

# **Online Metro Rail Management**

## **A PROJECT**

*Submitted to the Department of Computer Science and Engineering Bangladesh University of Business and Technology (BUBT), Dhaka in partial fulfillment of the requirements for the Course of*

**Software Engineering Lab**

**CSE-328**

**SEMESTER: SAMMER 2020**

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**November 2020**

## CERTIFICATE

This is to certify that this can be a bonafide record of the project presented by the scholars whose names are given below in partial fulfilment of the course CSE-300 in Computer Science and Engineering.

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## DEDICATION

We dedicate this project to any or all of the people that need blood for emergencies. We also dedicate this project to any or all of my friends who have supported and helped me throughout the method.

## APPROVAL

This Project Report Submitted by Gourab Kanti Paul bearing ID No. 17182103141, Satyajit Sarkar bearing ID No. 17182103157 and Romzan Ali Mohon bearing ID No. 17182103177 in partial fulfillment of ultimate Project Submission for the course CSE-328 has been examined and accepted for further process.

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## ABSTRACT

*Online Metro Rail Management* is an integrated service that provides all information about the metro rail and its routes for the public. The proposed system is a web-based application which provides information regarding timings, routes, fair.

This system manages public feedback about services through it's message management system. With this system user can register themselves, login system, search routes with specific day and view fair price of tickets.

There is also an admin module where admin can add stations, trains, routes and also update the fairs. The admin is a panel consisting of a group of authorized persons.

## ACKNOWLEDGMENTS

Praise to Almighty, the foremost magnificent and therefore the most merciful, without whose patronage and blessing this project wouldn't be completed. It's an auspicious occasion for us as students of the Department of Computer Science and Engineering, one among the distinguished academic centers of the Bangladesh University of Business and Technology (BUBT), to precise our deep feelings of gratitude to the department. We are immensely indebted to our supervisor, Dr. Kamruddin Nur Associate Professor & Chairman Department of CSE Bangladesh University Business and Technology, for his wonderful guidance, inspiration, encouragement, and also for thorough review and correction of this dissertation work that would not be finalized without his astute supervision. We'd also thank our honorable Chairman of the Department of CSE for his support and guide whenever we wanted it.

With Best Regards,

Gourab Kanti Paul  
Satyajit Sarkar  
Romzan Ali Mohon

## DECLARATION

We hereby declare that the project entitled **Online Metro Rail Management** submitted in partial fulfillment of the necessities for the Course CSE-300 in Computer Science and Engineering in the Faculty of Computer Science and Engineering of Bangladesh University of Business and Technology (BUBT) is our own work which it contains no material which has been accepted for the award to the candidate(s) of the other degree or diploma, except where due reference is created within the text of the project. To the simplest of our knowledge, it contains no materials previously published or written by the other person except where due reference is formed within the project.

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# Chapter 1

## Introduction:

This is an integrated service that provides all information about the metro rail and its routes for the public. The proposed system is a web-based application which provides information regarding timings, routes, fair.

This system manages public feedback about services through it's message management system. With this system user can register themselves, login system, search routes with specific day and view fair price of tickets.

There is also an admin module where admin can add stations, trains, routes and also update the fairs. The admin is a panel consisting of a group of authorized persons.

It has a home page, register page, login page, find route page and contact us page.

### 1.1 OBJECTIVE

The objectives of the project are as follows:

- Users can register complaints through the site.
- User login page where users can recharge tickets online.
- Users can view metro timetable.

### 1.2. Home page

This is the main page of the system. Here user can see all header, logo and go for registration page.

