

Kimochi: a Career Guidance and Mentorship Network for Rural Underprivileged Kids

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Abstract—In a rapidly evolving world, every child should have the opportunity to dream and, more importantly, the tools to achieve those dreams. India, with its diverse educational landscape, faces a substantial gap in providing career guidance and mentorship to rural students. In the current scenario, while the rest of India is flourishing in the education sector, its hinterland is critically facing a gap in effective career guidance and mentorship. Numerous factors contribute to this, like financial constraints and even limited exposure to global market needs. To fill this unequal gap, we propose “Kimochi” an innovative ed-tech platform from a unique collaboration among Suzuki Motor Corporation, Suzuki Innovation Centre and Indian Institute of Technology Hyderabad. The methodology followed combines Agile and Design thinking with rapid prototyping and co-design. Our platform serves students in grades 8 to 12 in rural India who aspire to excel in their careers through practical guidance from mentors from premier education institutes like IIT.

Index Terms—Career Guidance, Mentorship, Rural and Underprivileged Kids, Social Networking

I. INTRODUCTION

Career selection and progression pose significant challenges for youth, including those in rural areas. Rural youth, facing the additional burdens of poverty and disadvantage, encounter heightened difficulties in navigating career-related issues, particularly in the context of rural India’s distinctive characteristics. This proposed solution aims at solving these career

related challenges experienced by underprivileged or youth in rural areas through suitable career guidance and mentorship in their early years. It is a solution for solving the gap in career guidance. Despite a wealth of literature addressing the career development needs of urban youth, there is a gap in career guidance understanding and support for the substantial rural Indian segment of the school going population. Limited career-related studies have been conducted in India with an inclusive (if not exclusive) focus on rural or other underprivileged groups. Many young talents in rural areas face a “career gap” due to limited resources, hindering their ability to translate dreams into reality and impacting their transition to successful career. Addressing this need, a collaboration between the Suzuki Innovation Center and the Indian Institute of Technology Hyderabad led to a unique platform for students in grades 8 to 12 in rural India. This lifeline offers mentorship, connects them with premier educational institutions, and goes beyond traditional learning methods with engaging content like video lessons and simulations.

Our product isn’t just another online learning platform. It’s designed to make learning engaging and accessible, offering video lessons, quizzes, and simulations. But our vision stretches beyond the conventional boundaries of education. We aim to nurture social entrepreneurship, fostering students

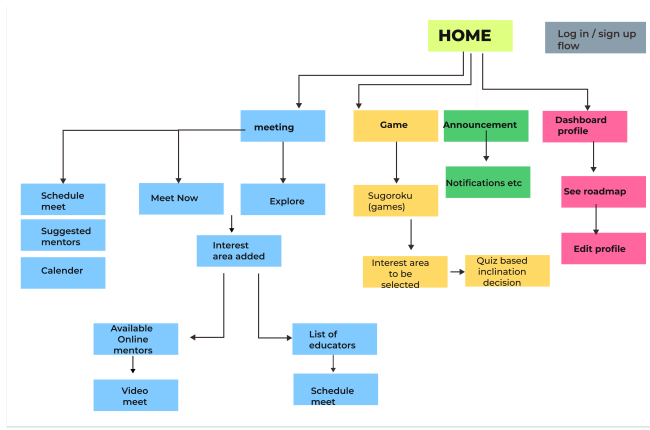


Fig. 1: Information architecture.

Hi-fidelity screens

A responsive layout was followed to be adapted to smaller screens as well.

The Home page.

The starting pages are to welcome new and existing users to the app. The first page prompts users to log in or sign up, and is followed by either the log in or sign up page. KIMochi makes its first impression to the user here with bright, friendly colors and the trusted Material Design.

