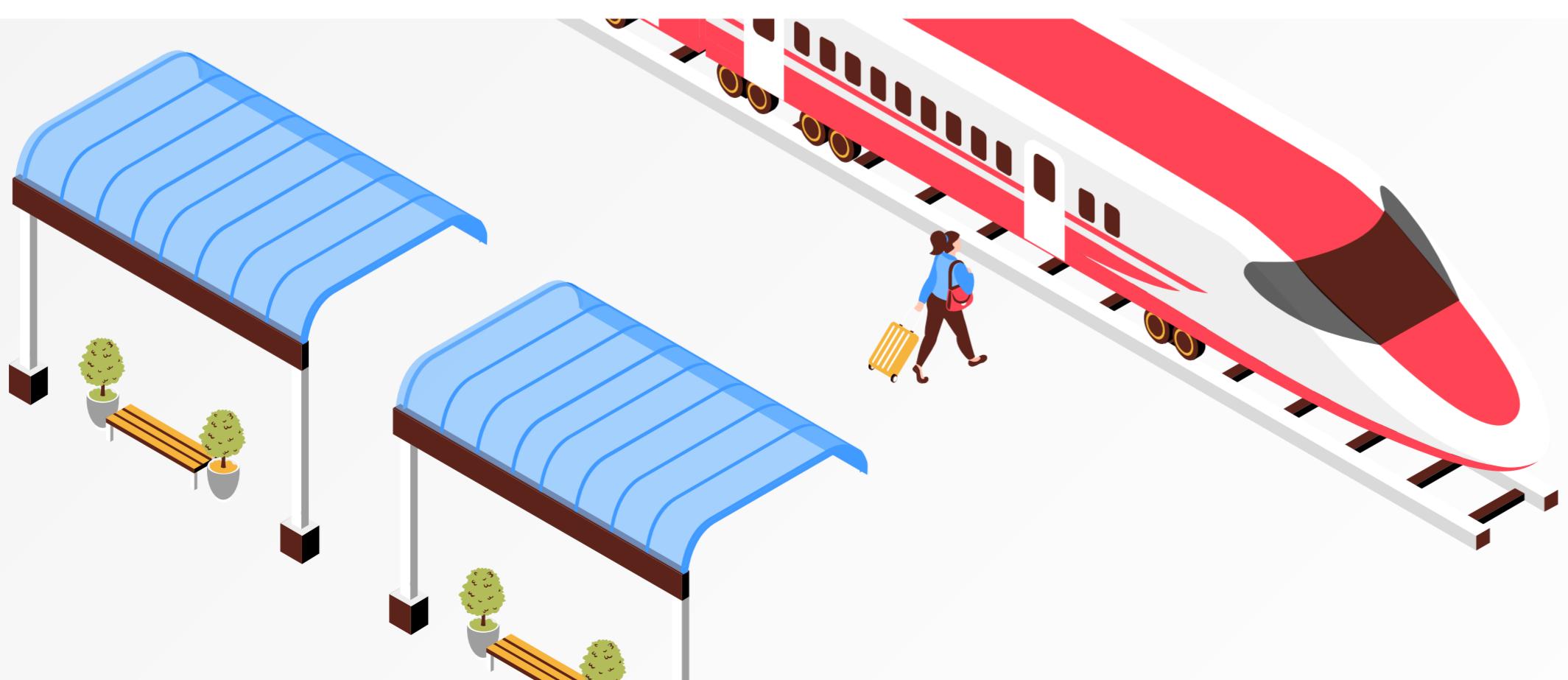
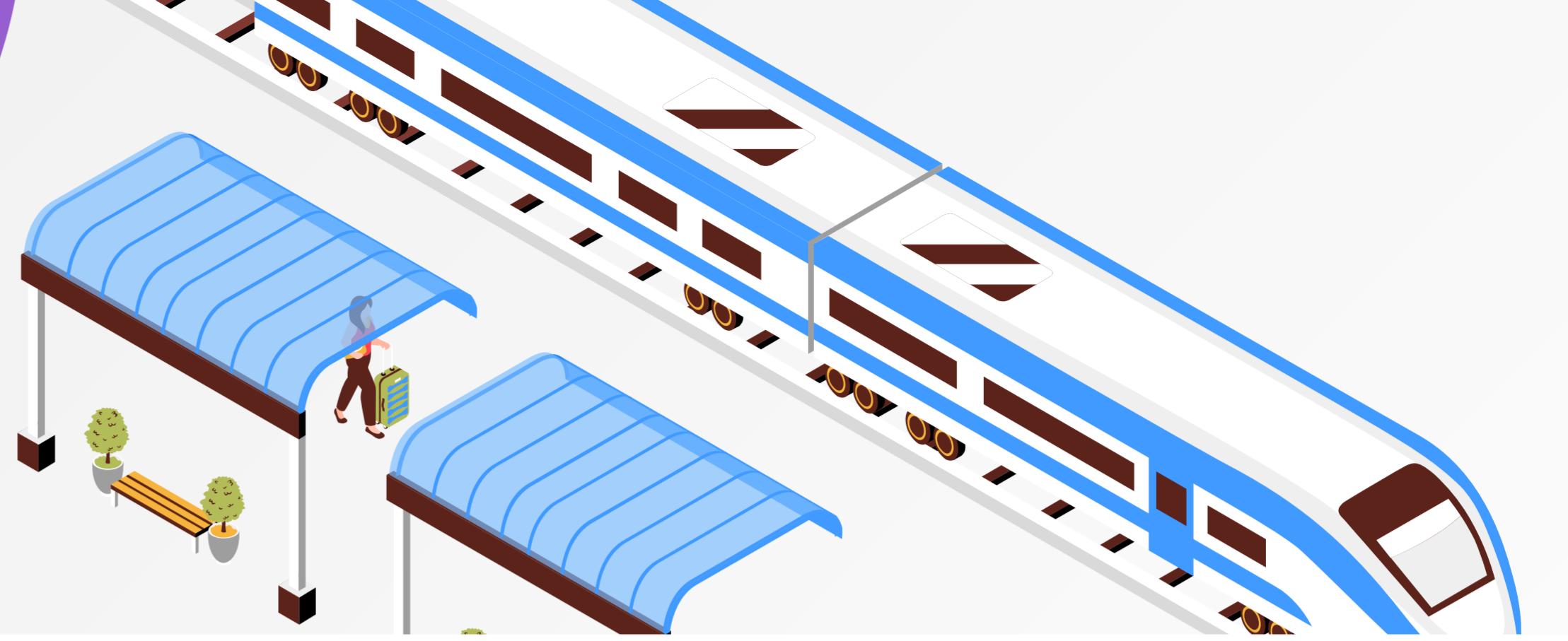


