

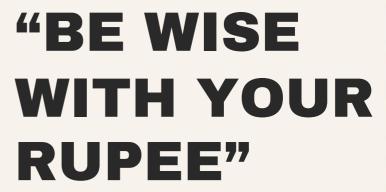
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# RUPEBEE: EMPOWERING A FINANCIALLY WISE INDIA

## A Success Story from Team RupeeBee at the PSBs Hackathon Series-2025

Our hackathon journey began with a powerful problem statement: "Develop an interactive app to educate users on personal finance and protect against financial fraud." We quickly realized this challenge strikes at the very core of the modern financial industry: trust. Every digital transaction is built upon this trust, yet it is being eroded by sophisticated fraud. This is not just a user-level issue but a critical business risk for the entire banking and fintech sector, damaging reputations and slowing the adoption of digital innovations.

The primary vulnerability being exploited is a gap in practical financial knowledge. This insight crystallized our mission, which we distilled into a simple guiding principle: to help every individual "Be wise with your rupee." We concluded that empowering users is the most effective strategy to safeguard them and to fortify the trust essential for the growth of the entire digital financial ecosystem.

To address a challenge of this magnitude we knew a simple educational pamphlet in app form would fail. Our solution had to be a living, breathing ecosystem that actively guides and protects. That is why we created **RupeeBee**, a comprehensive financial **companion**. Our inspiration was not drawn from a single source but from the world around us and the people closest to us.



We saw our parents navigating cumbersome spreadsheets and our grandparents being targeted by **sophisticated digital scams**. These personal experiences ignited our passion for creating something truly inclusive. We looked at platforms like **Duolingo**, which masterfully turn learning into an engaging habit and asked, "Why not for finance?" This led us to develop interactive fraud simulations, score-based learning and cartoonish videos to make complex topics approachable for everyone.

Similarly, we saw how AI assistants personalize our daily lives and questioned why they could not offer proactive financial guidance. This sparked the creation of **Sarathi**, our multilingual AI that provides **actionable forecasts** instead of generic advice. For security and personalization we implemented **Federated Identity Management (FIM)** to create a secure tailored hub for each user. To ensure no one was left behind we integrated a **Text-to-Speech (TTS) engine** for the visually impaired. RupeeBee was engineered from the ground up to empower every person to "**Be wise with your rupee**."



# Forged in Competition: The Rupeebee Hackathon Journey

The PSBs Hackathon Series-2025, hosted at the prestigious I.K. Gujral Punjab Technical University, was a rigorous, multi-stage hackathon designed to identify the most promising innovations in banking. Our journey through this demanding competition is a testament to the strength of our vision and the dedication of Team RupeeBee.

#### Phase 1: The Blueprint for Success

The competition began with the ideation phase, where we were judged on our strategic approach. Our detailed blueprint for RupeeBee focusing on a secure, accessible, and intelligent platform stood out, and the validation here was a turning point, earning us entry into Phase 2.

#### Phase 2: Building an Enterprise-Grade Solution

Moving on, the execution challenged us to build a robust, enterprise-grade version of RupeeBee. Scary? Yes! but through regular video calls, our mentor from Punjab & Sind Bank lent us their invaluable technical expertise and demonstrating best programming practices to follow. Ultimately helping us refine RupeeBee into a practical solution banks could adopt with confidence.







# From Spark to Code: The Rupeebee Grind

From Spark to Code, our team worked sleepless nights to transform strategy into a seamless, intuitive app. We focused on three principles: security-first design, clean UI/UX, and scalable backend infrastructure. Using Supabase for secure cloud services and Flutter for a consistent cross-platform interface, we ensured that the same backend powered both web and mobile apps. This dual-approach coding grind turned ideas into reality within days.

At one point, we hit a major roadblock with real-time spam detection. It was 3 AM, and instead of giving up, the team turned the obstacle into a breakthrough developing a lightweight, multilingual spam classifier in under 24 hours. These were the defining moments of RupeeBee's grind.

### **Apex: The Final Test**

The final verdict was a moment of **surreal pride**. Stepping onto our own university stage as the winning team, with our parents watching from the audience, was a dream realized and the ultimate tribute to their support. Receiving personal congratulations from senior officials was more than an honor; it was the ultimate **validation** of our vision.

That day, we felt the shift from being a hackathon team to becoming the **architects** of a necessary, real-world solution. The fatigue from months of relentless work vanished, replaced by a profound sense of purpose. The verdict wasn't just a trophy; it was a **mandate** to help build a financially wiser India.



#### **THANK YOU**

Our journey with **RupeeBee** would not have been possible without the support and guidance we received. We sincerely thank the **Indian Banks' Association (IBA)**, the **Department of Financial Services (DFS)**, **Punjab & Sind Bank** and our university **IKGPTU** for giving us the opportunity to innovate and the platform to turn our vision into reality.