

**CYBER SECURITY** 

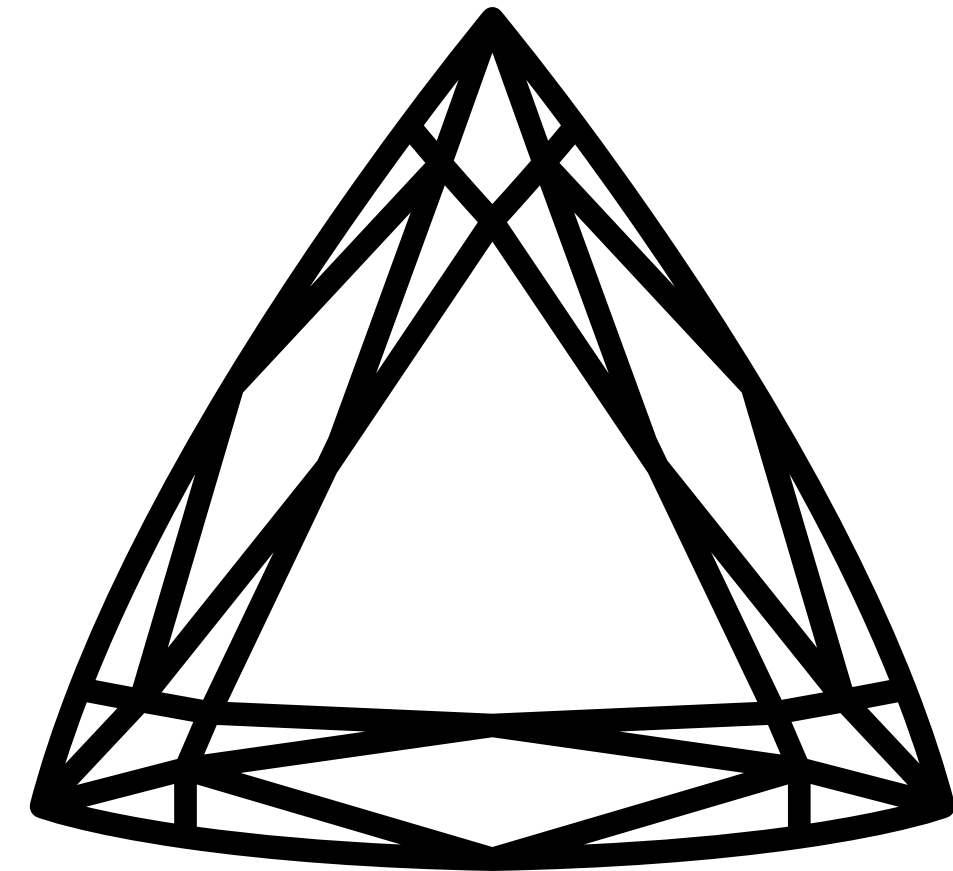
# GUARDIAN VAULT

***SECURITY IS NOT THE ABSENCE OF DANGER, BUT THE PRESENCE  
OF MEASURES TO ADDRESS IT***

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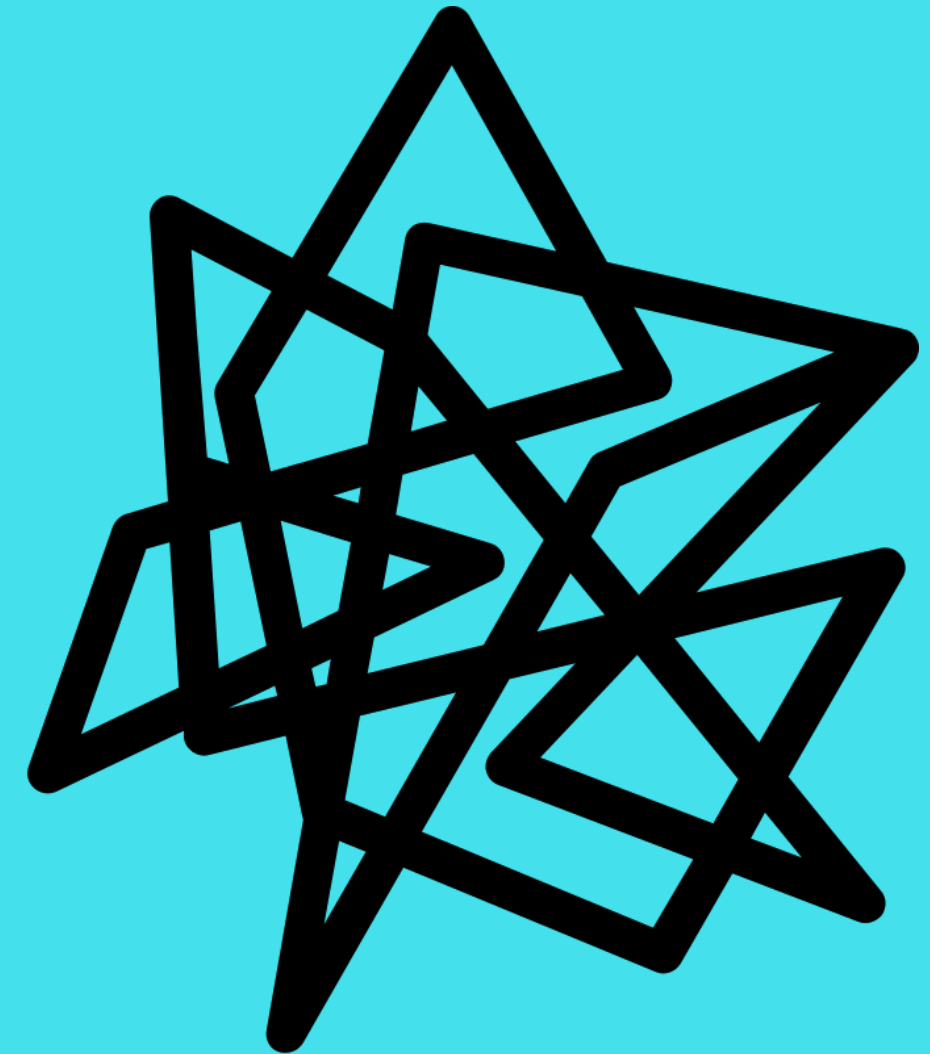
# INTRODUCTION

***IT'S THE ULTIMATE PLATFORM  
PRIORITIZING PRIVACY AND TRUST  