# Cholche Gari

A Railway Management Application





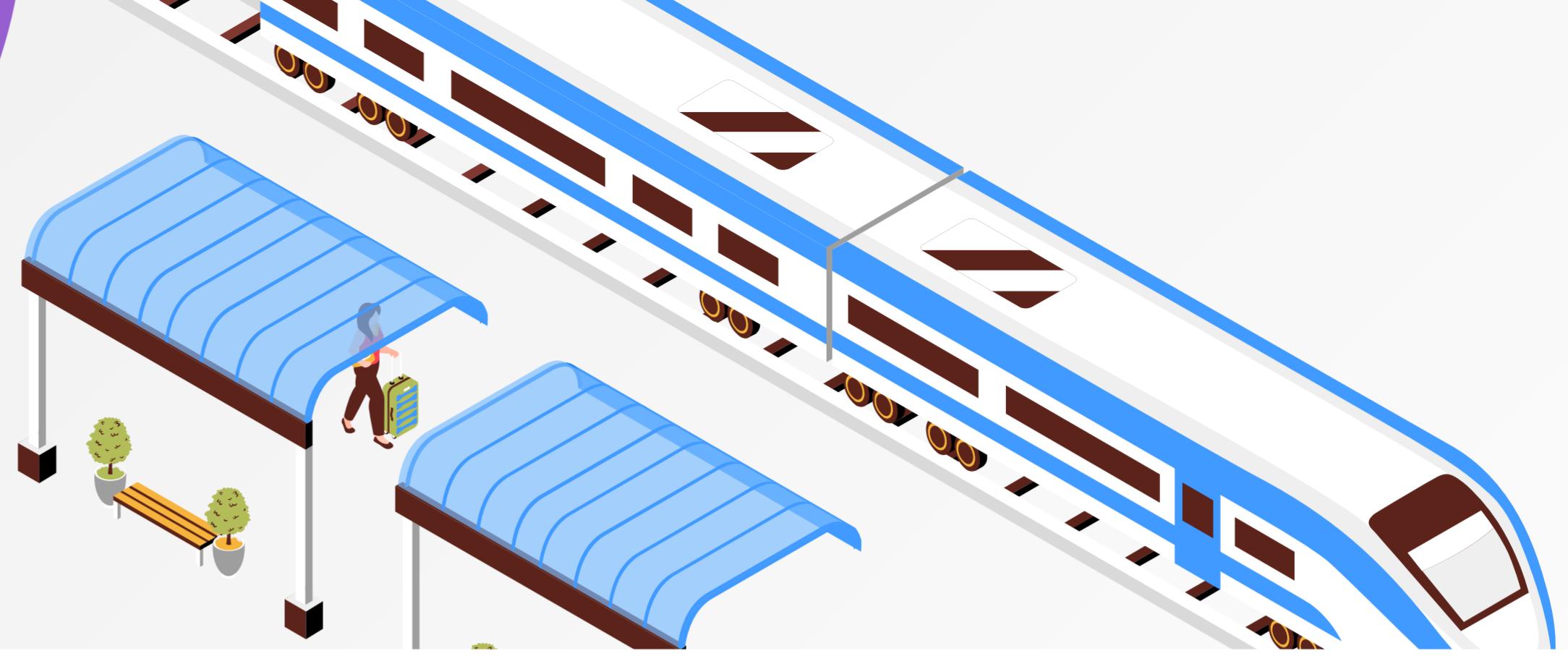
# **Presented To**

# **Dr. Shamim H Ripon**

Professor

Department of Computer Science & Engineering  
East West University  
Bangladesh





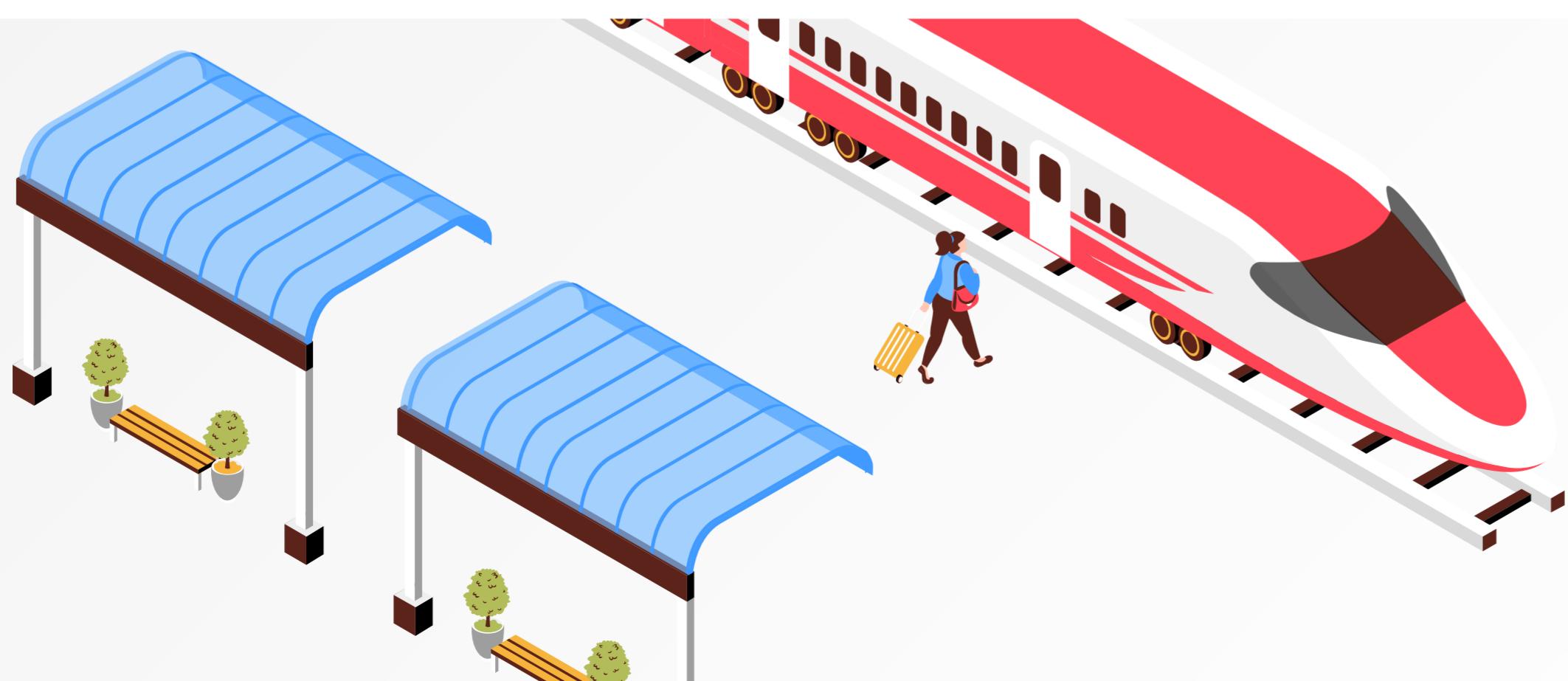
