



# Innovate4FinLit

## Game Challenge

Innovating Game-Based Solutions for Financial Literacy

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### Problem Statement :

Financial literacy initiatives in India fail to create real behavior change because they rely on text-heavy content, theoretical explanations, and fragmented solutions tailored separately for farmers, women, students, and young adults. These approaches do not work well in low-literacy, low-connectivity, and rural or semi-urban contexts, leading to poor adoption and minimal long-term impact.



## Brief about the Idea:

**ArthVratta – The Financial Resilience Farm** is a **voice-first, narrative-driven farming simulation game** that teaches financial literacy through lived experience instead of lessons.

Users manage a virtual farm across seasonal cycles. Every farming decision (crop choice, insurance, saving, borrowing, digital payments) directly maps to real-world financial concepts. Learning happens implicitly through consequences, not instruction.



Opportunity should be able to explain the following:

## How is it different from existing ideas?

1.Existing solutions use **education-first** models (videos, quizzes, articles). ArthVratta uses a **behavior-first simulation**.

1.Existing apps split users into separate products. ArthVratta uses **one unified metaphor (farming)** adaptable to all four user groups.

2.Most tools assume literacy, smartphones, and internet. ArthVratta is **voice-first, icon-based, and offline-first**.

### **How does it solve the problem?**

- Converts abstract financial concepts into tangible farm outcomes.
- Encourages habit formation through repetition and feedback loops.
- Makes finance culturally intuitive for Bharat.

### **USP (Unique Selling Proposition)**

- A single game where **financial literacy emerges naturally from gameplay**, not from teaching—designed specifically for India's socio-economic and linguistic realities

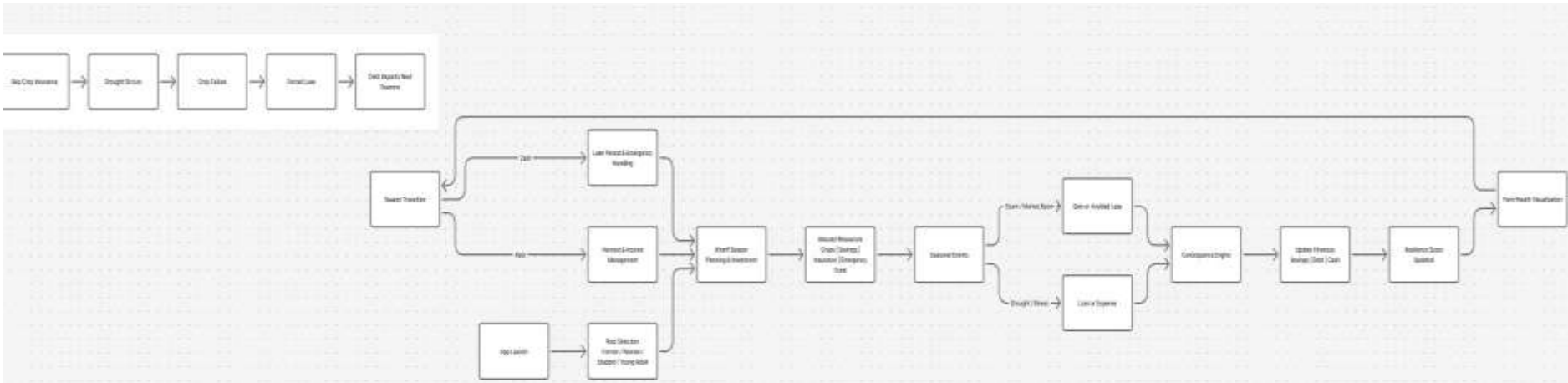


## List of features offered by the solution:

- Seasonal Farming Simulation (Kharif, Rabi, Zaid)
- Savings & Budgeting Mechanics (Seeds = Money)
- Insurance & Risk Events (Droughts, illness, pests)
- Digital Finance & Scam Detection Scenarios
- Financial Resilience Score (Visual farm health)
- Role-based Narratives (Farmer, Woman, Student, Young Adult)
- Emergency Fund System
- Offline Gameplay (One full season playable)
- Voice-first Interaction (Multi-language ready)
- Community Co-operative Mode (optional extension)

