

# **ALEP:** Automated Loan Eligibility Predictor

Awwal Ahmed, `aya3@hood.edu`

Sarah Freidel, `srf3@hood.edu`

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## **1 Project Description**

We want to build an Automated Loan Eligibility Predictor (ALEP) system to address the challenge of assessing loan eligibility for users. This system will leverage financial data and machine learning to provide accurate predictions and financial guidance.

## **2 Resource Requirements**

Our project requires Python for back-end development, web-based platforms, Git and Visual Studio Code for version control and development, Jupyter for data cleaning/preparation and machine learning model development, and access to machine learning frameworks.

## **3 Tools**

Key tools: Git for version control, Visual Studio Code (IDE), Angular (front-end), Flask (Python) for back-end development. For machine learning task, we will utilize scikit-learn for various functions such as preprocessing, model selection, and evaluation. The xgboost library will be utilized for building powerful and scalable gradient boosting machine learning models.

## **4 Processes**

We will be following Agile Development methodology for iterative development, adaptive changes, and continuous team communication.

## **5 Expected Deliverables**

Delivery includes a functional ALEP web application, machine learning model integration, comprehensive documentation, and a concise project summary poster.