# Presented By

Fahmida Anjum Raisa  
2021-2-60-027

Maherun Nessa Isty  
2021-2-60-086

Raiyan Gani  
2021-2-60-120

Warda Ruhin Parsub  
2021-2-60-164

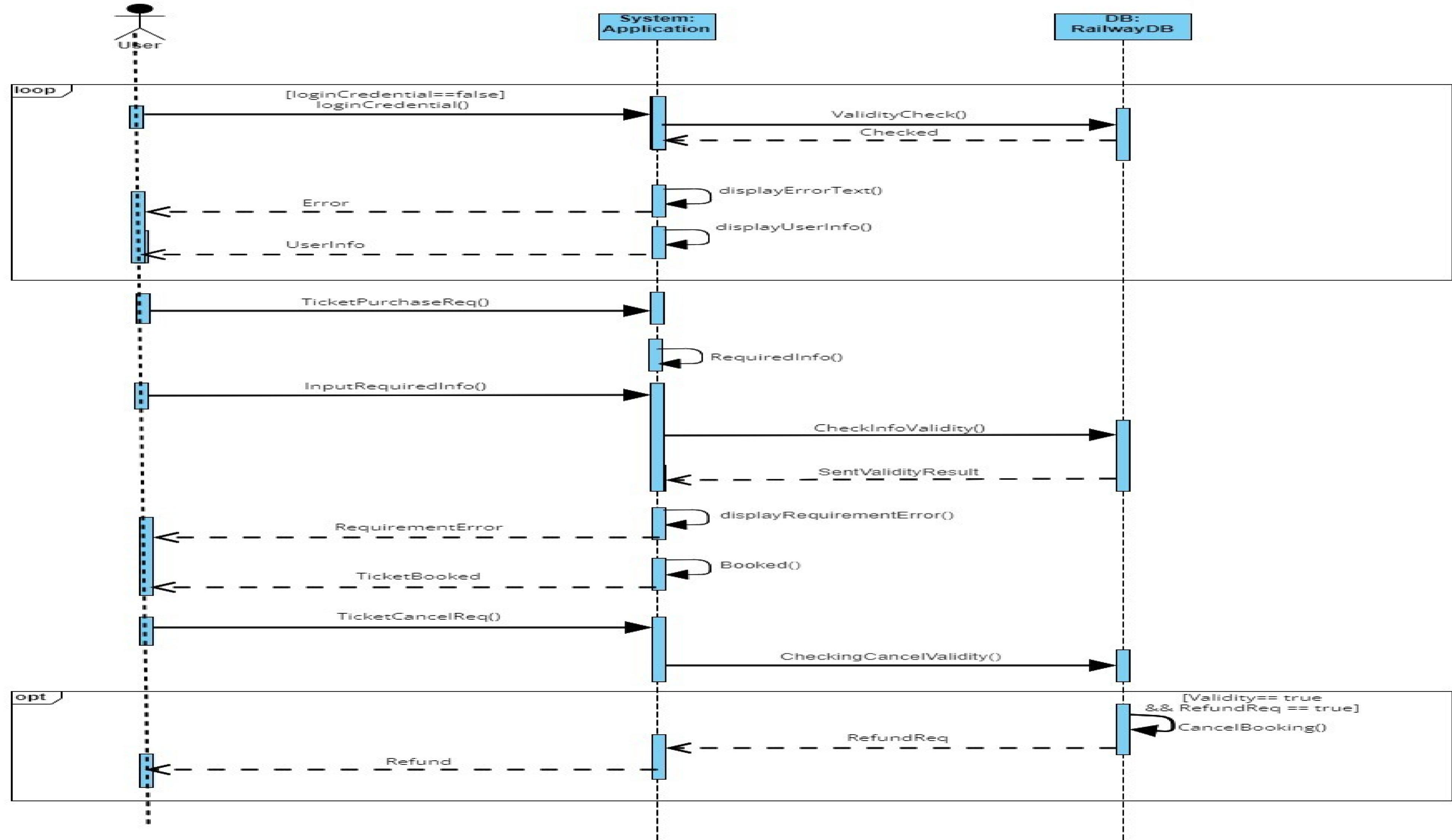


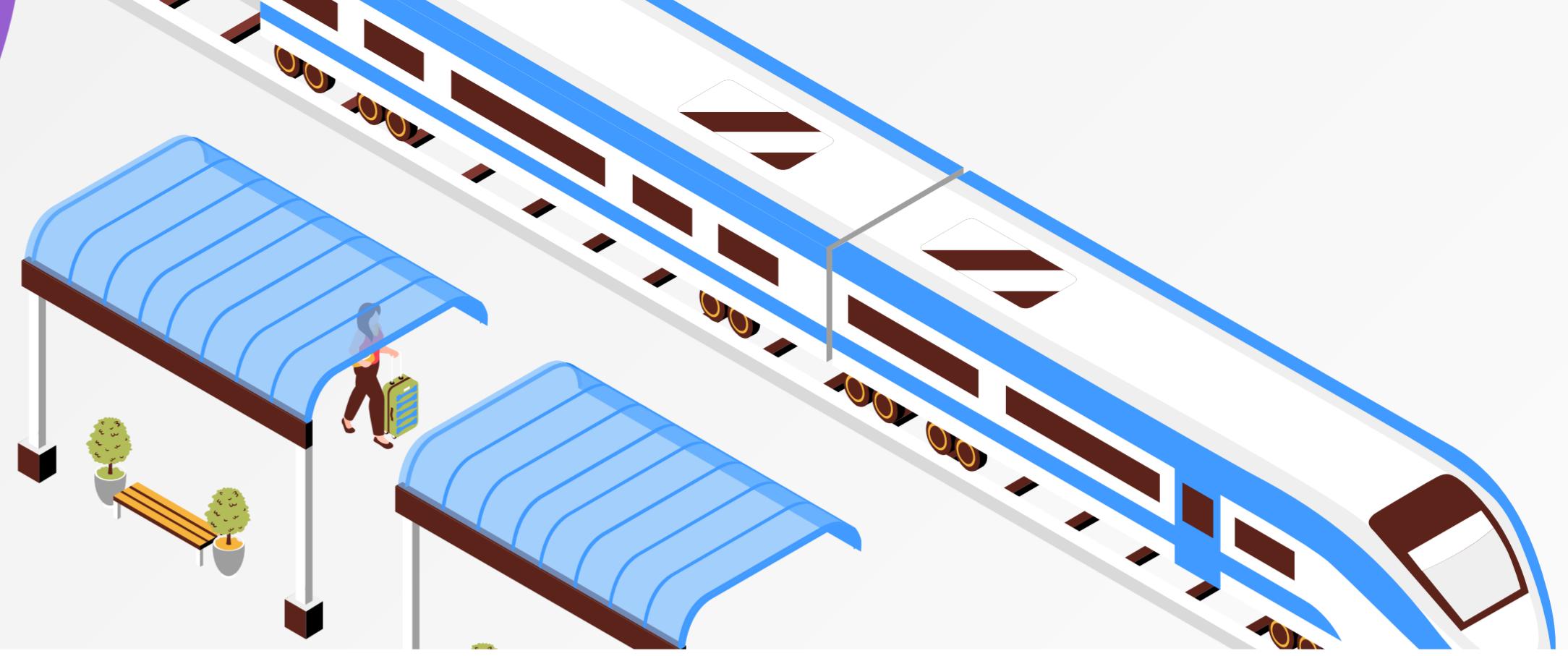


# Project Plan



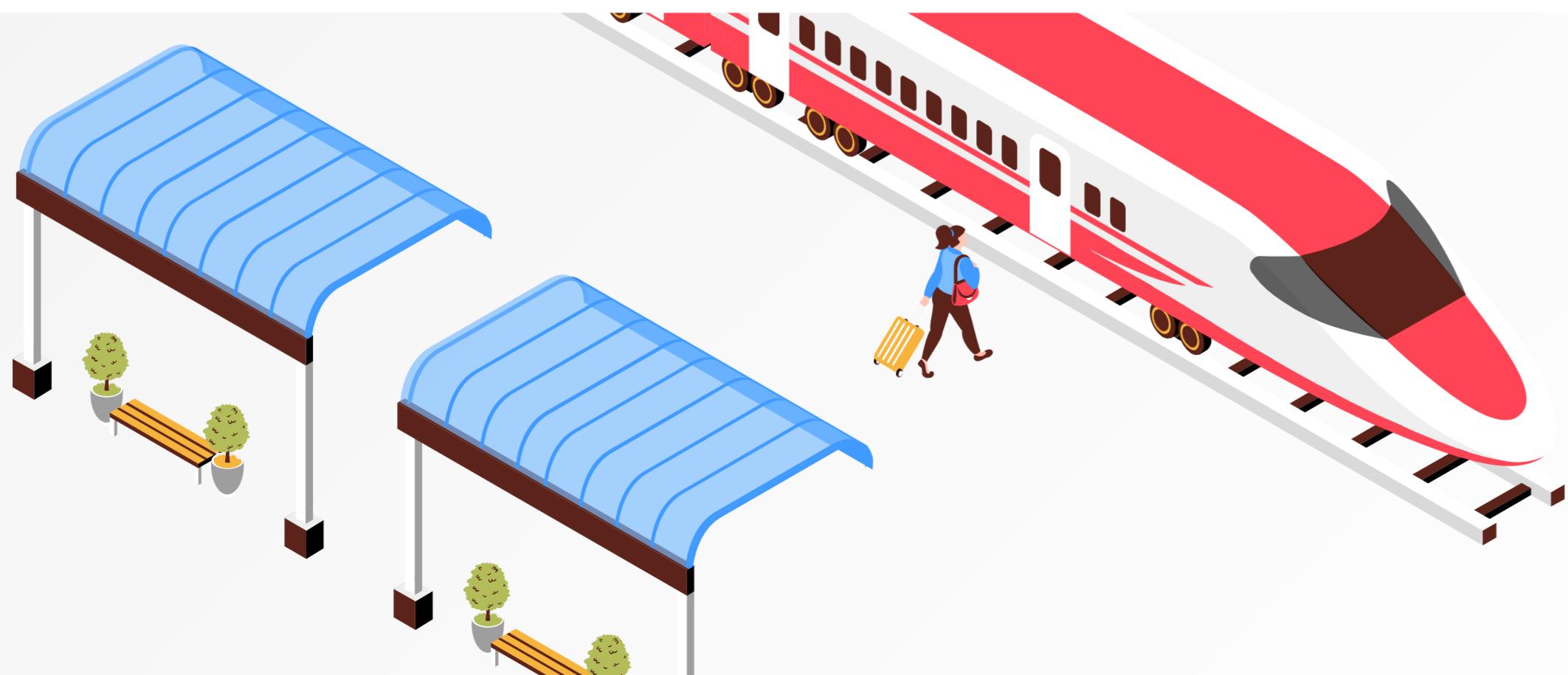