IN SAFEGUARDING YOUR SENSITIVE  
INFORMATION.***



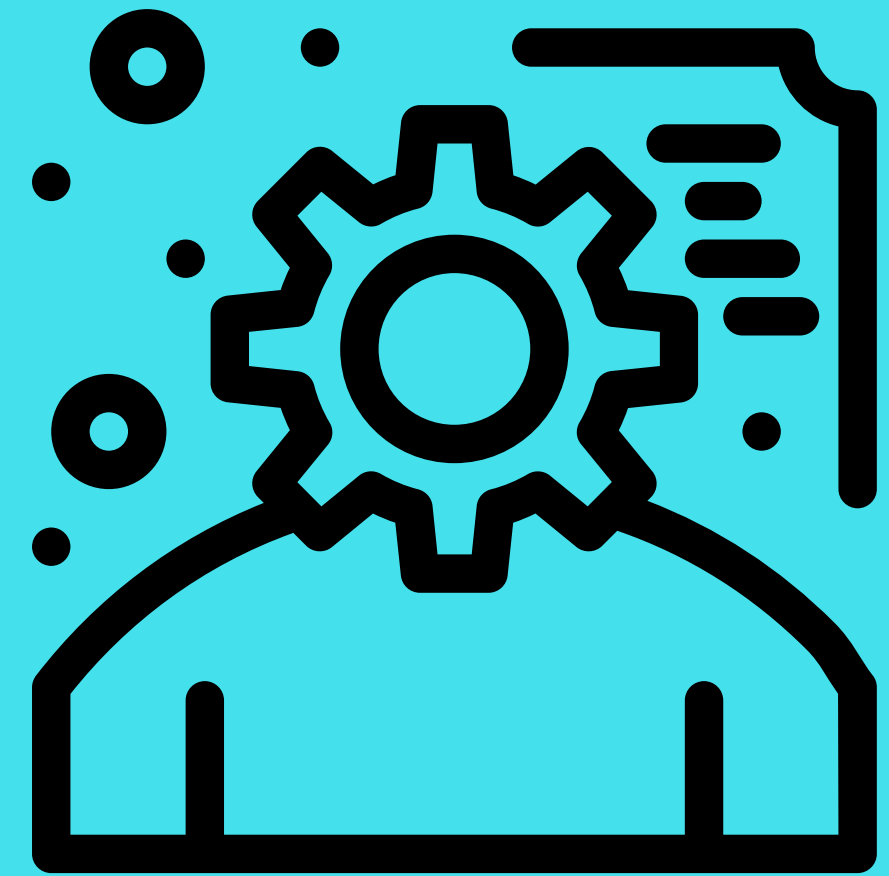
# PROBLEM STATEMENT

**EXISTING DATA STORAGE SYSTEMS LACK  
ROBUST PROTECTION AGAINST SQL  
INJECTION ATTACKS, JEOPARDIZING THE  
SECURITY OF PERSONAL AND SENSITIVE  
INFORMATION.**