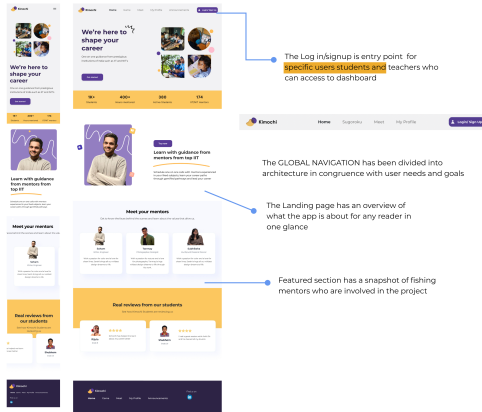


Fig. 2: Home Screen.

who can become more than just successful professionals - they can be community leaders, innovators, and change-makers. The objectives of the projects are - Solving the Career Gap: addressing the critical issue of career awareness and preparedness, ensuring that no dream is left unexplored due to lack of guidance Connecting Dreams: We bridge the gap between students in rural India and the brilliant minds of premier institutions like IIT, fostering mentorship relationships that inspire and guide these young minds.

II. PROPOSED SOLUTION

The proposed career guidance and mentorship platform has been termed as Kimochi that means 'Feelings' in Japanese. As we aspire to help students understand and transform their feelings into actual career choices. In this section, we first highlight the key aspects and contributions of Kimochi, next

Log in flow

Since our users were school kids, we debated on what would build trust and does not compromise the level of tech adaptation kids have already.

The screens give the option to choose and log in as a teacher or as a student. The log in option is necessary to get track of personalised mentorship content.

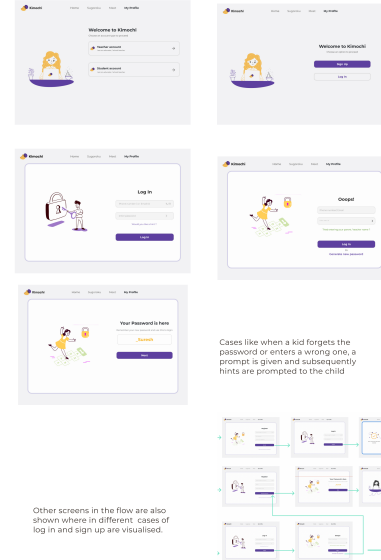


Fig. 3: Login/ SignUp Screen.

we illustrate a sample use case followed by a brief User interfaces.

A. Main Value Proposition

The key aspects considered in the development of the app are

- 1 Quick personalisation of content and guide for students using hashtags. (To correctly match with a mentor of interest.
- 2 Feedback, progress Track and future road map, made with the mentor's guidance using virtual meetings.
- 3 Minimum navigation screens for kids for better user experience, along with the gamified approach to learning about various career paths.

User Interface: Information architecture for the application has been illustrated in Fig. 1.

The home page, login/ signup screen and the gamified experience are illustrated in Fig. 2, Fig. 3, and Fig. 4, respectively, next we discuss a typical use case in which Kimochi can be used.

B. Use case

We consider the typical user as a child from a rural school in Telangana with basic knowledge of smartphone, internet and basic level skillset in english reading (for navigating the application) : A child of a rural school in Telangana Goal: The child's goal is to find the right mentor for his guidance in career path. Preconditions: The child must be enrolled in a school or not drop out for adequate guidance. Flow of event: The child faces career guidance issues and goes to the Kimochi

Gamified experience

The **quiz based** feature of the app wherein the child really gets to understand his knowledge in his field, thereby motivating him to see what all additional steps need to be taken in order to achieve his goals

This part of product is still under development and iteration in the larger plan for product cycle

