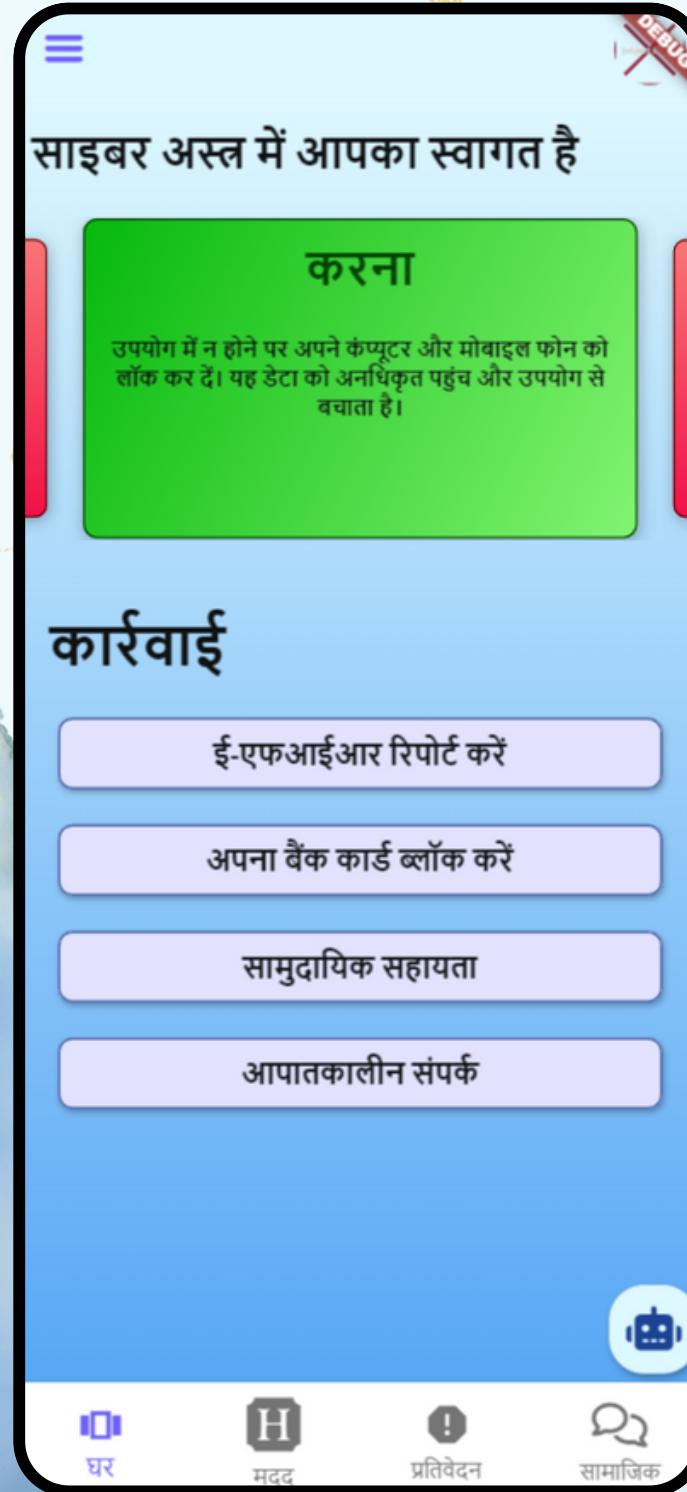


User Registration and Authentication

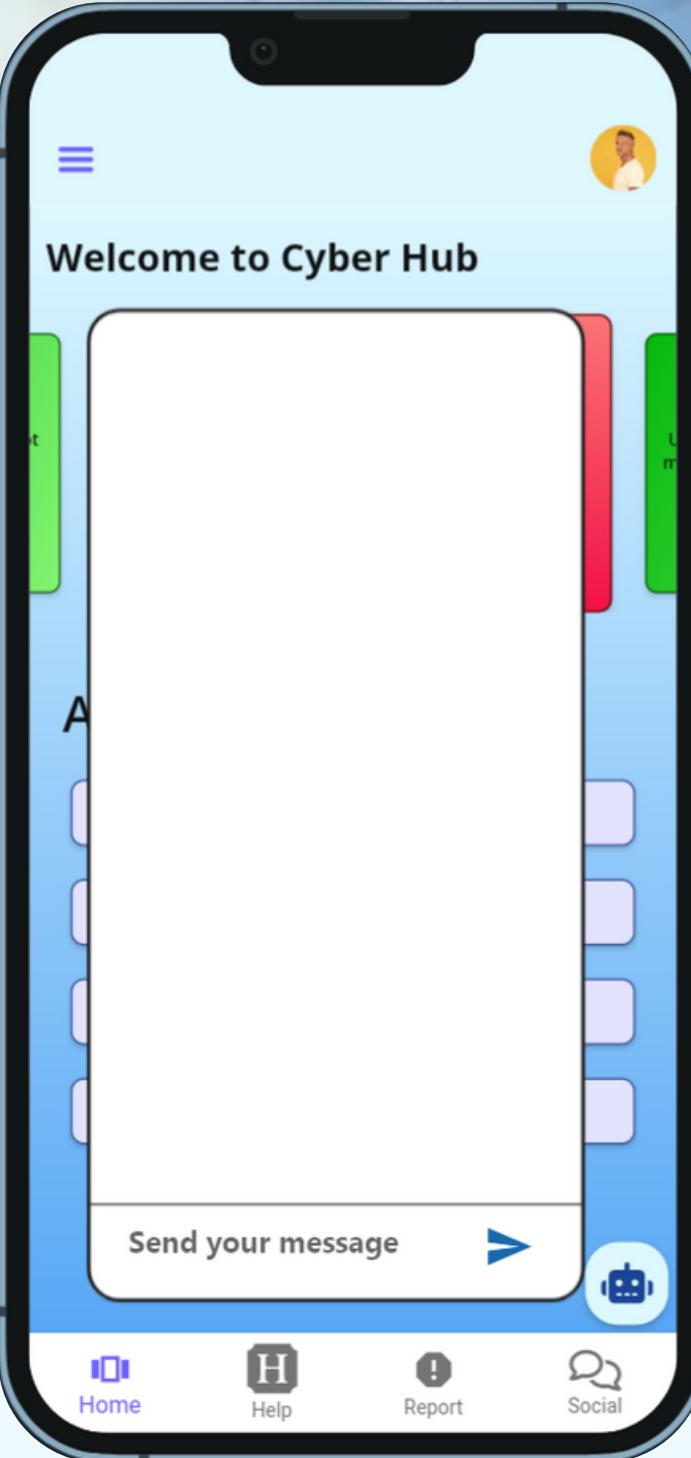
- The registration process, including name, email, password, and Aadhar number, ensures a secure and personalized user experience.
- Leveraging Aadhar details for user information