



# Guardian Vault

Cyber Security

Project Proposal

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# IDEA

"Guardian Vault" aims to revolutionize data security in the digital age. By implementing advanced encryption techniques, the project offers a secure storage module for personal information and sensitive data. The objective is to create a robust and user-friendly platform, instilling confidence in users to store their information securely. Ultimately, this project prioritizes data privacy and seeks to elevate cybersecurity standards."

## Customers/Users

1. **Individual Users:** Everyday individuals seeking a secure and user-friendly platform to store personal information, journals, and sensitive data.
2. **Professionals:** Professionals such as doctors, lawyers, financial advisors, and consultants who handle confidential client data and need a secure repository.
3. **Businesses and Enterprises:** Small to medium-sized businesses and enterprises looking for a secure solution to store sensitive corporate information and access controls.
4. **Educational Institutions:** Schools, universities, and educational organizations looking for a secure platform to store student records, grades, and other sensitive academic data.
5. **Healthcare Providers:** Healthcare professionals and organizations in need of a secure way to store patient medical records and health-related information in compliance with health data privacy regulations.
6. **Legal Firms:** Law firms and legal professionals seeking a secure platform to store case-related information, client data, and confidential legal documents.

## Pains of Customer

1. **Data Breaches and Unauthorized Access:** Customers often worry about unauthorized access to their sensitive data. GuardianVault provides robust encryption and security measures to mitigate the risk of data breaches.
2. **SQL Injection Vulnerabilities:** SQL injection is a prevalent attack vector. GuardianVault's SQL injection prevention measures protect customer data from potential exploitation and manipulation.
3. **Lack of Secure Data Storage Options:** Customers may struggle to find a reliable and user-friendly platform for storing personal and sensitive data securely.
4. **Concerns about Compliance:** Businesses and professionals need to comply with various data privacy regulations.
5. **Privacy Infringement:** Users are concerned about their privacy being infringed upon. GuardianVault prioritizes data privacy by allowing users to have control over their sensitive information.

# Specifications of Guardian Vault

1. **User Authentication and Authorization:** Implement a secure user authentication system using industry-standard protocols to ensure only authorized users can access "Guardian Vault".
2. **Encryption Algorithms:** Utilize strong encryption algorithms to encrypt both user credentials and sensitive data stored within "GuardianVault."
3. **Secure Storage:** Design a secure storage mechanism to store encrypted user data in databases or file systems, ensuring data integrity and confidentiality.
4. **SQL Injection Prevention:** Implement parameterized queries and input validation techniques to prevent SQL injection attacks, ensuring the security of the underlying database.
5. **Intuitive User Interface (UI):** Create an intuitive and user-friendly UI for easy navigation and efficient interaction with "GuardianVault," catering to users across different devices and platforms.
6. **Data Backup and Recovery:** Implement a reliable data backup and recovery mechanism to enable users to restore their data in case of accidental deletion, system failures, or other unforeseen events.

## Sequence Diagram

