

**PYTHON PROJECT**  
**on**  
**“ PASSWORD MANAGER “ FOR SECURITY PURPOSE**

**By -**

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## INTRODUCTION

The Password Manager In Python is a simple project developed using Python. This project is a command based which helps in creating user account and logins from the users input. This project is an interesting and simple project. The project is not completely functional.

It is created in Python using Tkinter and Mysql database to manage passwords for several application. A password manager is a program that houses all your passwords, as well as other information, in one convenient location with one master password.

The benefits of using Password Manager are:

- A Password Manager will do the work of creating the complicated passwords you need to help protect your online accounts.
- You need to remember only the password manager's password. That single password will give you access to all of your others .

## DESCRIPTION

A password manager is a service that helps you generate and store long, unique passwords for all of your online accounts. That's important, because using weak passwords, or the same passwords on multiple accounts, makes you more susceptible to identity theft and other crimes.

It is a tool that generates passwords based on the given guidelines that you set to create an unpredictable strong password for your accounts. The Password generator tool creates a random and customized password for users that helps them to create a strong password which provides greater security.

## **SCOPE :**

In this project, we will build an application which will store the User's password, as well as other information, in one convenient location with one master password. Python Features and methods are used to implement in this project. Today, people have a large number of passwords for social media sites, work logins, shopping pages, online banking and much more. While it is important to use strong passwords and to use different passwords on each site, it can be a difficult task to remember all them. With a password manager, you simply enter the GUI app, provide the master password you set for the password manager in that software, then log in to the GUI app and the username and password will be stored for you. However, the primary purpose of this project to make Password Manager application user-friendly so that any individual can interact with the system

The main scope and deliverables of the project would be to:

- ❖ Understand and prepare detailed user requirement and specifications.
- ❖ Prepare high level and detailed design specifications of the system.
- ❖ Prepare Test Plan & Test cases.
- ❖ Develop the system and coding.
- ❖ Perform unit testing, integration testing and system testing.
- ❖ Demonstrate a bug free application after suitable modification, if needed.
- ❖ Develop a GUI application using Python Tkinter.

## **Tools And Technologies :-**

### **✓ Python: -**

Python is an interpreted high-level and general-purpose programming language.

### **✓ Python GUI Framework:**

A Graphical User Interface (GUI) is the first thing your user sees and interacts with when he opens your application or website

### **✓ MySQL:**

MySQL is an open-source relational database management system (RDBMS). language for relational database management systems. It is used for storing, manipulating and retrieving data in databases.

### **✓ Tkinter :**

Often referred to as the go-to GUI toolkit by a majority of Python developers, Tkinter was created to equip modern developers with a standard interface to the Tk GUI toolkit with its Python bindings. The name Tkinter comes from Tk interface. Tkinter was written by Fredrik Lundh and it is free software released under a Pyhton license.

- Window
- Widget
- Themed TK
- Frame
- Pack

## **Conclusion:**

Overall, This project is designed for the users who surf through internet a lot and create a number of online accounts and they can't keep track or memorize all of their online accounts login details. That's where our Password Manager comes in use it helps them to houses all their passwords in encrypted database. Even it helps in generating a stronger, random and complex passwords which makes them more difficult to crack or guess. Thus, you can have easy access for your accounts and more difficult for hackers.

## **Future Enhancement:**

This project has very vast scope in future. As the user's requirement is always going to be changed which is not static. Project can be updated as per the user requirement and it is very flexible in terms of expansion. The enhancement of the project can easily be made without changing the programming structure. The following are the future enhancement of the project • Enhancement of UI of application • Converting the Desktop application into Web application.