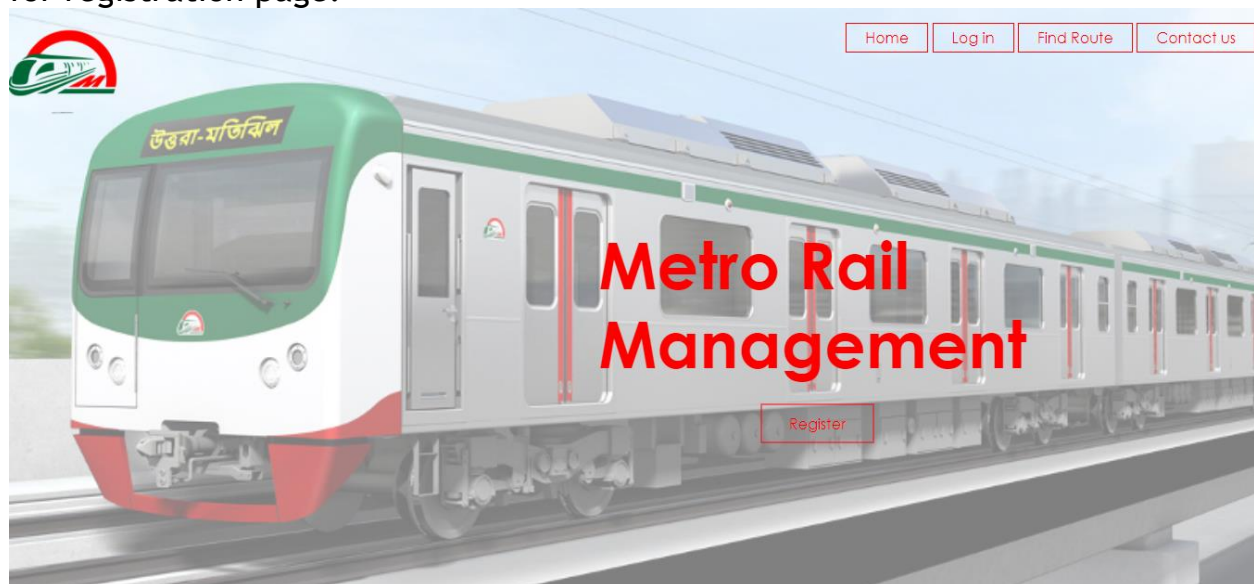


Figure:1 Home

### 1.3. Register page

This is for registration. Here user can register themselves.

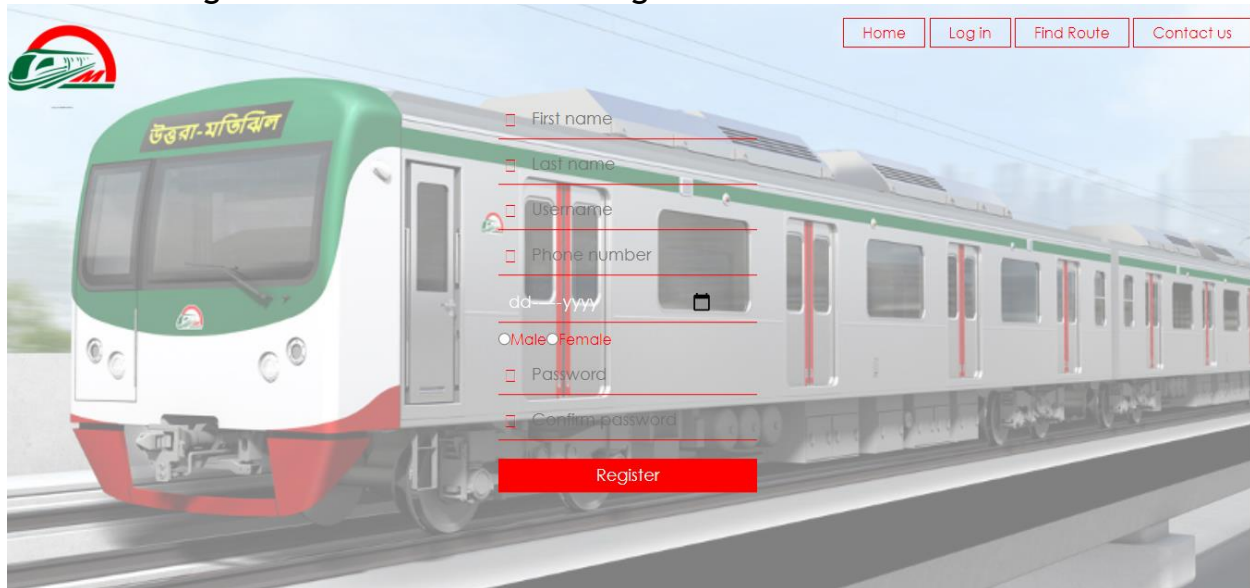
The screenshot shows the Register page of a web application. The background features a 3D rendering of a green and white train with red accents, moving on tracks. The train has the text 'উত্তরা-মতিঝিল' (Uttara-Motighil) on its front. In the top right corner, there are four navigation buttons: 'Home', 'Log In', 'Find Route', and 'Contact us'. On the left side, there is a logo of a train. The main content area contains a registration form with the following fields: 'First name', 'Last name', 'Username', 'Phone number', a date field labeled 'dd-mm-yy', a gender selection with radio buttons for 'Male' and 'Female', 'Password', and 'Confirm password'. A red 'Register' button is positioned at the bottom of the form.

