
1. The Building Blocks of the App

The app is made using a toolkit called **Tkinter**. Think of Tkinter like a box of LEGOs that lets us build buttons, boxes, calendars, and more on a computer screen.

We also use a **calendar tool** (called tkcalendar) to pick dates for our tasks and some other tools to save and load our task list.

2. What's in the App?

Here's what you see when you open the app:

a) The Title

At the top, there's a big label that says, "**TANVAS ToDoList App**." This tells you what the app is.


b) Add Task Section

This is where you can **type the name of the task** you want to do, like "Clean my room." You can also:

- **Set a priority** for the task (Low, Normal, or High).
- **Add the task to your list** by clicking the "+" button.

c) Task List



In the middle, you'll see a **big box** where all your tasks are listed. Each task shows:

- Whether it's completed (it has a  if it's done or [] if not).
- The task's name, due date, and priority.

You can click on a task in this box to **see more details about it, like its description**.

d) Buttons to Manage Tasks

Below the task list, there are some cool **round buttons**:

-  **Mark Completed:** Click this to mark a task as done.
-  **Delete Task:** Click this to remove a task.

You can also **filter the tasks** (show All, Completed, or Pending tasks) or **sort them** by due date or alphabetical order.

e) Calendar

There's a **calendar** at the bottom that lets you pick a date. If you want to see tasks for a specific date, just click on that date!

f) Search Bar

You can also **search for a task** by name using the magnifying glass button.

3. How Does the App Work?

Now let's peek behind the scenes to see how the app does all these cool things!

a) Saving and Loading Tasks

- Tasks are saved in a file called tasks.json on your computer. This is like keeping a notebook where you write down all your tasks.
- When you open the app, it reads this file and shows your saved tasks.


b) Adding a Task


When you type in a task name and click the "+" button:

1. The app asks you for a description (optional).
2. It adds the task to the list with:
 - A due date (picked from the calendar).
 - A priority (Low, Normal, or High).
 - A "not done" status.


The app saves the task so it's there next time you open it.

c) Marking a Task as Completed

When you click the  button:

1. The app checks which task you've selected.
2. It marks that task as done (adds a ).
3. It saves this update in the notebook (the tasks.json file).

d) Deleting a Task

When you click the  button:

1. The app checks which task you selected.
2. It removes that task from the list.
3. It saves the updated list so the task is gone forever.

e) Filtering Tasks

You can filter tasks to see:

- **All tasks:** Everything you've added.
- **Completed tasks:** Only the ones you've finished.
- **Pending tasks:** Tasks you still need to do.

f) Sorting Tasks

You can sort tasks in two ways:

1. **By Due Date:** Tasks with earlier dates come first.
2. **Alphabetically:** Tasks are ordered from A to Z.

g) Search

If you forget where a task is, you can click the  button and type the name of the task. The app will show only tasks that match what you typed.

h) Viewing Task Details

When you click on a task, the app shows a box with its **description**. This is like flipping over a card to see what's written on the back.

4. What Makes the App Special?

- **Easy to Use:** It's simple to add, complete, or delete tasks.
- **Shows Task Details:** You can write descriptions for tasks and see them anytime.
- **Search and Sort:** Quickly find what you need.
- **Calendar Integration:** Easily pick dates and view tasks by day.
- **Saves Everything:** Your tasks are stored, so you won't lose them even if you close the app.

5. How Does It Look?

The app is colorful and friendly:

- Buttons are round and bright, with icons for easy understanding.
- The task list is neat and organized.
- You can quickly switch between views (All, Completed, Pending).

6. What's Happening Behind the Curtain?

- **Code:** This program is written in a language called **Python**, using tools like tkinter and tkcalendar.
- **Events:** When you click a button, the app listens and performs the action.
- **Files:** It uses a file (tasks.json) to store your tasks.

7. Why Use It?

This app is like having a personal assistant that helps you:

- Stay organized.
- Remember important tasks and dates.

- Finish everything on time.

