## **Washer Timer**

This project is an esp32-based timer for a dishwasher. It allows the user to select different wash cycles and start a timer for the selected cycle. The remaining time is displayed on a 4-digit 7-segment display.

#### **Features**

- Select different wash cycles: Intensive, Normal, ECO, Glass, Quickwash
- Set delay timers: 2 hours, 4 hours, 8 hours
- Display remaining time on a 4-digit 7-segment display
- Indicate when the wash cycle is finished by displaying "done"

### Hardware Requirements

- esp32-c3 supermini
- TM1637 4-digit 7-segment display

## Hardware for prototyping

- Push buttons for selecting wash cycles and delay timers
- Wires and breadboard for connections

### Pin Configuration

- CLK (TM1637 Display): Pin 0
- DIO (TM1637 Display): Pin 1
- Intensive wash button: Pin 2
- Normal wash button: Pin 3
- ECO wash button: Pin 4
- Glass wash button: Pin 5
- Ouickwash button: Pin 6
- 2-hour timer button: Pin 7
- 4-hour timer button: Pin 8
- 8-hour timer button: Pin 9
- Start button: Pin 10

## Usage

- 1. Connect the hardware components as per the pin configuration.
- 2. Upload the code to the esp32 board.
- 3. Select the desired wash cycle by pressing the corresponding button.
- 4. Optionally, set a delay timer by pressing one of the timer buttons.
- 5. Press the start button to begin the wash cycle.
- 6. The remaining time will be displayed on the 7-segment display.
- 7. When the wash cycle is finished, "done" will be displayed.

#### **Tasks**

For detailed tasks and future improvements, refer to tasks.md.

# License

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