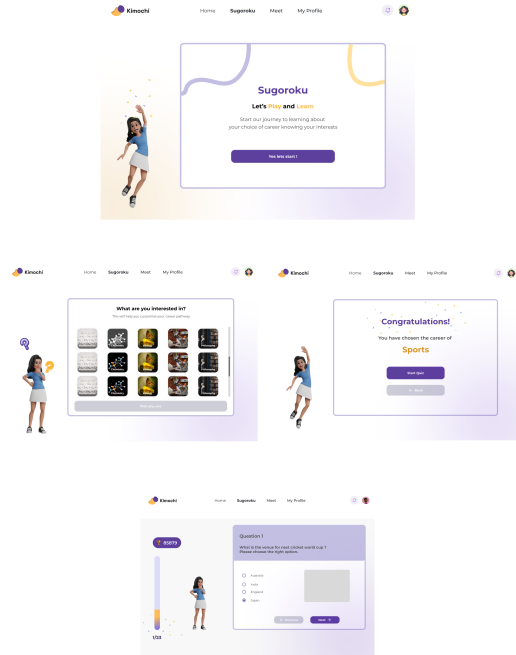


Fig. 4: Gamified experience.

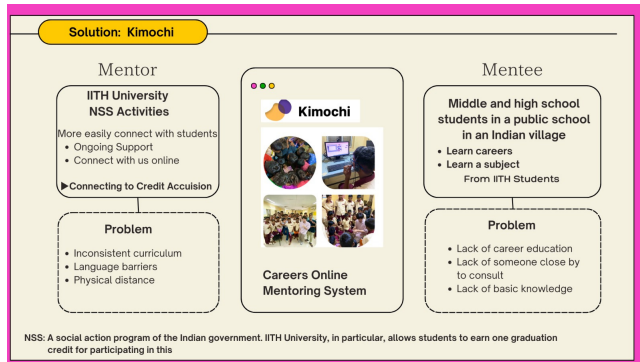


Fig. 5: Use case

platform; there, she searches for mentors and, through algorithmic matching, finds the right fit. Followed by video-based guidance, the child can collaborate on his career roadmap. Interactive quiz-based games and tracking of her journey are features that help the user to get optimised solutions for career guidance. Next, we present the technological backend used to develop Kimochi. System of use case is illustrated in figure 5.

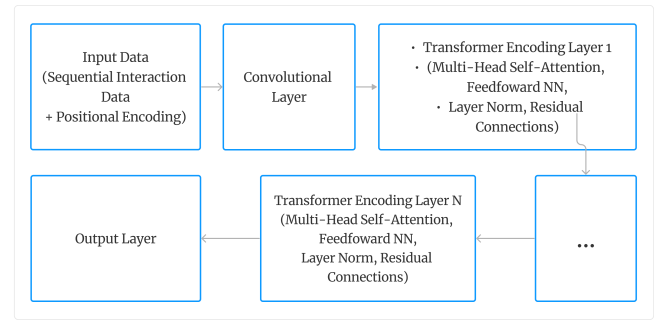


Fig. 6: Information architecture.

C. Technological Backend

The following aspects are considered in the development of Kimochi:

- 1 Matching & Mentoring: Integrating online meet SDK (AWS Chime) Provides an easy and efficient online meeting, which the mentor can teach and communicate in only a single Application.
- 2 Textbook Game Three.js WebGL based on Javascript Textbook-style games engage students and allow them to enjoy solving problems that apply to various lessons.
- 3 Career Quiz: Using Chat GPT, Career Quiz will be generated. => Original Career Coordinate by IIT student will be personalised based on the student's percentage of correct answers in the future. Architecture of backend is shown in Figure 6.

III. CONCLUSION

Our Kimochi Project is poised to revolutionise rural education by ensuring unprecedented convenience in accessing mentorship and personalised learning, minimising financial constraints through a sustainable, technology-driven approach. This initiative empowers students, serving as catalysts for positive change in their communities. It represents a holistic investment in the future, breaking the cycle of limited opportunities in rural areas and paving the way for a more empowered and equitable rural landscape where every student has the tools and support to navigate a path towards success. As we grow, our platform aims to build a community of empowered and inspired rural students and team of motivated and qualified mentors that will transform the future of rural in India.

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