

Digital Empowerment: Building Safety, Support and Legal Awareness for Women and Children

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Abstract—The project, designed to develop a secure and interactive online platform, focuses on enhancing the safety and mental well-being of women and children by integrating virtual counseling services, gamified activities and legal rights awareness. Using the MERN stack (MongoDB, Express.js, React, Node.js), it ensures a robust, scalable and user-friendly system. The platform incorporates personalized user profiles and strong authentication to foster a secure environment for open communication. Users will gain access to valuable resources, interactive counseling sessions and legal knowledge through engaging activities, empowering them with education, support and practical skills. By promoting mental well-being and personal safety, the platform is equipped with a feedback mechanism to continuously improve the user experience and adapt to evolving needs. Ultimately, the project aims to create a safe, informed space for vulnerable populations, providing them with the tools and knowledge needed to confidently navigate various challenges.

Index Terms—Children, Counseling, Digital Empowerment, Mental Support, Rights, Safety, Women.

I. INTRODUCTION

In today's digital world, ensuring the safety and mental well-being of vulnerable populations, especially women and children, is crucial. This project aims to create a comprehensive online platform that combines virtual counseling services, interactive games and legal rights education, giving users the tools they need to protect themselves. The platform will offer personalized profiles and secure authentication to ensure a safe, reliable environment for users.

The virtual counseling feature will allow users to book sessions at their convenience, providing a private space for support. Additionally, the platform will include games that promote relaxation and mental well-being while educating users about safety

practices. A community space will also be available for users to share feedback, participate in discussions and support one another.

The platform will provide an extensive collection of videos and resources focused on mental health, legal rights and safety measures. Users will have access to information about their legal protections against issues like domestic violence, child abuse and online exploitation, ensuring they are well-informed and empowered.

By focusing on simplicity and user experience, this platform will offer a secure, supportive space where women and children can find the resources and assistance they need to navigate the digital world safely.

II. RELATED WORKS

Women and children are among the most vulnerable groups in society, facing challenges such as domestic violence, cyber threats and a lack of awareness about their legal rights. Ensuring their safety and support has been a crucial concern for decades, with legal and psychological assistance often relying on expert professionals, government helplines and NGOs. However, accessing these resources can be time-consuming, expensive and sometimes ineffective due to limited availability of experts. With the rise of digital technologies, an automated and integrated system can play a significant role in providing immediate safety measures, legal education and mental health support.

Digital platforms have the potential to bridge the gap by offering real-time counseling, legal awareness and community support, making it easier for women and children to seek help, share experiences and understand their rights.

The existing system in the domain of digital mental health utilizes machine learning techniques, particularly Naïve Bayes (NB) and Support Vector Machines (SVM), to recommend activities that enhance emotional well-being. It collects user activity data from mobile applications used in both clinical and non-clinical settings, where users manually log their activities along with mood ratings. These activities are categorized into types such as social, leisure and work and machine learning models predict the likelihood of an activity positively impacting a user's mood. The study compared personalized and generalized models, concluding that personalized recommendations significantly outperformed generalized ones after collecting approximately 58 activities per user. However, existing digital interventions face several challenges, including the lack of personalized recommendation systems, reliance on manual user input and limited context-awareness, such as considering location, time and weather conditions. Additionally, while the system effectively predicts mood-boosting activities, it does not integrate with broader support services such as counseling or legal assistance. These gaps highlight the need for a more comprehensive and interactive digital platform that not only offers personalized mental health support but also incorporates legal awareness and community support to create a holistic well-being ecosystem.

The proposed system is a comprehensive digital platform designed to provide women and children with easy access to essential resources related to safety, legal rights and mental well-being. It includes a home page with user authentication features such as sign-in and sign-up, along with interactive activities like games based on topics of legal rights, safety and mental health, aimed at engaging users in a fun and educational way. The counseling page will allow users to book appointments with experts, while also providing a feedback mechanism to share experiences and improve the service.