# PROJECT IDEA

***THE OBJECTIVE IS TO CREATE A ROBUST  
AND USER-FRIENDLY PLATFORM, INSTILLING  
CONFIDENCE IN USERS TO STORE THEIR  
INFORMATION SECURELY***



# **SPECIFICATIONS**

**1**

## **USER AUTHENTICATION AND AUTHORIZATION**

*A secure user authentication system using industry-standard protocols to ensure only authorized users can access*

**2**

## **ENCRYPTION TECHNIQUE**

*Encrypt user credentials and sensitive data in "GuardianVault" using strong algorithms for maximum security.*

**3**

## **SECURE STORAGE**

*Design a secure storage mechanism to store encrypted user data in databases or file systems, ensuring data integrity and confidentiality.*

## FRONT-END DEVELOPMENT



- **HTML/CSS:** For structuring and styling the user interface, ensuring a visually appealing and user-friendly experience.
- **JavaScript:** Used for client-side scripting to create dynamic and interactive elements within the application's interface.

- **Python Flask:** Employed as the web framework for building the server-side logic and managing interactions between the front-end and database.
- **MySQL (via MySQL Workbench):** Used as the database management system to store and manage encrypted user data securely.

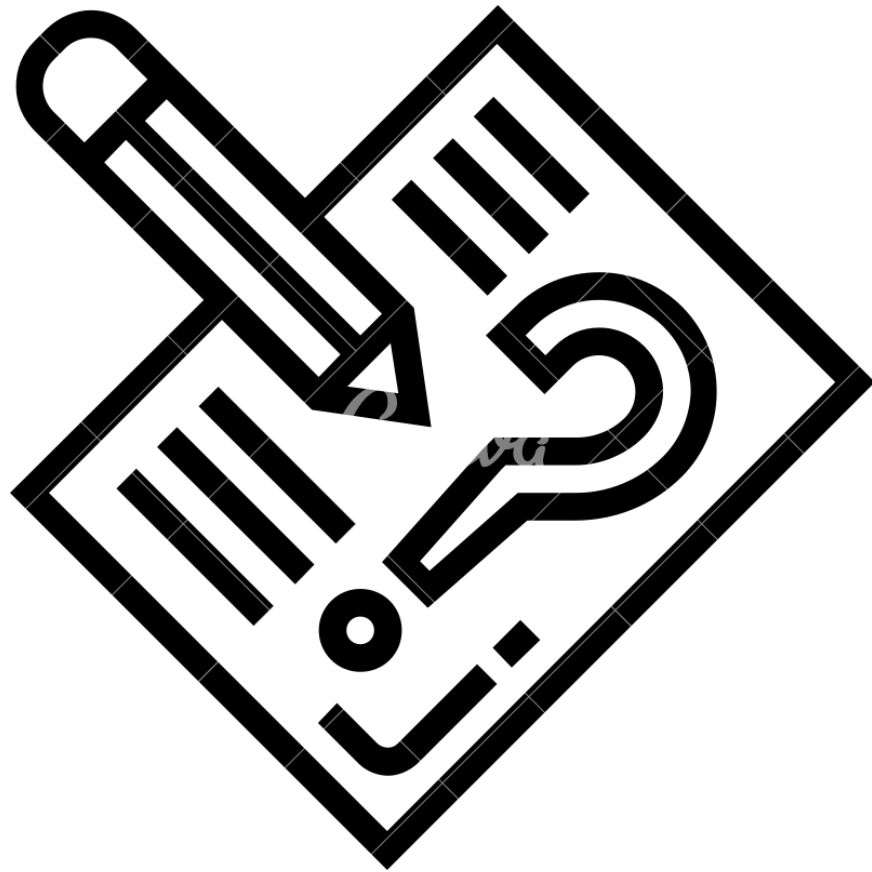


## BACK-END DEVELOPMENT

# CHALLENGES

## COMPLEXITY OF ENCRYPTION:

*Implementing strong encryption is complex, involving choosing algorithms, managing keys securely, and ensuring seamless integration without compromising performance.*



## PERFORMANCE VS SECURITY TRADE-OFF:

*Ensuring strong security without slowing down the system is a delicate balance, where robust encryption might affect the application's speed, demanding careful optimization.*



# **!THANK YOU**

GUARDIAN VAULT ENSURES YOUR SECRETS STAY SAFER  
THAN A SQUIRREL HIDING NUTS IN WINTER

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