retrieval streamlines the onboarding process.



Legal Awareness and Cybersecurity Tips



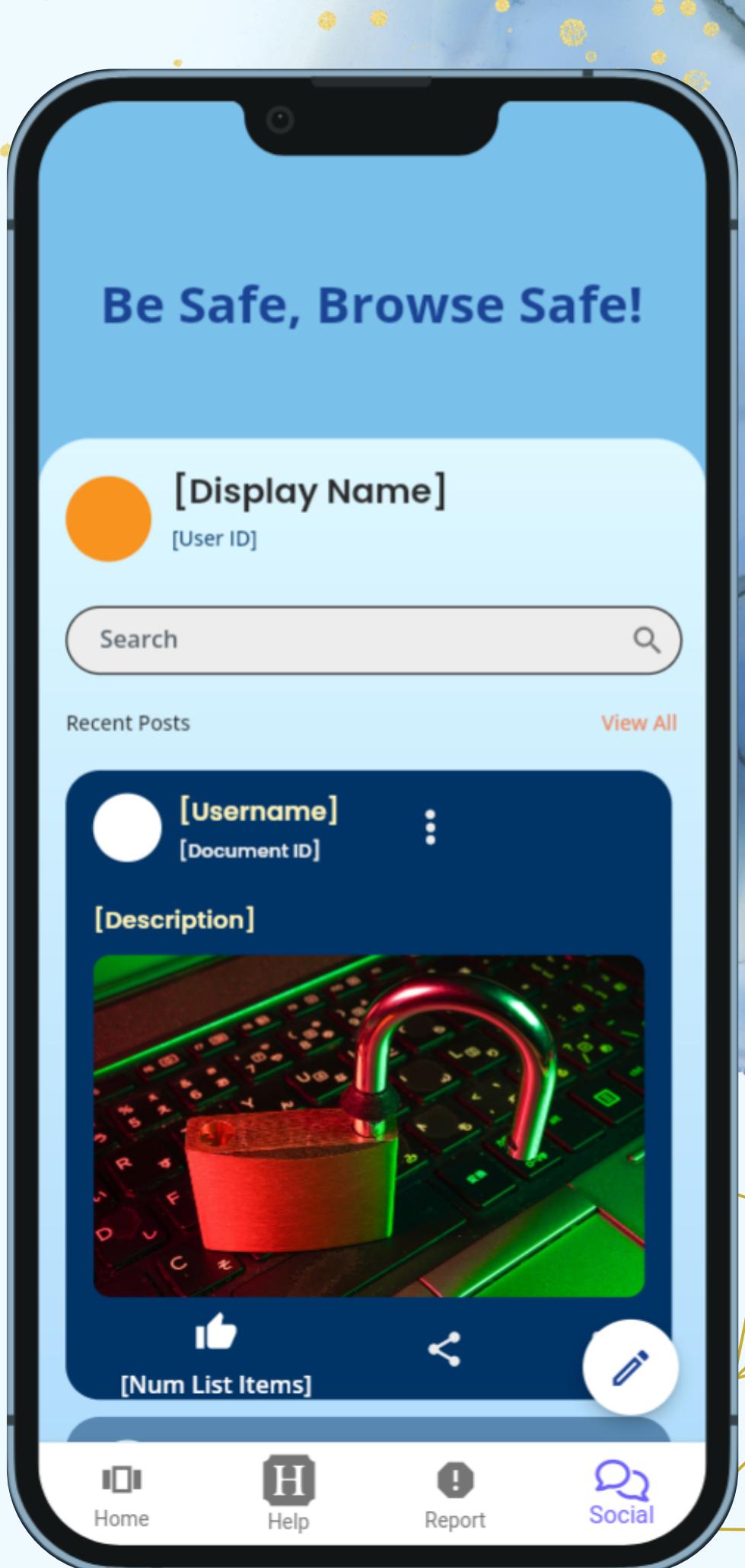
The carousel on the homepage offering cybersecurity tips demonstrates a proactive approach to educating users about best practices, contributing to increased awareness.