The community page will foster peer support, enabling users to connect with one another and share experiences in a safe, moderated space. The Empower and Connect page will feature educational videos on topics like safety and legal rights and allow users to interact with experts via webinars or live chats. The resources page will offer downloadable eBooks and essential resources, including helpline numbers and FAQs, to ensure users have easy access to critical

information. The legal rights page will provide clear, detailed information about the rights of women and children, including protection laws and legal assistance. The settings page will allow users to manage their profiles and log out securely. Counsellors will also have a dedicated dashboard to view and manage appointments, ensuring smooth interactions with users. Built using modern web technologies, the platform's architecture will ensure responsiveness and ease of use, while robust backend frameworks will support user data management and security. This system will offer a secure and personalized environment where users can access vital resources, receive counseling support and engage in educational activities, all while ensuring their privacy and data protection. Ultimately, the platform will empower users, provide necessary support and create a safe, informative and interactive space for women and children.

III. METHODOLOGY

Landing Module

The Landing Module serves as the gateway to the Digital Empowerment Platform, offering users an engaging and informative introduction to its features. It provides a visually appealing layout with interactive navigation, ensuring a seamless user experience. This module highlights key aspects of the platform, including legal education, counseling, community engagement, quizzes and games. Additionally, it includes a contact form, allowing users to reach out for support or inquiries. By creating a welcoming and user-friendly entry point, the Landing Module encourages active participation and enhances overall engagement within the platform.

User Management Module

The user management module allows users to create accounts, log in securely, and manage their profiles. It includes a simple signup process where users provide basic details to register. The login system ensures security through authentication, preventing unauthorized access. Passwords are encrypted to protect user data. Once logged in, users can update their personal details and preferences in their profile. The interface is designed for easy navigation, making account management smooth. Strong security measures keep user information safe. This module

provides a reliable and efficient way for users to access and interact with the platform.

Empower and Connect Module

The Empower and Connect Module is designed to provide users with essential support, guidance and a sense of community. It offers helpful videos on safety, legal rights and mental well-being, giving users valuable insights and expert advice. To enhance personalized support, the module includes a counselor appointment feature powered by machine learning algorithms like Support Vector Machine (SVM) and Naïve Bayes (NB) to analyze user preferences and suggest suitable counsellors based on availability and expertise. This enables users to book sessions efficiently, ensuring a more tailored experience. Additionally, the community space fosters interaction by allowing users to share thoughts, engage with others and post updates in a safe and welcoming environment, where SVM and NB-based moderation can help detect and filter inappropriate content, ensuring a positive user experience. To improve the platform, a feedback section allows users to share suggestions and personal experiences. By leveraging machine learning analysis, user feedback can be categorized and prioritized for platform enhancements. By combining expert guidance with AI-driven insights and community interaction, this module promotes confidence, awareness and meaningful connections.

Activity Module

The activity module provides an engaging way for users to learn through quizzes and interactive games. It covers topics like legal rights, safety measures, and mental well-being, helping users gain essential knowledge in a fun and interactive manner. The quizzes test understanding, allowing users to review their answers and see their scores for better learning. The games are designed to be interactive, encouraging problem-solving and awareness in an enjoyable way.

Legal Aid and Resources Module

The Legal Aid and Resources module provides vital information to support women and children by ensuring they are aware of their rights and available assistance. It includes a well-organized document section containing essential legal rights, safety guidelines, and emergency contacts. The module

offers access to important resources such as helpline numbers, frequently asked questions and step-by-step guidance on seeking help. Users can easily navigate the platform to find relevant information for their specific concerns. It aims to enhance awareness and preparedness by offering clear and practical advice. This module also provides links to legal aid services and support organizations for immediate assistance. The information is regularly updated to ensure accuracy and relevance. Users can access simplified legal explanations, making it easier to understand their rights. It helps individuals take informed actions in case of emergencies or legal challenges. The module promotes empowerment by providing reliable and accessible resources. Through educational content, users gain confidence in addressing legal concerns effectively. It also features case studies and real-life examples to illustrate practical solutions. The resources are designed to be user-friendly, catering to a wide range of needs. The module includes multilingual support to reach a diverse audience. Interactive tools such as self-assessment guides help users understand their legal position. It encourages proactive learning and preparedness for different situations. The platform ensures privacy and confidentiality while accessing sensitive information. Users can bookmark important sections for quick reference. The module continuously evolves to include new policies, legal changes, and additional support networks. It serves as a valuable resource for individuals seeking legal aid, ensuring they are well-informed and supported.