Figure:2 Register

### 1.4. Login page

After registration is complete user can go for login page. In this page user login the system.

The screenshot shows the Login page of the web application. The background is the same 3D rendering of the train as in the Register page. The navigation buttons and logo are also present. The main content area contains a login form with the following fields: 'Username' and 'Password'. A red 'Login' button is positioned above the 'Username' field, and a red 'Sign Up' button is positioned below the 'Password' field.

Figure:3 Login

### 1.5. Find route page

This page for search route. After search route with source area, destination area and date, user can view rail name, rail departure time and ticket fair price.



Figure:4 Find Route

## 1.6. Contact us page

In this page user can give feedback and contact with system manager with the contact information.

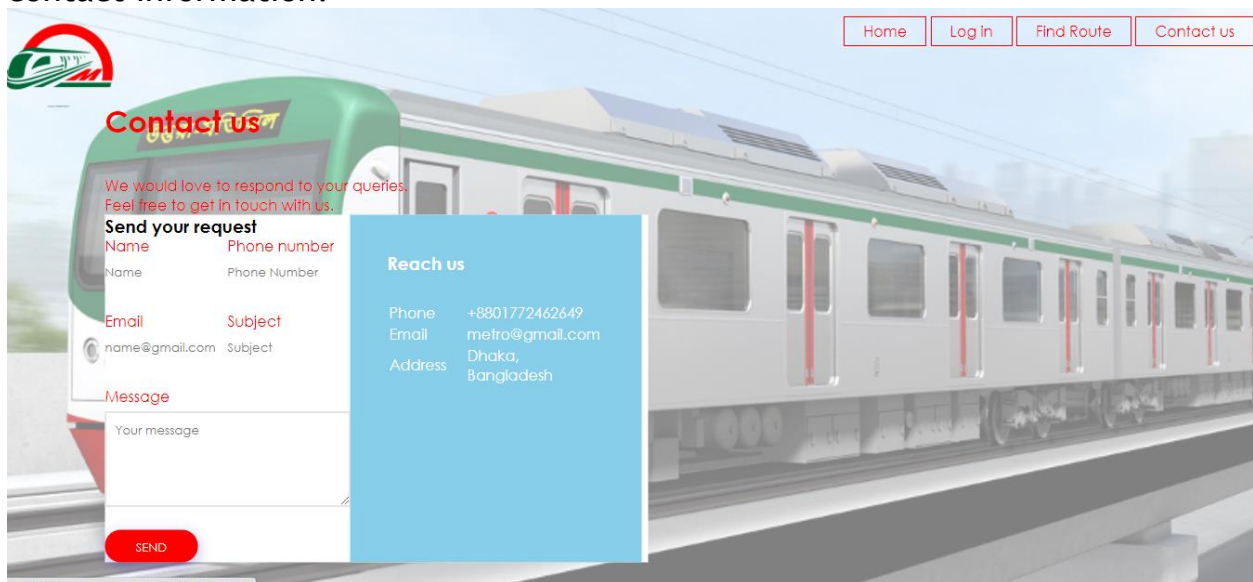


Figure:5 Contact Us

## 1.7. Summary

To see rail fair ticket price is very hard and time killing job. With our system user can easily find metro train time table and view fair price of ticket. This system can save users valuable time.