## Sequence Diagram





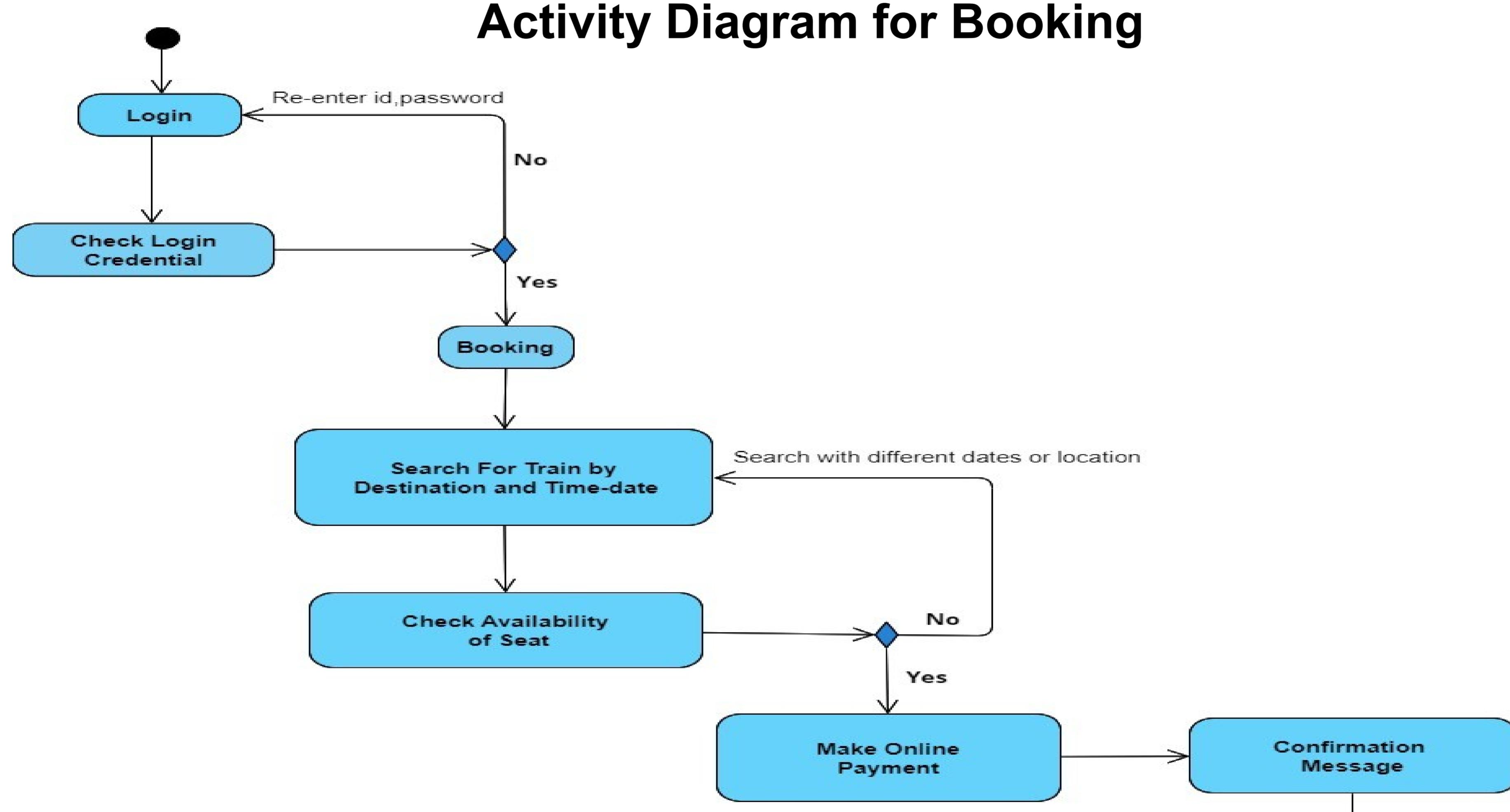
# Thank You

Feel Free To Ask Any Questions





# Project Plan

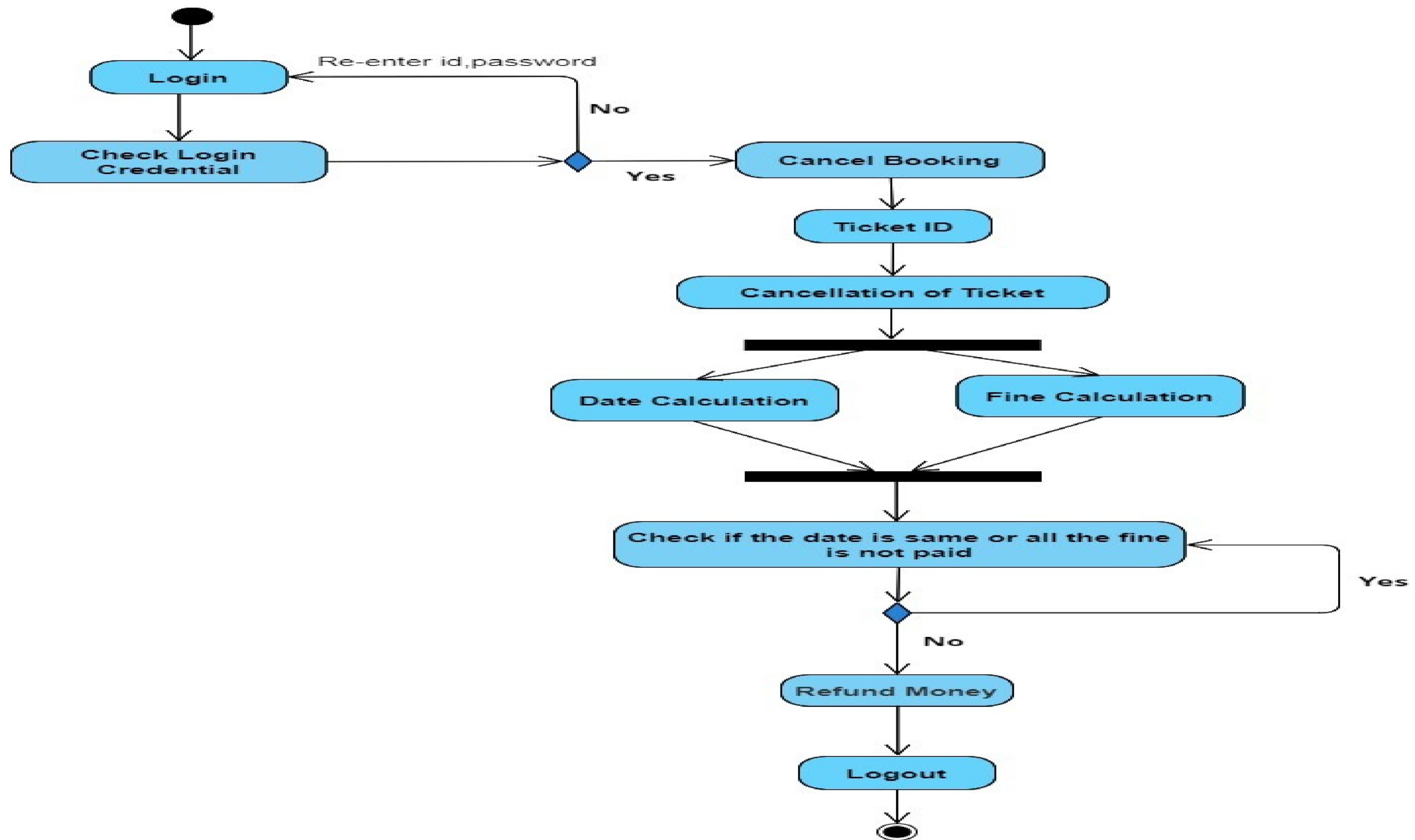




# Project Plan



## Activity Diagram for Cancel-Booking

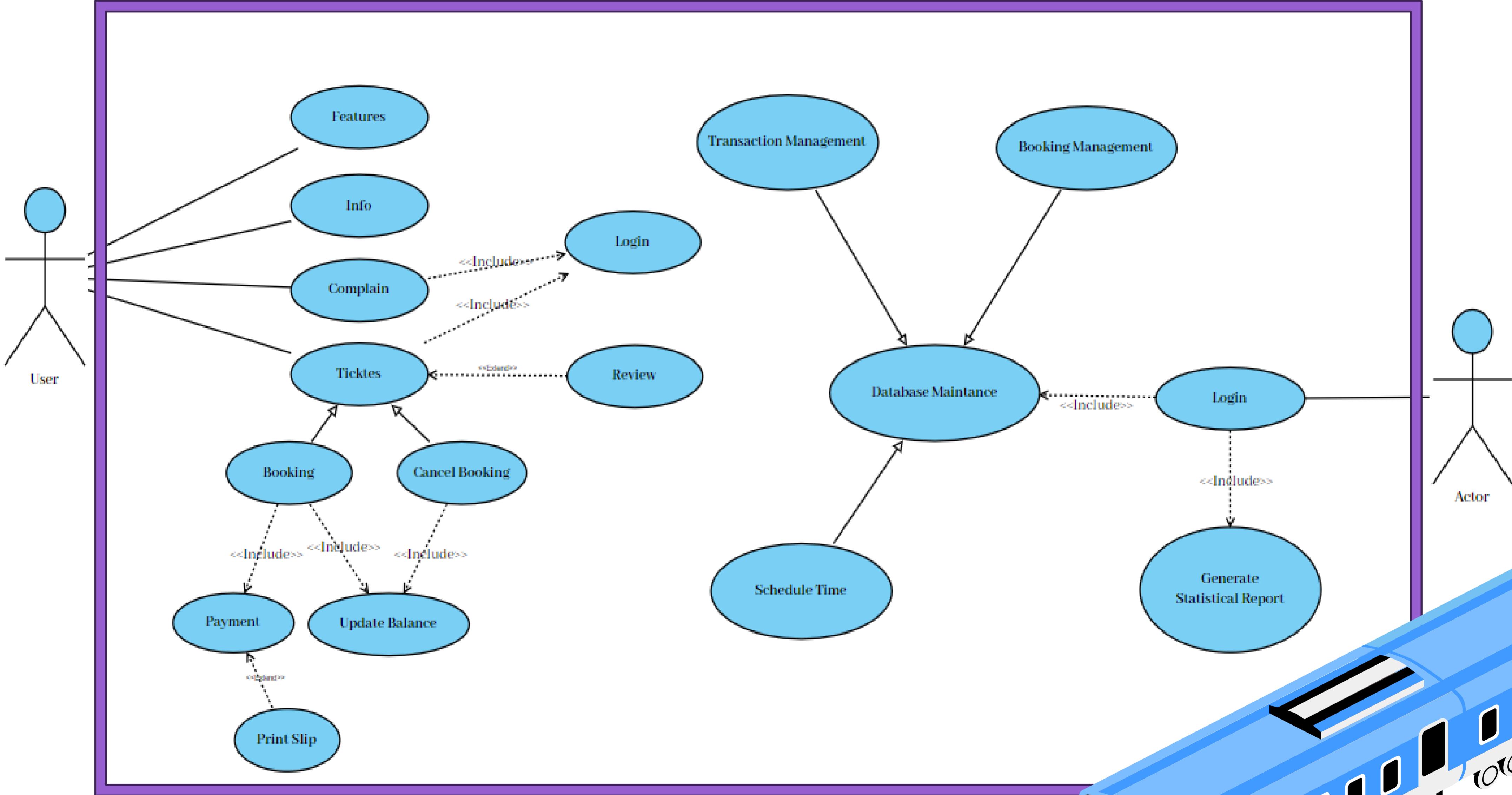