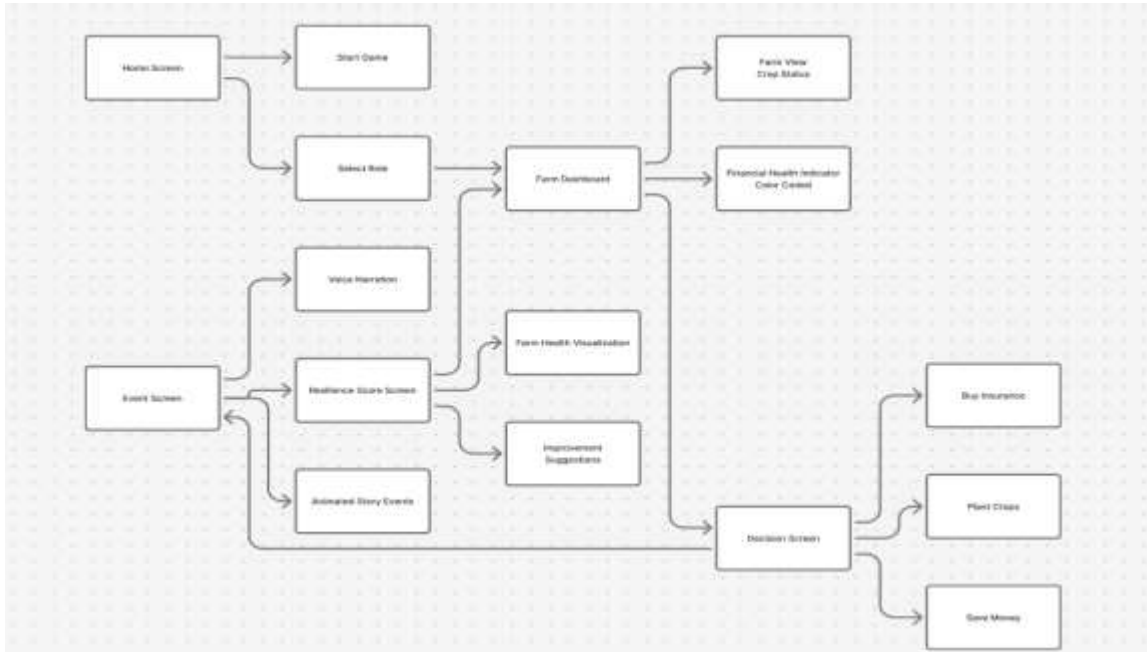


## Process flow diagram or Use-case diagram



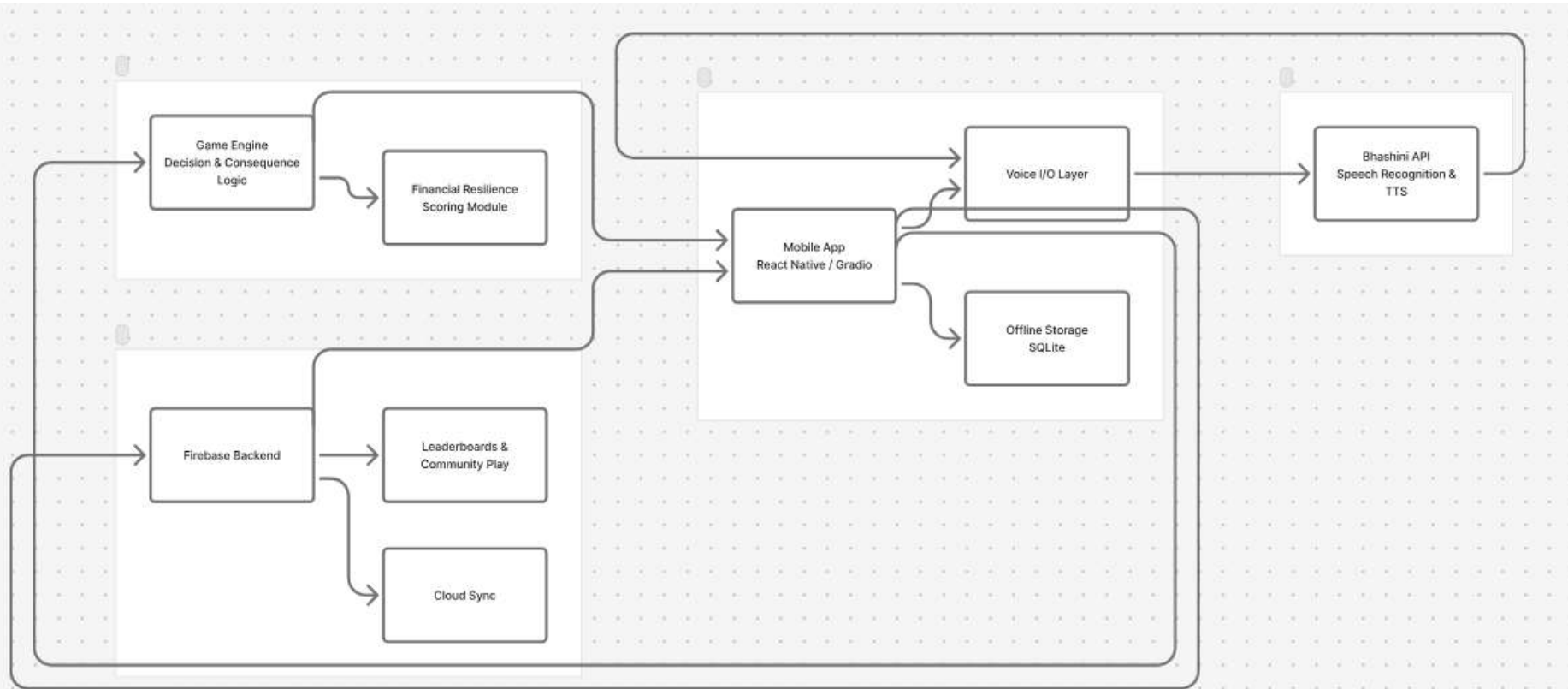


## Wireframes/Mock diagrams of the proposed solution





## Architecture diagram of the proposed solution







Technologies to be used in the solution:

- **Frontend:** React Native / Gradio (Prototype)
- **Backend:** Firebase (optional)
- **Game Logic:** Python
- **Voice:** Bhashini ASR/TTS
- **Database:** SQLite (offline-first)
- **Cloud Sync:** Firebase / REST APIs
- **Design:** Vector-based assets for low memory usage



## Estimated implementation cost (optional):

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Component	Approx Cost	
App Development	₹2–3 Lakhs	
Voice Integration	₹1 Lakh	
Content & Localization	₹1–2 Lakhs	
Testing & Deployment	₹50,000	
<b>Total (MVP)</b>	<b>₹4.5–6.5 Lakhs</b>	



Add as per the requirements for the hackathon:

- **Target Beneficiaries:** Farmers, Women SHGs, Students, Young Adults
- **Deployment Ready:** Android APK <15MB
- **Scalability:** Can integrate with banks, schools, NGOs, SHGs
- **Impact Measurement:** Pre/post behavior tracking via resilience score
- **Alignment:** National Financial Literacy goals, Digital India, Bharat-first design



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# THANK YOU

