



HACK2SKILL



HARYANA POLICE

HACKATHON

Reinventing Youth Communication



Team Name: DrugMITigation Squad

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Problem Statement: Cracking the Code to Youth Engagement

College/Organisation Name: Madras Institute of Technology, Anna University

Problem Statement Understanding

The challenge is engaging digitally savvy youth with positive anti-drug messages. Traditional approaches fall short, requiring innovative strategies that leverage digital platforms and influencer tactics. Understanding youth interests, offering engaging content, and integrating technology and counseling are vital to tackling drug-related issues effectively.

- ❑ **Youth Engagement:** Engaging today's digitally connected youth in anti-drug and delinquency messages is challenging due to their diverse interests and heavy online presence.
- ❑ **Communication Gap:** Traditional methods like lectures fail to resonate with the youth; innovative approaches are needed to capture their attention.
- ❑ **Digital Dominance:** To effectively reach the youth, the strategy must leverage mobile apps, social media, and other digital platforms where they spend significant time.
- ❑ **Positive Messaging:** The focus is on delivering positive content rather than conventional warnings, aiming to influence behavior positively.

Brief about the Idea/Prototype

The proposed initiative revolves around an AI-infused mobile app tailored for combatting youth drug addiction. Leveraging AI, it customizes anti-drug content and **counseling sessions**, utilizing **interactive quizzes, contests**, and compelling **success stories** to captivate users. The platform aims to illuminate the adverse effects of drug abuse through impactful posts while promoting positivity and awareness.

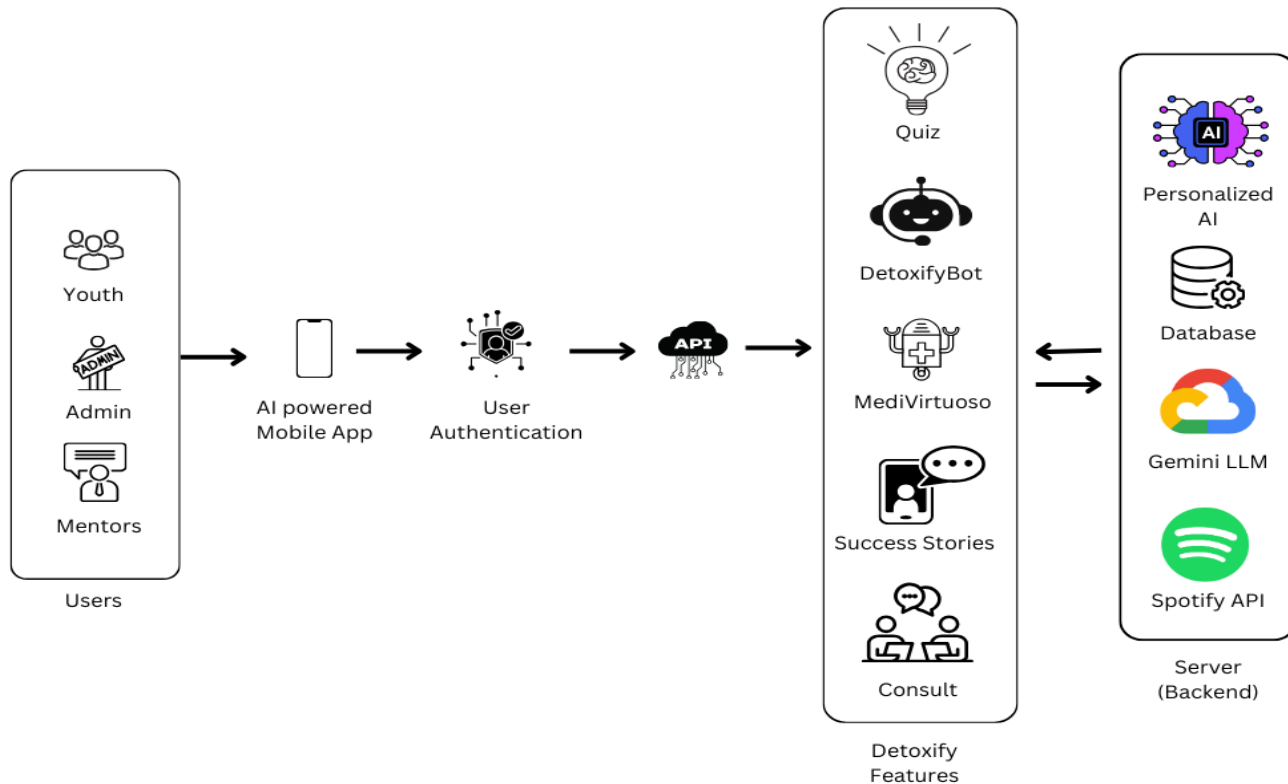
Social media integration enables users to anonymously or selectively share these stories, fostering community engagement and spreading the message effectively. Moreover, the app integrates motivational music, courtesy of platforms like Spotify, enhancing user experiences and serving as an uplifting tool in their journey.

Prioritizing user privacy and data security, the app creates a secure space where individuals can seek guidance and support without fear. The core objective lies in empowering the youth, offering comprehensive tools and support systems via a dynamic, engaging, and secure digital platform. Ultimately, it aspires to instill a sense of community, educate, and guide young individuals toward a drug-free lifestyle, harnessing the power of technology and positivity to inspire change and wellbeing in the target demographic.

