Analysis Report

Summary

In this project, I analyzed user behavior from a real-money online gaming app, aiming to evaluate player engagement using a loyalty point system. The analysis covers deposit/withdrawal behavior, gameplay activity, and fairness of the reward formula. This helped uncover top-performing users, behavioral patterns, and areas for improving user incentives.

Tools & Methodology

- **Language:** Python
- **Libraries:** pandas, numpy
- **Process:**
  - ✓ Data loading from Excel
  - ✓ Merging & cleaning datasets
  - ✓ Calculating loyalty points based on activity
  - ✓ Ranking users and bonus assignment
  - ✓ Suggesting improvements to reward formula

Key Findings

Part A – Loyalty Points Breakdown

- Loyalty Points calculated for slots:
  - **Oct 2 (S1)**
  - **Oct 16 (S2)**
  - **Oct 18 (S1)**
  - **Oct 26 (S2)**

Part B – Top Players & Bonus Allocation

- Top 50 players assigned bonus amounts based on loyalty ranking
- Consider including a **bar chart or leaderboard table** here

Part C – Metric Insights

- **Avg Deposit Amount:** ₹X
- **Avg Deposit/User:** ₹Y
- **Avg Games/User:** Z

Observations & Recommendations

Observation-
Players who play more games may still score fewer loyalty points due to smaller deposit/withdrawal activity.

Recommendation-
Revise the loyalty formula:
Change Games Played weight from 0.2 → 2