Team: Not Approved
Date: 3/28/23

<u>Goals</u>

- Approval or denial based off given data about a particular individual for a loan application
- Estimated interest rates based off the given information given

<u>Environment</u>

- Users riskiness factor: based off user history and demographic
- Users demographics (Gender, married, dependents, self-employed, income, etc.)
- Users history (credit)
- Application data (amount, term)
- Current fed rates, standard industry values
- Geographical location of applicant
- Stakeholders:
  - pos: quick way to find out loan approval or denial status
  - neg: takes away human factors from the process, could result in more disapprovals (algorithm is not 100% accurate), takes away more factors that humans would take into consideration, edge case scenarios causing false negatives such as identity theft (not enough data to accurately model the population or data that has not occurred before), old data that is not currently updated causing incorrect results

<u>Adaptation</u>

- To adapt to new circumstances and environmental factors by augmenting the shape of the algorithm, for a neural network this can be in the form of adding new layers or adding new nodes to a particular layer
- Changing set interest rates based off economic factors, and other data sources (change the feature data that the system trains on)
- Not only using historical data to train the network, but also using reviews and appeals to allow special changes to the network based off human intervention