## **Chapter 2**

### **SYSTEM ANALYSIS**

#### **Introduction**

System analysis is the process of gathering and interpreting facts, diagnosing problems and using the information to recommend improvements on the system. System analysis is a problem-solving activity that requires intensive communication between the system users and system developers. System analysis or study is an important phase of any system development process. The system is viewed as a whole, the inputs are identified and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal is reviewed on user request and suitable changes are made. This loop ends as soon as the user is satisfied with the proposal.

#### **2.1 EXISTING SYSTEM**

- Information cannot be collected, processed and communicated more quickly and efficiently.
- Current working systems doesn't ensure that right information reaches the right person at the right time.

#### **2.3.1. DESCRIPTION**

##### **System Description:**

Metro rail management system is an online system which helps the user to view route and ticket fair online. It also have a complaint management system in which users can register their complaints online. By visiting the site the users can get metro time table. Other than that by entering the source station and destination station the users can get all sorts of information about trains arriving and departing from the stations, it's fair details.

##### **Problem Statement:**

The problem occurred before having online system includes:

- File lost When online system is not implemented the complaints are reported in files. The files are always lost due to some human errors.
- Time consuming When there is no computerized system then for recharge purposes the users need to travel to the stations and also sometimes even need to stand in large queues for recharge purposes.
- Most updations are unnoticeable. When online systems is not implemented any changes in fair, timings etc when updated ,the details of these things are only available at the stations.

#### **2.3.2 SYSTEM OBJECTIVES**

- Improvement in Control and performance



- The system is developed to cope up with current issues and problems of the metro rail.
- The system helps to make a complaint online, display metro timetable, fairs.
- Save time User is able to recharge online, see details of metro time table, fairs and even the user can complaint online there by saving his valuable time.
- Easy to Use A person with just an internet connection and a pc can do things such as complaint, recharge and view metro details very easily.