The app includes information about articles and laws of the Indian constitution related to cybercrime in multiple languages, promoting legal awareness among users.

Community help

- The "Community Help" feature acts as a social platform for users to share their experiences, report frauds, and seek support from the community, fostering a sense of collaboration and shared knowledge.
- This collaborative environment not only creates a sense of community but also empowers individuals facing cybercrimes by providing a platform for shared insights, advice, and solidarity.



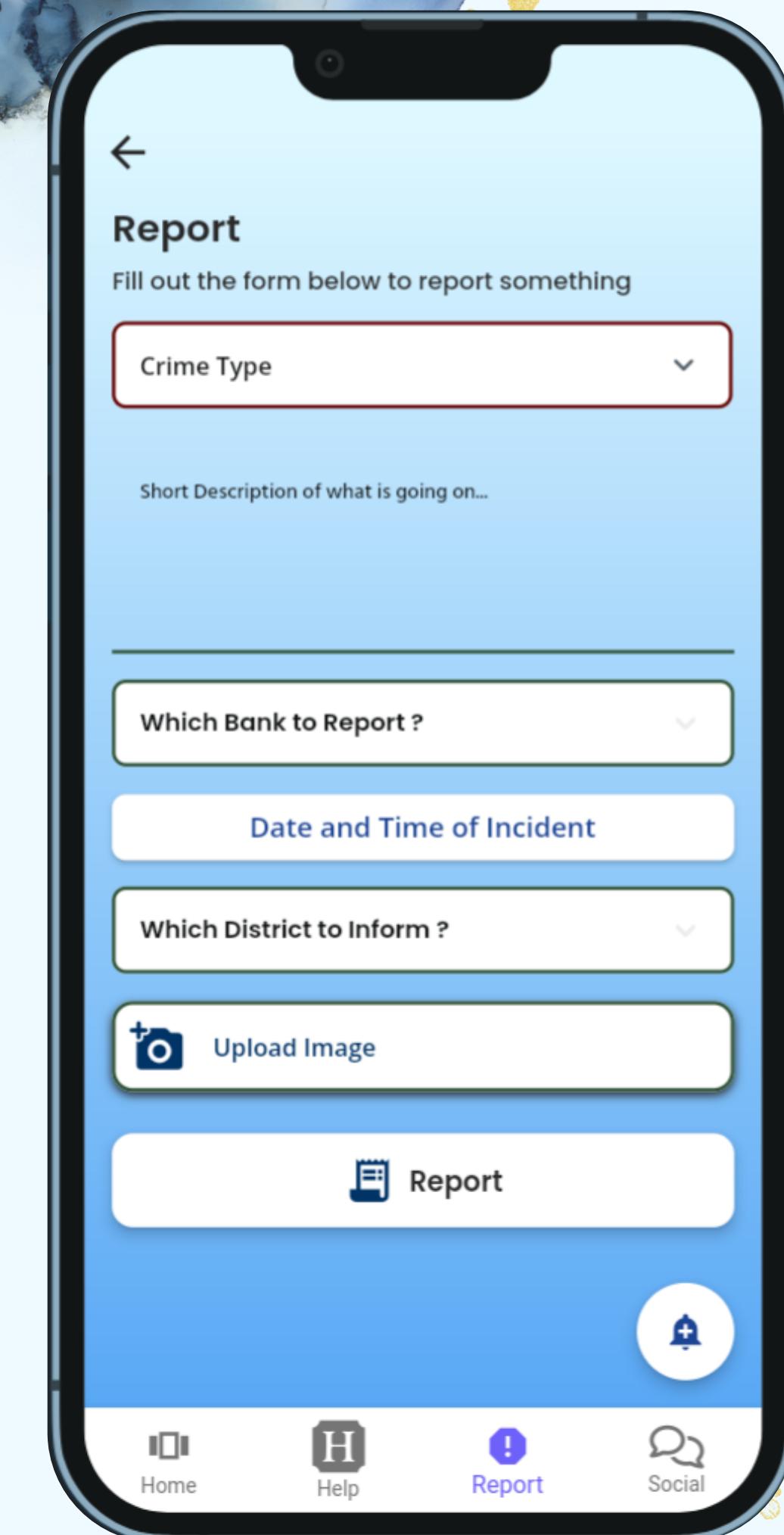
Sentiment Analysis

- The sentiment analysis model provides real-time analysis of string messages, enabling swift identification of potentially fraudulent content.
- This proactive approach allows users to detect and respond to fraudulent activities promptly.
- This adaptation ensures comprehensive coverage, as fraudulent activities can manifest through various communication channels.

```
Lenovo@Mann MSYS ~
$ curl -X POST -F "audio=@C:\Users\Lenovo\Downloads\Phone call with HMRC fraudster in UK 2021.wav" https://8899-2409-40d4-a-b287-8837-6ad1-c9d3-bb2a.ngrok-free.app/api/transcribe_audio
{
  "transcription": [
    " Excitement",
    " Excitement",
    " Temptation",
    " Urgency",
    " Urgency",
    " Caution"
  ],
  "fraud_detection_result": "Potentially Fraudulent Call Detected"
}
```

