

## **Title**

### **Financial Literacy RPG Quest — Simulation Based Personal Finance Learning System**

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#### **1. Objective**

To design a simulation-driven financial learning platform that teaches real-world money management through decision-based gameplay.

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#### **2. System Overview**

The system simulates a virtual financial life where a player earns income, manages expenses, handles debt, invests money, and faces random financial events. Each decision impacts financial stability, risk level, and long-term wealth growth.

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#### **3. Architecture**

- Player Engine
  - Decision Engine
  - Financial Simulation Core
  - Risk Evaluation Model
  - Credit Score Engine
  - Advice Generation System
  - Random Event Generator
  - REST API Layer
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#### **4. Simulation Model**

Each month:

- Salary added
- Random life event applied
- Player decision executed
- Debt / savings updated

- Credit score recalculated
  - Risk and health evaluated
  - Financial score computed
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## **5. Financial Metrics**

### **Net Worth**

Net Worth = Balance + Savings – Debt

### **Financial Score**

Measures overall financial stability using savings, debt, and credit score.

### **Risk Levels**

- LOW → Safe finances
  - MEDIUM → Manage debt carefully
  - HIGH → Financial instability risk
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## **6. Decision Engine**

Players can:

- SAVE → Increase savings
  - INVEST → Grow wealth with risk
  - SPEND → Reduce balance
  - LOAN → Increase debt
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## **7. Credit Score Model**

Credit score changes based on:

- Debt level
  - Savings stability
  - Negative balance
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## **8. Advice System**

AI-based rule engine generates financial guidance based on:

- Risk level
  - Financial health
  - Savings behavior
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## **9. Game Progression Levels**

- BROKE
  - STABLE
  - GROWING
  - INVESTOR
  - WEALTHY
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## **10. Game Outcome**

- BANKRUPT → Excessive debt
- IN PROGRESS → Normal
- FINANCIALLY FREE → Strong wealth

## SAMPLE OUTPUT :