## 2.4. ER diagram

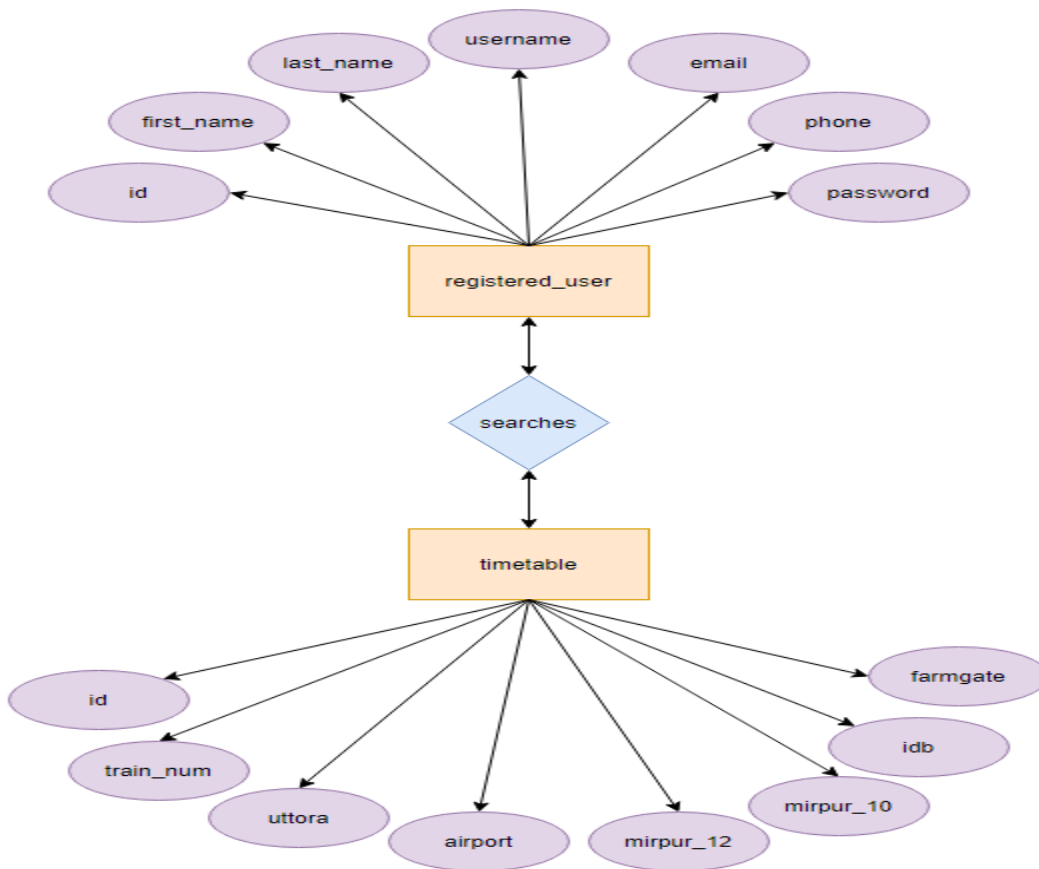


Figure:6 ER diagram

## Chapter 3

### PROPOSED SYSTEM

#### Introduction

The proposed system is designed to eliminate the disadvantages of the existing system. The proposed system “Metro Rail Management System” is mentioned for tracing the problems in the existing system.

- Increased efficiency and reliability. Easier Access.
- Easy to use Provide accurate information to the user for taking necessary decisions.
- Accuracy - The information will be correct, accurate and unambiguous.
- Efficiency - Information can be collected, processed and communicated more quickly and efficiently.
- Systems ensure that right information reaches the right person at the right time.
- Reliability - Since systems are free from boredom and tiredness, they work constantly on data to produce more reliable outputs.
- Accessibility, Usability and Understandability The options used can be easily accessed, used and realized.

