Metro Made Simple

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The Scope of the Project

- 1. This project works only for one user where the details (user name, password) are hard coded.
- 2. The cost of tickets are same even if you travel for only one stop or five stops.
- 3. There are only six metro stations named a,b,c,d,e,f.
- 4. The paytm number that we enter for recharge can be any ten digit number.
- 5. The otp ideas (otp instead of token or otp when we lost the card) are just our assumptions for the benefit of users.
- 6. The user can book tickets, see his bookings, recharge his wallet, and purchase a gift card in this application.
- 7. The aadhar card number and paytm otp are hard coded in this project.

The Scope of the Project

This project is an attempt to leverage and optimise the functionalities of metro rail with an aim to meet the objectives set. This project will enable the features which are user friendly and leverage the existing infrastructure and take it to a next level from User experience and utility perspective.

Objective

- To spread awareness about how to use the metro efficiently.
- We can take one step towards less air pollution.
- It will make the process easier for people to use the service.
- It is not just enough that we have metro system, it is all about how effectively we are able to leverage the infrastructure and functionalities of Metro rail through technology.
- Connecting the government and public transport to commoners through technology.
- Taking Hyderabad metro to make it efficient and productive as per the benchmark standards of other effective metro stations in India.

Methodology

A python basis command line application built using conditional statements, loops, and lists.

Real Time Metro Rail Project

Our team has come up with an idea to develop an application covering the below features / modules.

Modules Menu

- 1. Booking tickets
- 2. Timings of metro
- 3. Recharge my metro card
- 4. Lost my metro card
- 5. Check my balance
- 6. About Metro
- 7. Show Tickets
- 8. Purchase a Gift card
- 9. Transaction History
- 10. Exit

1. Booking a Ticket

Problem Statement

- 1. There is a lot of rush in the token counter.
- 2. People are standing in the token line along with the luggages, small kids, and family.
- 3. Lot of people pick up their token and run very fast to board the train which could lead to accidents okay
- 4. Hence in our project we are developing a solution for online tokens, which is not there currently.

1. Booking a Ticket (continued)

Solution/Improvement Features Suggested

- 1. Booking tokens online
- 2. Book the tickets with a six digit OTP.

This will help in reducing the amount of rush and accidental risks at a metro station.

2. Timings of Metro

Current Features in L&T Metro

Currently, we can check online, the timings of metro and also in metro station.

Improvement Features Suggested

In our project, we also enable the user to see the timings of metro.

3. Recharge the Metro Card

Problem Statement 2

- Recharge currently takes 2 hours minimum at the counter and online.
- This leads to people missing their trains.

Solution/Improvement Features Suggested

 The recharge will be completed immediately and will reduce the risk of missing the trains.

4. Lost the Metro Card

Problem Statement 3

- There is no option online if you lost your card or to get a new metro card
- It takes a lot of time to do all of the paperwork and documentation at the metro station.

Solution/Improvement Features Suggested

- Enable online replacement of metro card.
- Procedure Asks phone number, aadhar card number, and OTP to help leave if the user is still on a train.

5. Check my balance

Current Features in L&T Metro

Currently, we can check our balance in the ticket vending machine in metro station.

Improvement Features Suggested

In our project, we enable the user to check their balance online.

6. About Metro

Current Features in L&T Metro

Currently, we can go through information about metro online.

Improvement Features Suggested

In our project, we also have the option to check information about metro.

7. Show Tickets

Current Features in L&T Metro

Currently, there is no feature of showing tickets online nor in the metro station

Improvement Features Suggested

In our command line application, we are having this feature which will allow us to see our purchased tickets.

8. Purchase a Gift Card

Problems Statement 4

Currently, there is no feature of purchasing a gift card online and also in the metro station.

Solution/Improvement Features Suggested

1. Purchasing a gift card online.

In our command line application, we are having this feature which will allow us to purchase a gift card to our convenient amount online.

9. Transaction History

Problem Statement 5

Checking the past transactions is only available at a metro station and not online. The only way to access the transactions is through the 'Ticket Vending Machine'. This machine will only let the users check their last ten transactions.

Solution/Improvement Features Suggested

This program allows the user to check their transactions online. It is not just the last ten transactions, but this program will show the transactions from the beginning!

Thank !