

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	19 September 2022
Team ID	8.2
Project Name	Password strength classifier
Maximum Marks	4 Marks

Technical Architecture:

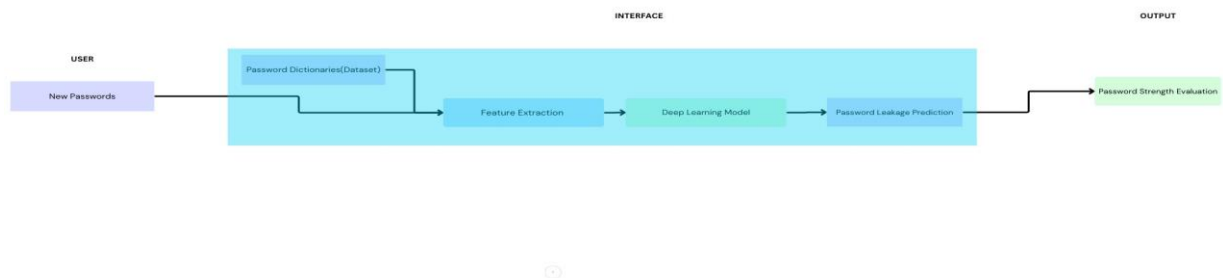


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	Password Dictionaries	Databases of leaked and non-leaked passwords for training data	SQL, MongoDB
2	Feature Extraction	Extracting numeric features from passwords	Python, scikit-learn
3	Deep Learning Model	Neural network model for leakage prediction	TensorFlow, Keras
4	Model Serving	Deploying trained model on devices	TensorFlow Lite, Flask
5	Password Scoring	Evaluating new passwords using model	Python, SDKs

Table-2: Application Characteristics:

S.No	Characteristic	Description	Technology
1	Semantics	Extracting meaning of passwords	NLTK, spaCy
2	Patterns	Identifying structural patterns	Regex, Python
3	Composition	Analyzing password composition	N-grams, Python