

Design Phase

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

Project Overview

- Purpose and goals
- Target users and stakeholders
- Success criteria

Requirements Analysis

- Functional requirements
- Non-functional requirements
- User personas and scenarios
- Prioritized user stories

System Architecture

- High-level component diagram
- Technology stack
- Hardware and infrastructure needed
- Third party services and APIs to integrate

Database Design

- Database schema diagram
- Tables for passwords, features, models, etc.
- DB sizing estimations

Model Design

- Types of models to train
- Model workflows and pipelines
- Training, validation and test data
- Evaluation metrics

Security Design

- Encryption mechanisms
- Access controls and authentication
- Security monitoring and auditing

Scalability Design

- Scaling needs over time
- Strategies for horizontal/vertical scaling
- Load testing plan

Deployment Design

- CI/CD pipelines
- Staging and production environments
- Monitoring and alerting systems

User Interface Design

- Wireframes and mockups
- Responsive design considerations
- Accessibility standards

Testing Plan

- Types of testing e.g. unit, integration, perf, security
- Test data requirements
- Automation testing approaches

Release Planning

- Project phases, timelines and milestones
- Versioning scheme
- Rollout and rollback planning

Appendices

- Supporting analyses and research
- Benchmarking of solutions
- Cost estimations
- Risk assessment
- Glossary