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ML-MINOR-JULY (Minor Project)

Name: Neeraj S. Belsare

Email-ID: neeraj.belsare@mitaoe.ac.in

College: MIT Academy of Engineering

Project Problem Statement:

Create a Countdown Timer in Python with features – reset, stop, pause, resume.

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Project Setup

Modules used:

1. threading – to create the thread for starting the timer.

2. time – to create the timer and add sleep functionality.

3. platform – to detect the platform the program is being run on.

4. PyQt6 – to create the GUI of the application.

5. win10toast – to show Windows toast notifications once the timer is done.

6. playsound – to play sound once the timer is done.

7. sys

System Requirements:

1. PyCharm / Visual Studio Code / Jupyter Notebook.

(**Note:** The program won’t run on Google Colab because PyQt6 can’t be installed on Google Colab due to incompatibility).

Problems Encountered and Major Bugs:

1. Pressing the stop button after the resume button did not reset the time properly.

2. The program crashed randomly with an error code (0xC0000005) [Access Violation Error].

Solutions Adopted to Resolve the Errors and Bugs:

1. Created a new function for the resume functionality instead of calling the start thread.

2. Initialized all variables in the \_\_init\_\_ method. Also used try-except blocks to catch exceptions and handle them.

Source Code:



Output: