Terna Engineering College
Computer Engineering Department
Program: Sem VIII

Course: Human-Machine Interaction Lab (CSL801)

Experiment No. 4

A.1 Aim: Design interface for automated ticket vending machine (ATVM) for any system.

PART B
(PART B: TO BE COMPLETED BY STUDENTS)

Roll No. 50	**Name:** AMEY MAHENDRA THAKUR
Class: BE COMPS B	**Batch:** B3
Date of Experiment: 18-02-2022	**Date of Submission:** 18-02-2022
Grade:	

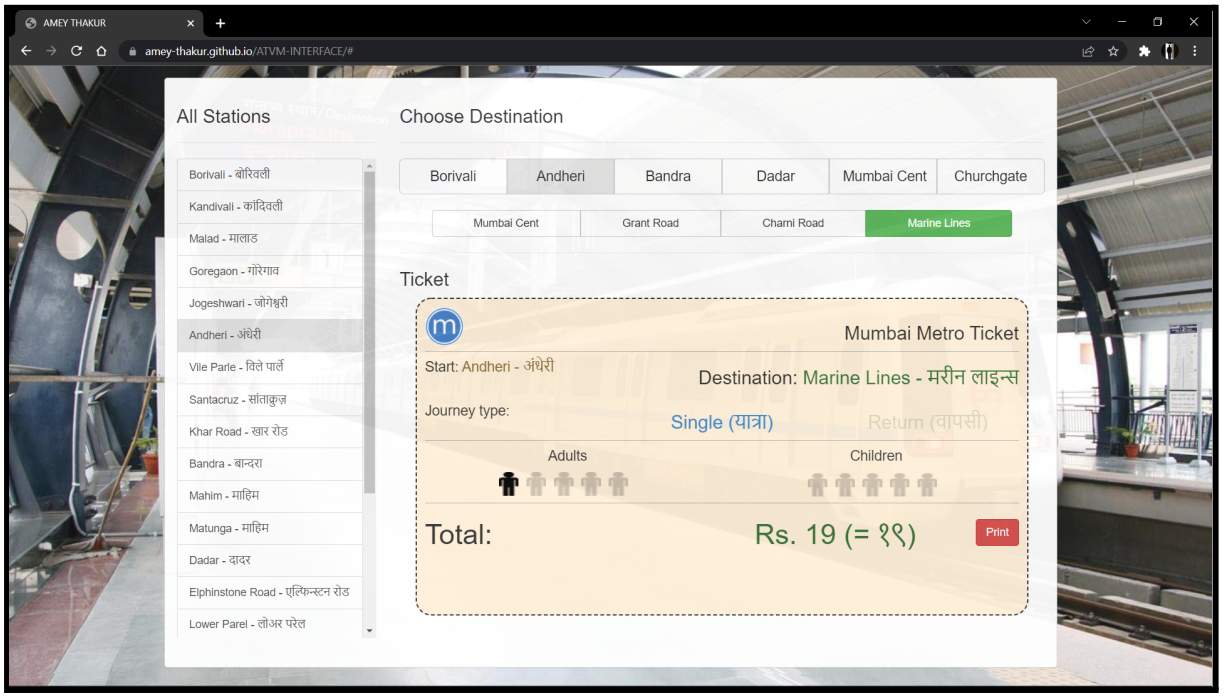
B.1 Tools used to design Interface:

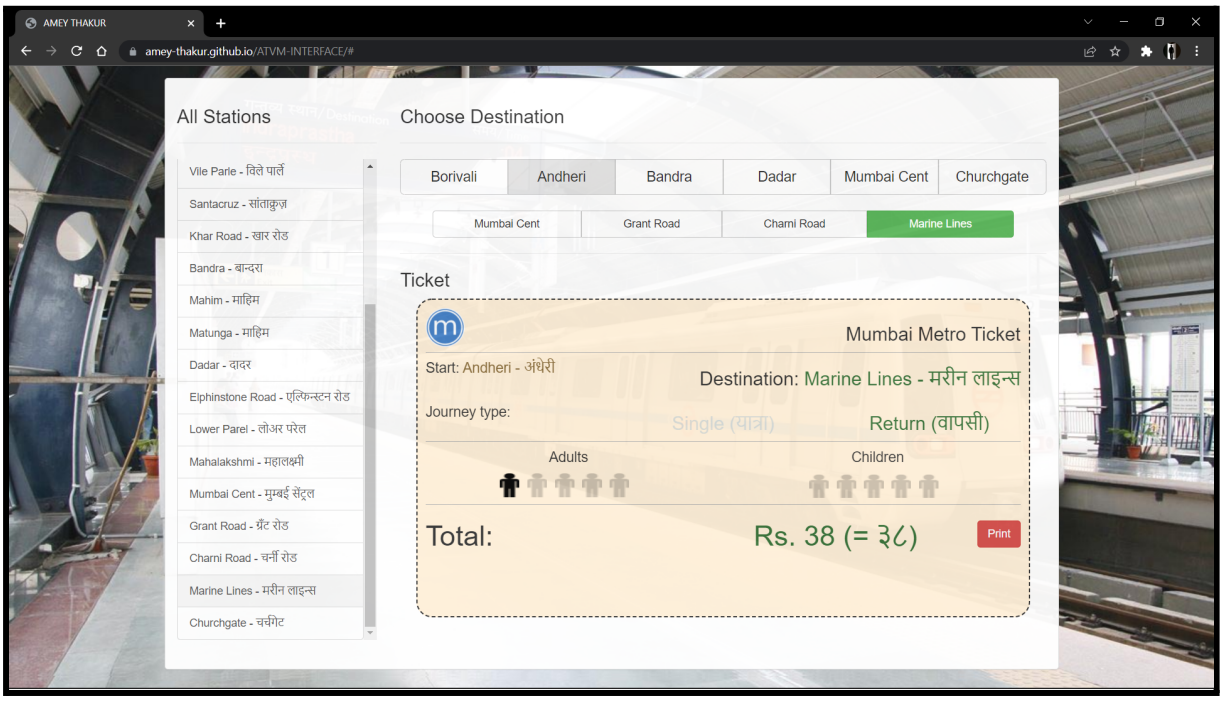
- HTML
- CSS
- JavaScript
- Bootstrap Framework
- GitHub Pages
- Atom

B.2 Interfaces of ticket vending machine for the metro train:

GitHub Repository: https://github.com/Amey-Thakur/ATVM-INTERFACE

Web Application: https://amey-thakur.github.io/ATVM-INTERFACE





B.3 HMI principles used to design interface:
ANS:

HMI Principles used to design ATVM interface:

1. Aesthetically Pleasing: A design is aesthetically pleasing if it is attractive to the eye. It draws attention subliminally, conveying a message clearly & quickly.
2. Clarity: The user interface is clear in visual appearance, concept & wording.
3. Compatibility:
    a. User Compatibility
    b. Task & job compatibility
    c. Product compatibility
4. Comprehensibility: The steps to complete a task is obvious. The system is understandable & flowing in a meaningful order.
5. Configurability: A default configuration, as well as easy personalization & customization through configuration and reconfiguration, is provided.
6. Consistency: Consistency is important because it can reduce requirements for human learning by allowing skills learned in one situation to be transferred to another like it.
7. Control: The user can control the interaction & never be interrupted for errors. Actions can result from explicit user requests & be performed quickly.
8. Directness: Tasks are performed directly & alternatives are visible reducing the user's mental workload.
9. Efficiency: Transition between various systems controls can flow easily & freely. Navigation paths are as short as possible.
10. Familiarity: Familiar concepts enable people to get started & become productive quickly.
11. Simplicity: Simplicity can be achieved by progressive disclosure, providing defaults, minimizing screen alignment points, making common actions points, making common actions simpler,& providing uniformity & consistency.

B.4 Target audience of this Interface:
ANS:

- At Railway Stations, ATVMs (Automatic Ticket Vending Machines) are used for booking tickets.
- The goal of this ATVM Interface is to create an interface for ATVM machines that allow travellers to purchase tickets at train stations.
- The interface also adhere to basic HCI principles and be easy to use for both regular and occasional travellers.

B.5 Conclusion:

- Hence designed an interface for an Automatic Ticket Vending Machine.