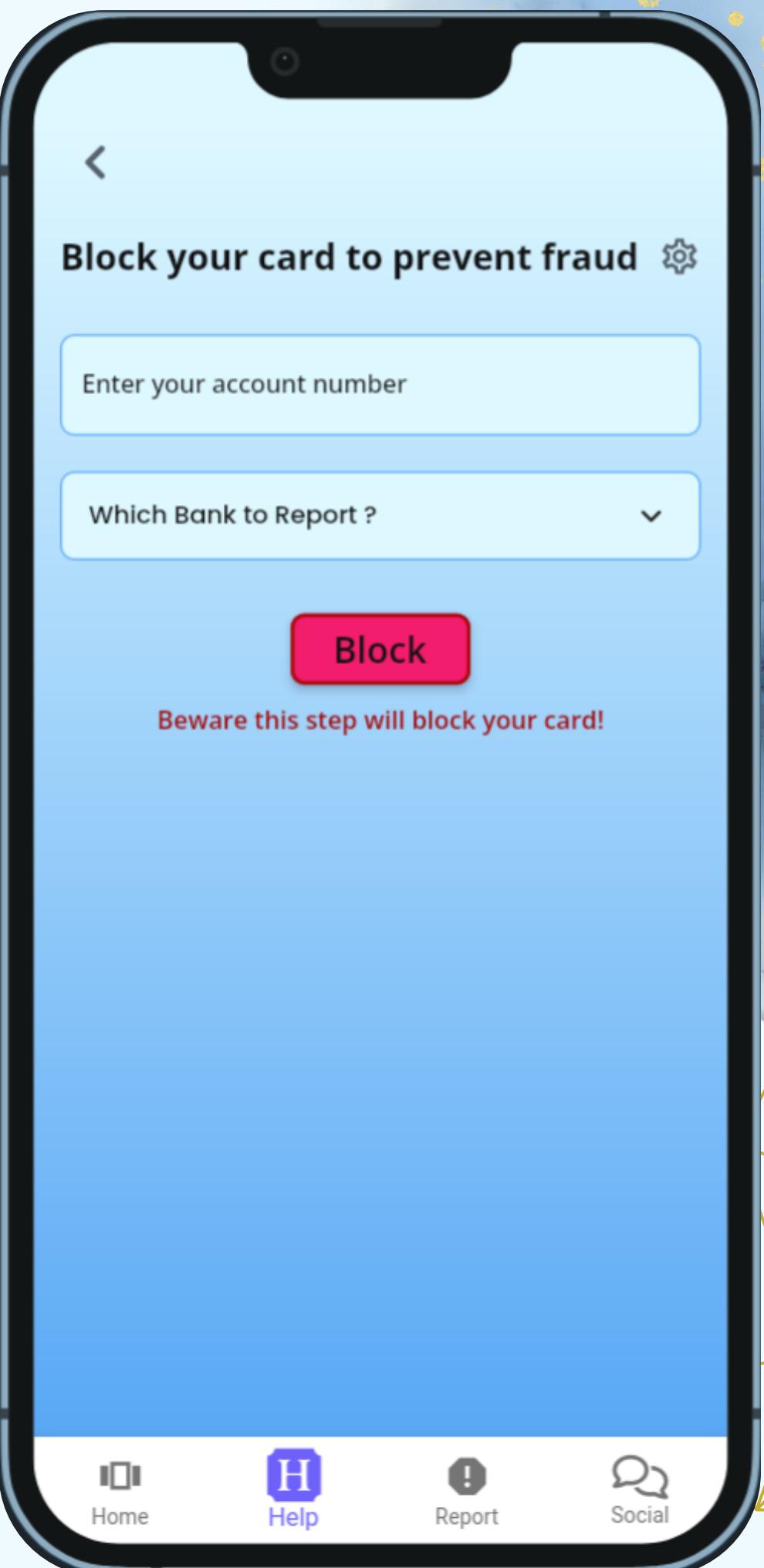
Streamlined Reporting Process

- The "Report an eFIR" feature allows users to file a report efficiently.
- Integration with the Aadhar card API helps in quickly fetching basic user details, simplifying the reporting process.
- Collecting additional event details ensures a thorough and comprehensive report.



Card Blocking Options

- Providing option for blocking a bank card offers users quick and accessible solutions, enhancing their ability to respond effectively to potential cyber threats.
- This reduces time as it creates a single interface for freezing your bank card giving users more power towards controlling their bank card.



Admin Portal

- Admin (police headquarters) can view the complaints registered by the app users, sort the complaints based on the status of complaint and change the status of complaint i.e. **Pending**, **In-progress** and **Completed**.
- This change of status will also be reflected in the app complaint status.

The screenshot shows a web browser window titled "localhost:5173/dashboard". The main title is "1930 Dashboard". On the left, there is a sidebar for an "Admin" user, featuring a profile picture of a woman, and buttons for "Reports", "Posts", and "Teams". A red "Logout" button is at the bottom of the sidebar. The main area displays three key metrics: "Downloads 31K From January 1st", "Users 4,200 > 40 (2%)", and "New Reports 1,200 > 90 (14%)". Below these metrics is a table listing four reports. The columns are: UserID, Bank, District, Description, Headline, and Status. The data from top to bottom is:

