

### Step 1: Understanding the Problem

We were given JSON data of Aave V2 protocol wallet transactions. Each record had a wallet address, action (borrow, repay, etc.), and amount. Our task was to assign a credit score between 0 and 1000 to each wallet based on behavior.

### Step 2: Project Setup

We created a project folder `aave-credit-score` with subfolders:

- `data/` for input file
- `src/` for the Python script
- `readme.md` and `analysis.md` for documentation

### Step 3: Loading JSON

Used Python `json` and `pandas` libraries to load and organize the data.

### Step 4: Feature Engineering

Extracted:

- Total and count of actions like `borrow`, `repay`, `liquidationcall`
- Repay-to-borrow ratio
- Liquidation counts

### Step 5: Scoring Logic

We used:

```
python
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raw_score = (repay_ratio * 2) - (liquidation_count + 1)
```

Then scaled the score to 0–1000 using `MinMaxScaler`.

### Step 6: Output Files

- `wallet_scores.csv`: Wallets with credit scores
- `score_distribution.png`: Graph of score ranges

### Step 7: Documentation

`readme.md` describes the project, method, and how to run the code.

`analysis.md` gives behavioral insights for different score ranges.

### Step 8: GitHub Upload

Used `git` to push code and files to GitHub. Then submitted repo link in Google Form.