#### 3.1 Schedule

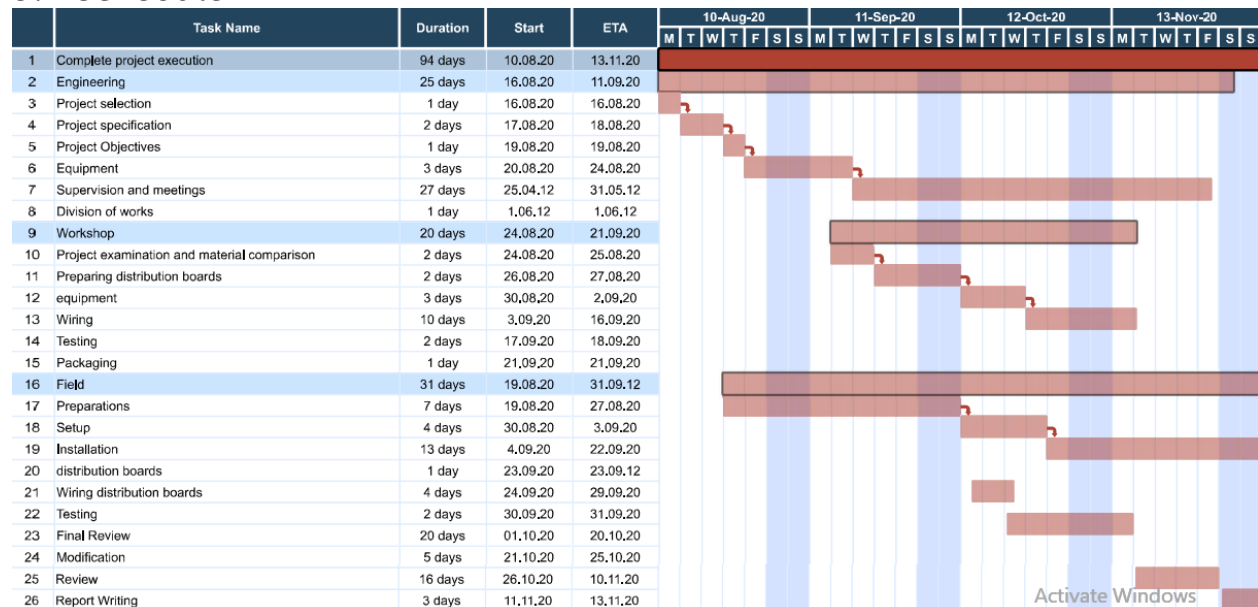


Figure7: Grant chart

## 3.2 Implementation And result

### 3.2.1 System Setup

1. Package: Operating System (Any)
2. Software: Android Studio, XAMPP, MySQL, MySQL connector, Application: Web browser (Any)
3. Hard Disk: 120GB (minimum)
4. RAM: 2GB (minimum)
5. Processor: Dual-core or above
6. Language use: HTML, CSS, PHP, SQL

### 3.2.2 Results and discussion

It's an online management system. It's a giant arrangement to show all the information about metro rail. Our project online metro rail management system is developed so that users can view the knowledge of the metro rail. Some information are may be unnotiable therefore the system can find the specified information with the specified information easily from the large database by using the search feature within the webpage. This technique provides a dynamic database. And keep users personal information secure.

### 3.2.3 Existing System Analysis

- In the current system, user often go for station to station collect information about the rail.
- In the existing system, a high cost of user time is required for searching and storing information about rail.
- However, the users feel weak and light-headed for several hours following the procedure.

## 3.4 Database

id	fname	lname	username	email	gender	telephone	Password	confirmpass
1	sakata	gin	sakatagin	gin@gm.com	male	555151	1414	1414
2	sakata	gin	sakatagin	gin@gm.com	male	555151	1414	1414
3	kirito	kazuya	sakatagin	gin@gm.com	male	54545456	1414	1414
5	himura	ken	himuraken	md.monirhossain17@gm	m	+8801681123162	1144	1144
6	himura	ken	himuraken	md.monirhossain17@gm	m	+8801681123162	1144	1144
7	kujo	kazuya	himuraken	md.monirhossain17@gm	m	+8801681123162	4747	4747
8	kakarotte	goku	himuraken	Shamsualam24@gmail.c	m	+8801681123162	7894	7894
9	sakata	kazuya	dsfdsf	romzanalimohon@gmail	m	+8801681123162	44	44

Figure 8: Registration

id	train_num	uttora	airport	mirpur_12	mirpur_10	idb	farmgate
1	Train-01	06:00:00	06:15:00	06:40:00	06:50:00	07:00:00	07:15:00
2	Train-02	07:15:00	07:00:00	06:35:00	06:25:00	06:15:00	06:00:00
3	Train-03	07:00:00	07:15:00	07:40:00	07:50:00	08:00:00	08:15:00
4	Train-04	08:15:00	08:00:00	07:35:00	07:25:00	07:15:00	07:00:00

Figure 9: From to

### 3.3 Summary

This application is providing each entity the power to approach to find all information about metro rail so that it'll become much easier. We believed that our system will reduce the rail information finding problem.

## Chapter 4 Conclusion

### Introduction:

This is an integrated service that provides all information about the metro rail and its routes for the public. The proposed system is a web-based application which provides information regarding timings, routes, fair.

To see rail fair ticket price is very hard and time killing job. With our system user can easily find metro train time table and view fair price of ticket. This system can save users valuable time.