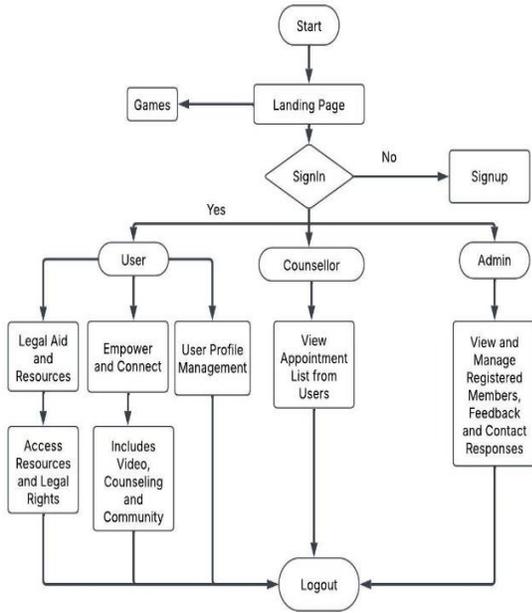
Counsellor Module

The Counsellor Module allows counsellors to efficiently manage and track booked sessions. With an intuitive and user-friendly interface, they can easily view scheduled appointments and ensure smooth coordination. The module provides seamless communication features, enabling counsellors to interact with users effectively.

Admin Module

The admin module provides a centralized system for managing users, reviewing feedback and handling inquiries. It helps administrators monitor activity and respond to concerns efficiently. The module ensures smooth communication and enhances user experience. It maintains system efficiency by organizing data and

resolving issues promptly. With streamlined management, the platform remains well-structured and responsive.



IV. FUTURE WORK

In the future, the platform can be expanded and improved in several key areas to better serve its users. One potential enhancement is the integration of advanced AI and machine learning techniques to provide more personalized user experiences, such as customized content recommendations and emotional state detection. Developing a mobile application version of the platform will further increase accessibility, particularly for users in remote or underserved regions. To promote inclusivity, the addition of multilingual support will enable users from diverse linguistic backgrounds to fully engage with the platform. Moreover, implementing real-time crisis intervention features, such as emergency chat services connected to counsellors and legal experts, will offer immediate assistance during critical situations. Partnering with NGOs, legal aid organizations and mental health professionals will help enrich the platform's resources and extend its reach. Additionally, expanding the gamified activities and educational tools will make learning about legal rights, safety and mental health more interactive and engaging. Finally, introducing a data analytics dashboard for platform administrators will support the continuous monitoring of user engagement and

feedback, driving further improvements to the system's functionality and impact.

V. CONCLUSION

The "Digital Empowerment - Building Safety Support and Legal Awareness for Women and Children" project provides a user-friendly platform that empowers women and children with essential resources on safety, legal rights and mental well-being. Through a structured web application, users can access information, engage in educational activities and connect with professional counsellors.

The platform includes key features like a personalized home page for registration and login, counseling services with appointment scheduling and interactive quizzes on legal rights and safety. The Empower and Connect page offers videos on mental health, legal rights and safety, ensuring users have access to up-to-date information. The Resources page provides downloadable eBooks, emergency helplines and FAQs. The Legal Rights page serves as a guide detailing rights in a clear and accessible way. A Settings page allows profile customization with a secure logout option to protect user data.

Designed for ease of use, the platform features a responsive and intuitive interface that works across devices. The backend ensures smooth operation, secure data transactions and efficient content management. A feedback system integrated into the counseling section helps improve services based on user insights.

This project combines technology with social impact, creating a space where women and children can find support, knowledge and resources to navigate personal and legal challenges. By promoting empowerment and awareness, the platform enhances safety, well-being and legal understanding for its users.

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