Wallet Risk Scoring Project

1. **What We Did**

We created a system that checks how risky different crypto wallets are when using Compound Finance.

- Analyzed 100 wallet addresses

- Checked their transaction history using blockchain APIs

- Gave each wallet a risk score from **0-1000**

2. How We Got the Data

We used two special tools (APIs) to collect information:

API Keys Used

1. **Etherscan API**

   o What it does: Gets transaction history from Ethereum blockchain

   o How to get it: Free key from etherscan.io (sign up needed)

2. **Alchemy API**

   o What it does: Backup data source when Etherscan fails

   o How to get it: Free account at alchemy.com

3. How We Checked Risk

We looked at 6 important factors:

Risk Factor	Why It Matters
Failed transactions	Shows wallet problems
Liquidations	Means loans weren't repaid
High borrowing	Spending more than they repay
Flash loans	Complex strategies = more risk

Risk Factor	Why It Matters
Big transactions	More money = bigger risks
Frequent borrowing	Regular borrowers = higher risk

4. How Scores Were Calculated

1. **Important factors got more weight**

   - Liquidations & borrowing ratio = 25% each

   - Failed transactions = 20%

2. **Final score formula**

(All scores added up) × 1200 → then capped at 1000

   - Minimum score: 50 (if any Compound activity)

   - No activity = 500 (neutral score)

5. Results

- Created wallet_risk_scores.csv file with all scores