UserID	Bank	District	Description	Headline	Status
MpMCWNNAgSglhY4LixxHFQBgp23	Canara Bank	Neem ka thana (Sikar)	What to do	Helppp	started
MpMCWNNAgSglhY4LixxHFQBgp23					
MpMCWNNAgSglhY4LixxHFQBgp23					
aQjA2Yuok6XbxjX3DM8WyVWT5C2	Bank of Baroda	Phalodi (Jodhpur)	E-Mail		

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Timeline



10 December, 2023

Our team decided the possible solutions of the problems and started collecting data for the idea.



15 December, 2023

The chatbot and sentiment analysis tool will be tested and completed on different speech and texts.



19 December, 2023

The frontend design of the app will be completed and tested.



30 December, 2023

The backend of the app will be integrated with the chatbot.



17 January, 2024

The app will be scaled and ready to be deployed on Play Store.

Conclusion

In summary, Cyber Astra is not just an app; it's your digital safety companion. It tackles the challenges we discussed, making the 1930 Helpline more efficient and giving you powerful tools. From easy reporting to our lively community hub, we put you in control. With a smart analysis tool and a quick card-blocking feature, we're all about keeping you safe. Cyber Astra goes beyond expectations, creating a future where everyone plays a part in digital security. Cyber Astra - Your Defender in the Digital World!