This application is providing each entity the power to approach to find all information about metro rail so that it'll become much easier. We believed that our system will reduce the rail information finding problem.

### 4.1 Future work

The Main future scope of our proposed model about online metro rail system is to try it in the real world that means we have to implement it with better results. We will try to improve the security of user identification make it more secure. We will use online geographical platform to view user and donor location. We

will add this in our future work. We will also try to improve to add online payment system.

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# **Metro Rail Management System**



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# Overview

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- Introduction
- Why we select this project
- What language we used for this project
- Project overview
- ER Diagram
- Gantt Chart
- Future work
- Conclusion

# Introduction

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Metro rail management system is a online system helps user to manage their timetable, tickets and complains.

Metro rail timetable website is important for the metro rail user. This website will help the metro rail user to find the timetable for trains and can also find destination time. With the help of this website the user don't have to ask stranger about metro rail schedule.

# Why we select this project

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- In current system user will need go to station for collecting information about the rail
- In the current system a high cost of user time is required for searching and storing information about rail
- As a result the users feel weak and light-headed for several hours following the procedure

Our system will reduce this.

# What technology we used for this project

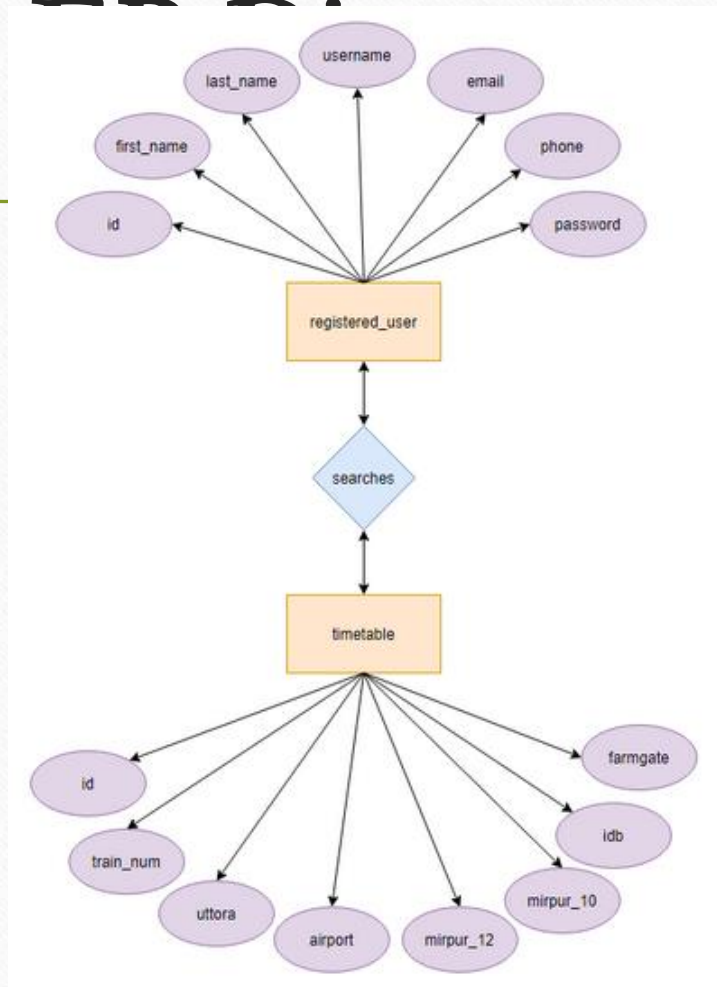
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- HTML
- CSS
- PHP
- MySQL Database
- XAMPP Control Center



