WASHING MACHINE SIMULATOR

CONTENTS:

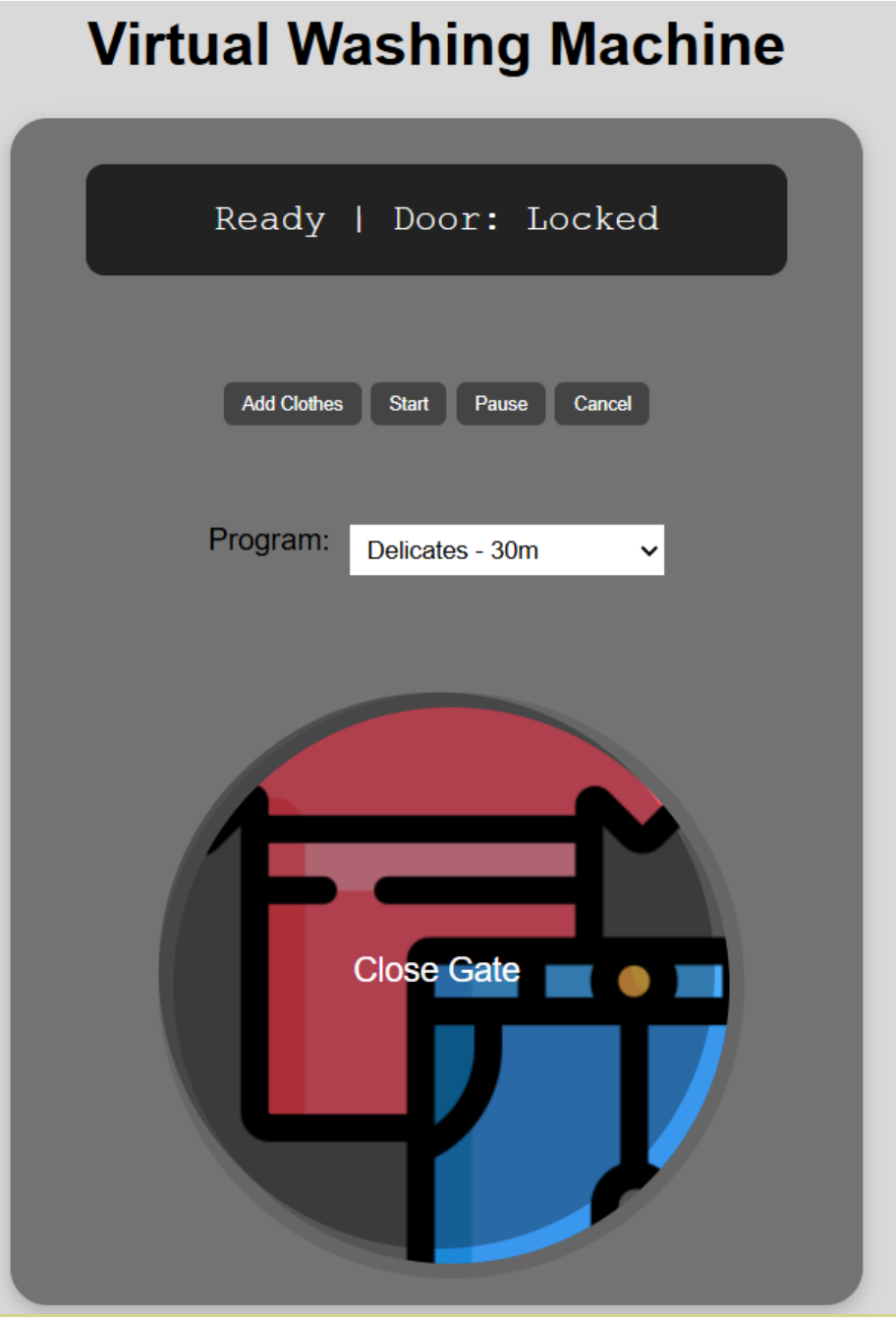
INTRODUCTION

A **fully automatic washing machine** automates the entire washing process, including washing, rinsing, and spinning, without requiring manual intervention. It comes with multiple wash programs, advanced sensors, and efficient water usage for a hassle-free laundry experience.

Technology used : HTML, CSS and Javascript

KEY FEATURES

1. **Interactive Drum & Gate** – Open/close the drum gate to enable washing.
2. **Clothes Addition** – Add up to 12 clothes before starting the wash.
3. **Multiple Wash Programs** – Choose from Cotton, Synthetics, Delicates, Quick Wash, or Custom Program.
4. **Realistic Display Panel** – Shows washing time and door lock status.
5. **Start, Pause & Cancel Controls** – Manage the washing cycle dynamically.
6. **Animated Drum Rotation** – Simulates real washing action.
7. **User-Friendly Interface** – Designed with Different colors and a modern layout.



UI DESIGN

The UI design of this project features an interactive interface, display panel, and intuitive controls for an engaging user experience.

LIMITATIONS OF EXISTING WASHING MACHINE

1.Complex Interface – Many washing machines have cluttered control panels with too many buttons and settings, making them confusing for users.

2.Complex Controls – Some washing machines have complicated user interfaces.

3.Small or Non-Digital Displays – Many models still rely on small, non-backlit displays that are difficult to read, especially in low light.

4.Limited Accessibility – Users with disabilities may struggle with hard-to-press buttons or unclear touch controls.

5.No Real-Time Feedback – Most machines do not provide real-time status updates, leaving users unsure about the wash progress.

CHALLENGES FOR USERS:

•**Difficult to Understand Settings** – Users often struggle to determine which program is best for their clothes.

•**Trial and Error Usage** – Many users rely on guesswork due to unclear instructions.

•**Lack of Modern Features** – Traditional washing machines lack smart features like touchscreen interfaces and real-time notifications.

FUTURE WORK

1.AI-Powered Washing Optimization – Implement machine learning algorithms to suggest the best wash settings for different fabrics.

2.Gesture & Voice Control – Integrate hands-free operation using voice commands and gesture recognition for better accessibility.

3.IoT & Mobile App Integration – Allow remote monitoring and control of the washing machine through a dedicated smartphone app.

4.Water & Energy Efficiency – Develop smart sensors to adjust water and power usage based on load weight and fabric type.

THANK YOU

Presented by:
Tarushi Sandeep Gupta
21BCS6280