

Project Title: Password Strength Classification

Project Start Date: 11/12/2021 **Project Finish Date:** 16/12/2021

Project Guide: Dr Gopikrishnan S

Team ID: 8

Project Team Lead – Abhay Chaudhary (19BCE7290), abhay.19bce7290@vitap.ac.in

Project Objectives – The main objective of our project is to determine the strength of a password and using machine learning algorithms classify it as Strong, Weak or Medium (2,1,0). Along with this classification, we have also done a comparison of the most popular machine learning algorithms for our dataset. We have also added a function where the user can enter a password and check its strength based on these algorithms. For achieving our primary objectives, we have to complete some secondary ones which include, pre-processing, understanding the data, applying the right models, analyzing the results.

Approach

1. **Gathering Data:** The dataset will be sourced from Kaggle.com. The passwords used in our analysis are from the 000webhost leak that is available online.
2. **Pre-processing:** Perform Data Pre-processing and Data Cleaning on the dataset.
3. **Perform Exploratory Analysis** on the dataset
4. **Creating ML Models:** Apply different Machine Learning Models to complete the Analysis
5. **Analysing the Results**
6. **Conclusion**

Roles and Responsibilities

Name	Role	Responsibilities
ABHAY CHAUDHARY (19BCE7290)	Team Lead	Organize Meeting (min 3) in MS Teams, do all Presentations, prepare Scope Document and prepare Case Study.
ANAGANI PAVAN KRISHNA (19BCD7209)	Documentation	Submit Minutes of Meeting, Prepare final PPT and Project Report.
MOHAMMED HABEEB (19BCE7583)	Data Scientist	Prepare Dataset, Perform Data preprocessing and Data Cleaning.
MOTIKI PAVAN ANUDEEP (19BCD7067)	Data Analyst	Analyze the Data, Perform Exploratory Analysis and Predict the solution.