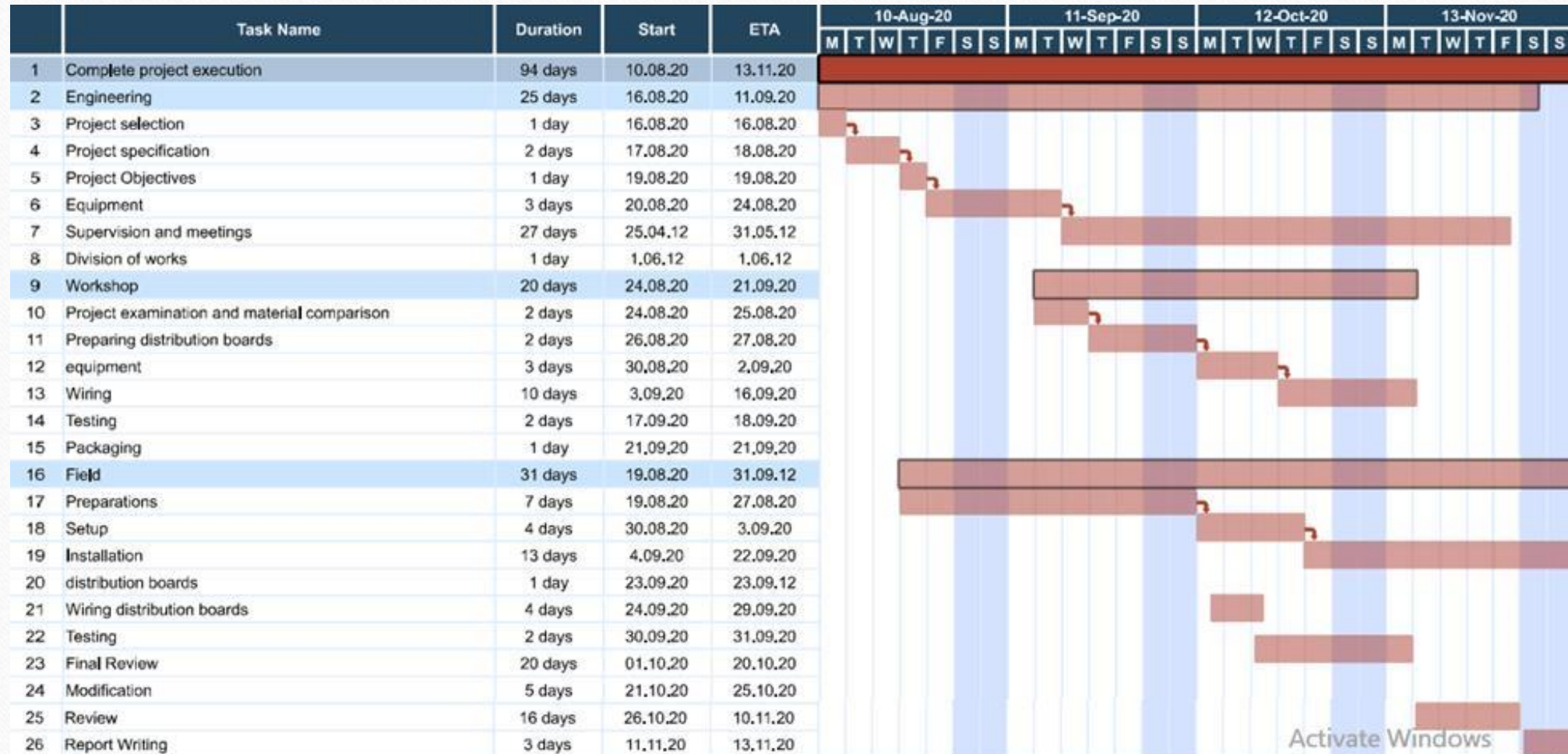
# Project Overview







# Gantt Chart



# Future Work

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- In future we would like to add the ability to purchase ticket from the website
- We would also like to add ability to add specific train schedule to ones calendar schedule
- We would also like to implement some kind of train tracking system for the user



# Conclusion

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This project will reduce hassle for the user to find and schedule their metro rail journey. It will also simplified the metro rail system for the user.

Any Questions ?

