

```
class ToDoList;

def __init__(self):
def add_task(self, task):
    self.tasks.append({"task": task, "completed": False})

def complete_task(self, task_number):
    if 0 <= task_number < len(self.tasks):
        self.tasks[task_number]["completed"] = True

def show_tasks(self):
    for i, task in enumerate(self.tasks):
        status = "Done" if task["completed"] else "Pending"
        print(f'{i + 1}. {task["task"]} - {status}')

def main():
```

```
todo_list = ToDoList()

while True:
    print("\nTo-Do List:")
    print("1. Add Task")
    print("2. Complete Task")
    print("3. Show Tasks")
    print("4. Exit")

    choice = input("Choose an option: ")

    if choice == "1":
        task = input("Enter the task: ")
        todo_list.add_task(task)
    elif choice == "2":
        task_number = int(input("Enter the task number to mark as complete: ")) - 1
        todo_list.complete_task(task_number)
    elif choice == "3":
        todo_list.show_tasks()
    elif choice == "4":
        break
    else:
        print("Invalid choice. Please try again.")
```

```
if __name__ == "__main__":  
    main()
```



Building a To-Do List App in Python

Creating a personal to-do list app can help you stay organised, increase productivity, and provide a sense of accomplishment as you check off your completed tasks. In this presentation, we'll explore how to build a simple yet effective to-do list application using Python.

 by Adiba Javed



Why Create a To-Do List App?

1

Improved Productivity

A to-do list helps you prioritize tasks, stay on track, and be more efficient in completing your work.

2

Better Organization

Keeping all your tasks in one place makes it easier to manage your time and responsibilities.

3

Sense of Accomplishment

Checking off completed tasks can provide a sense of progress and motivation to keep going.



Setting up the Development Environment

Install Python

Make sure you have the latest version of Python installed on your system.

Set up a Code Editor

Use a code editor like Visual Studio Code or PyCharm to write and manage your Python code.

1

2

3

Choose a GUI Library

Decide on a GUI library, such as Tkinter or PyQt, to create the user interface.

Creating the User Interface

Task List

Display the list of tasks, allowing users to view, mark as complete, and delete tasks.

Input Field

Provide an input field for users to add new tasks to the list.

Buttons

Include buttons for adding, completing, and deleting tasks, as well as a button to display the due dates.

Implementing Core Functionality

Adding Tasks

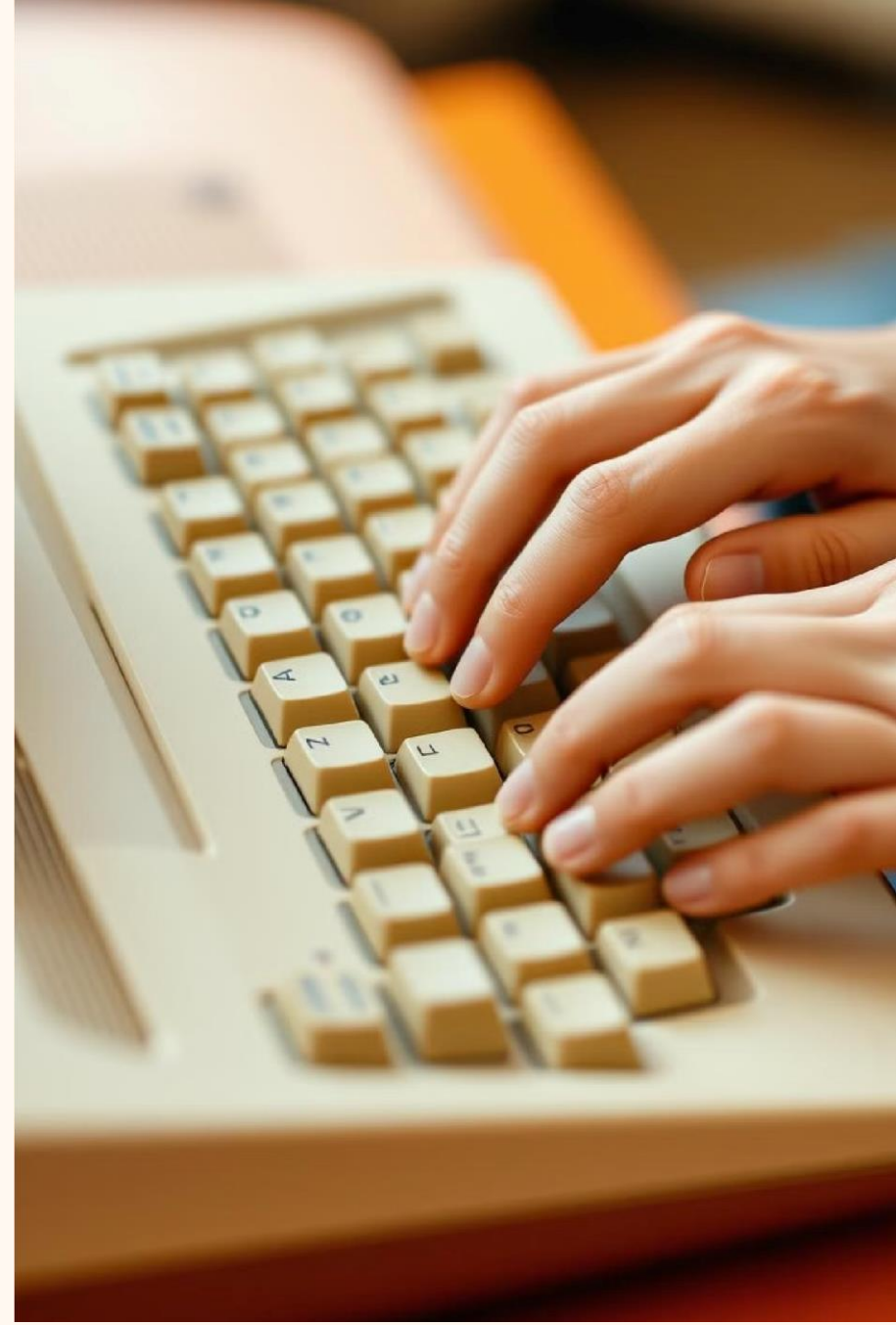
Allow users to add new tasks to the to-do list by inputting the task name and pressing the "Add" button.

Removing Tasks

Provide a way for users to remove tasks from the list, either individually or by clearing the entire list.

Viewing Tasks

Display the list of tasks, allowing users to see all the tasks they have added, including completed ones.





Storing and Retrieving Tasks

1

Local Database

Use a local database, such as SQLite, to store the tasks and their details, ensuring data persistence.

2

Save Tasks

Implement a function to save the user's tasks to the local database when the app is closed.

3

Load Tasks

Load the user's tasks from the local database when the app is launched, providing a seamless experience.

Advanced Features



Due Dates

Allow users to set due dates for their tasks, helping them stay on top of deadlines.



Priority

Implement a priority system, enabling users to assign **high**, medium, or low priority to their tasks.



Task Status

Provide a way for users to mark tasks as completed, in progress, or not started.





Conclusion and Next Steps

In this presentation, we've explored the process of building a to-do list app using Python. By incorporating a user-friendly interface, core functionality, and advanced features, you can create a powerful and customizable tool to help you stay organized and productive.

Going forward, you can consider adding more features, such as task categorization, reminders, and cloud-based synchronization, to further enhance the capabilities of your to-do list app.