

ADVANCED OBJECT-ORIENTED PROGRAMMING (AOOPS) PROJECT - Abstract

Team Members:

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Problem Statement: Password forgetfulness can cause significant disruptions, especially during critical moments. The "**Password Manager**" project addresses this issue by providing a secure platform for storing and managing passwords. The project focuses on delivering a user-friendly interface and robust security measures, ensuring a reliable and convenient solution for users.

Project Prerequisites:

1. Knowledge and Skills:

- Proficiency in Java for application development.
- Understanding of encryption techniques and security protocols.
- Familiarity with user interface design principles and Java Swing for GUI development.

2. Technical Tools:

- Programming Language: Java.
- Security Libraries/Frameworks: Java Cryptography Extension (JCE) for encryption.
- Development Environment: Any Java IDE (e.g., IntelliJ IDEA, Eclipse).
- Version Control: Git for project collaboration and version management.

3. Resources:

- Documentation and tutorials on Java development and encryption.
- Development environment setup and configuration guides.

EXPECTED OUTCOME: The project aims to develop a secure and user-friendly password manager with the following features:

- **Secure Password Storage:** Users can store passwords securely within the application.
- **Password Generation:** A built-in feature to generate strong and unique passwords.
- **Encryption:** Implementation of advanced encryption techniques using JCE to protect stored passwords.
- **Cross-Device Synchronization:** Utilize cloud-based storage solutions for accessing passwords from any internet-connected device.
- **User-Friendly Interface:** An intuitive interface developed with Java Swing for seamless navigation and efficient password management.