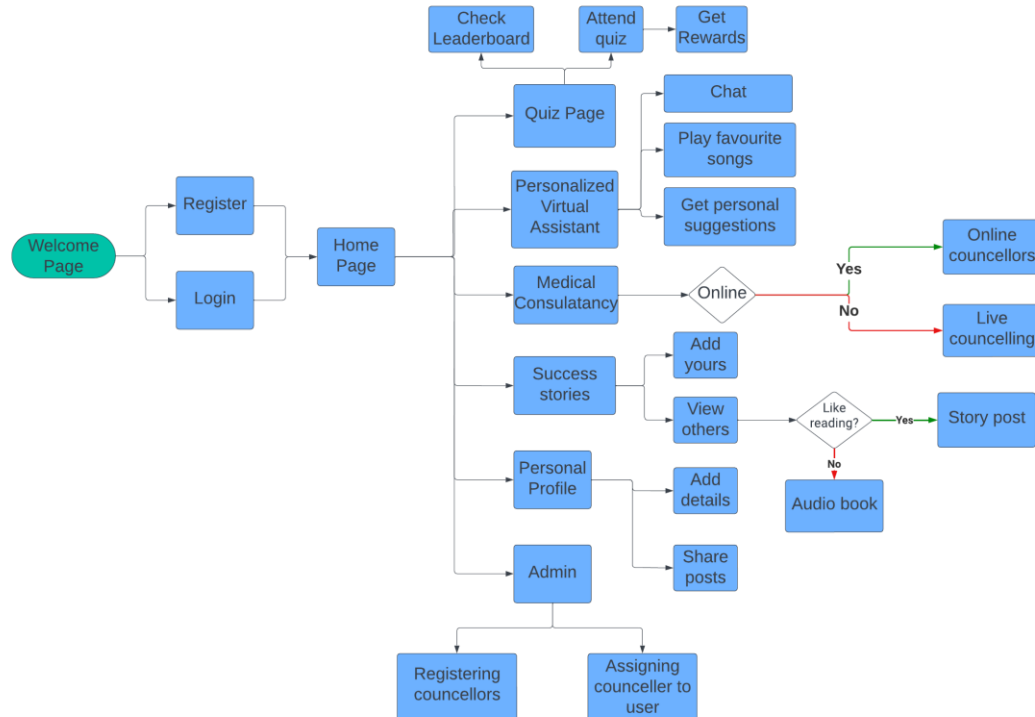
Proposed Solutions

- ❑ **AI-Powered Mobile App:** Focuses on aiding anti-drug efforts and aiding recovery for addicted individuals using ML and deep learning.
- ❑ **User-Centric Approach:** Offers personalized experiences with unique usernames and engages users through positive quizzes and contests.
- ❑ **Funding Portal:** Collects government and donor funding for rewarding top performers and providing resources like anti-ragging kits.
- ❑ **Personalized Support:** Delivers tailored suggestions and recommendations using AI and provides virtual counseling with a knowledgeable AI assistant.
- ❑ **Counseling Mechanisms:** Facilitates online counseling and mentoring sessions, pairing verified counselors with youth based on relevant factors.
- ❑ **Data Privacy:** Ensures user data security and anonymity throughout the app while sharing success stories and enabling motivational content sharing.
- ❑ **Impactful Stories & Posts:** Showcases positive impacts, anti-drug messages, and drug side effects; enables anonymous or specific sharing on social media.
- ❑ **Audio Motivation:** Integrates motivational music via Spotify for uplifting user experiences.

Architecture Diagram



Flow diagram of solution



TECHNOLOGY STACK



Machine Learning Models

TensorFlow: Excellent for building and training deep learning models, providing a high level of flexibility. Other **python** libraries and modules, were used.



Backend & Data storage

MongoDB utilized for database storage.

Flask: Lightweight and easy-to-use, perfect for smaller applications and quick prototyping..

Cloud Services: Google (GCP)



Mobile App Development

Flutter: Offers a unified codebase for both iOS and Android also web, using Dart for smooth and performant app development.

Figma, UI/UX tool were used to design UI.



Security and others

JWT (JSON Web Tokens): Securely authenticate API requests, providing a token-based system for enhanced security.

Others: HTTPS, Spotify APIs, OWASP.

Proposed Work Novelty

- **Customized chatbot responses:** Gemini LLM adapting its responses to individual user experiences and needs.
- **Chatbot + Spotify:** Integrating chatbot with Spotify API for leveraging music therapy through Spotify playlists curated by AI based on user emotions and withdrawal symptoms.
- **Dynamic drug education:** Tailoring information on specific drugs and risks based on user history and concerns.
- **Success stories:** Analyzing user data (preferences, goals, progress) to feed personalized success stories for motivation and inspiration.
- **Gamified learning:** Interactive quizzes with personalized feedback for engaging drug awareness education.
- **Mentor matching:** Matching users with suitable mentors based on compatibility and expertise.



GitHub Repository Link of the prototype

❑ GitHub Repository

Link: <https://github.com/J-B-Mugundh/Detoxify>

❑ Figma UI/UX Prototype

Link: <https://www.figma.com/file/2z1edhfpTEJtXwqjo2h0tW/Detoxify-final?type=design&node-id=502%3A1672&mode=design&t=AWxzHDmKxscSalXO-1>



Demo video link

Please find attached the link to the folder containing the implementation video showcasing our mobile app, also we have completed 65% of work. Your review and feedback on this demonstration would be greatly appreciated. Thank you for your attention to this matter.

<https://drive.google.com/drive/folders/10zWqAuKBsNH6b7WWBg4ho1S7nP-Aq6zV?usp=sharing>



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THANK YOU