# Project Plan



## Use Case Diagram





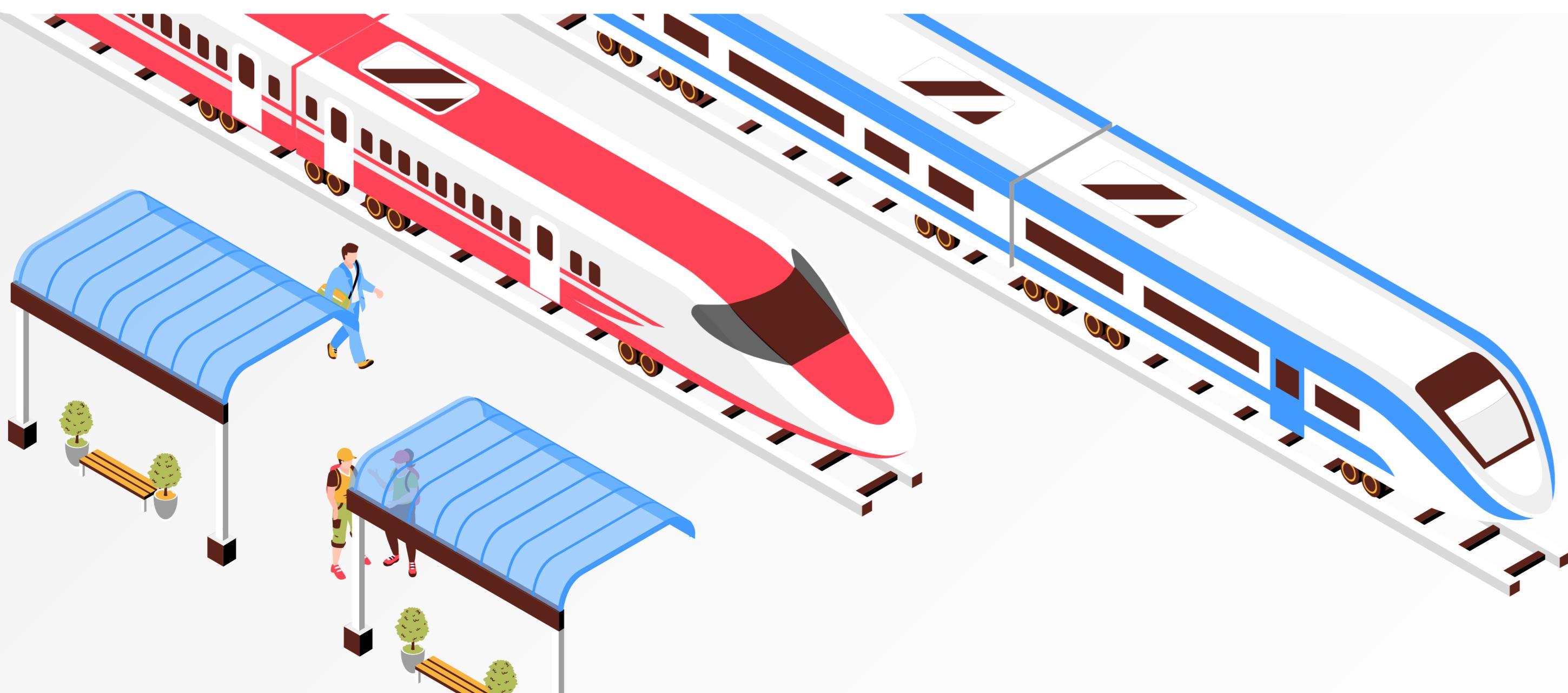
# Contents



- 01 Abstract
- 02 Project Plan
- 03 Advantages
- 04 Conclusion

# Abstract

A railway management system is a comprehensive software or information system designed to manage and simplify different elements of railroad operations. It is primarily used by enterprises and railway authorities in charge of running and maintaining railways, including passenger and commercial transit services. A railway management system's main objective is to boost the railroad industry's productivity, security, and customer satisfaction.





# Project Plan



User Features



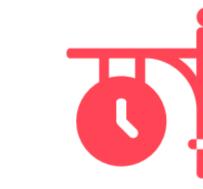
Welcome DashBoard



Railway History



Train Information



Station Information



Route Information



Train Schedule



Railway Authority



Tickets Reservation



Route Demands



Passenger Experience



User Complaint



# Project Plan



**Admin Features**



**Passenger Info/Add**



**Admin Info/Add**



**Station Info/Add**



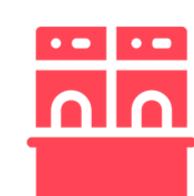
**Tickets Info/Add**



**Schedule Info/Add**



**User Review**



**Passenger Load**

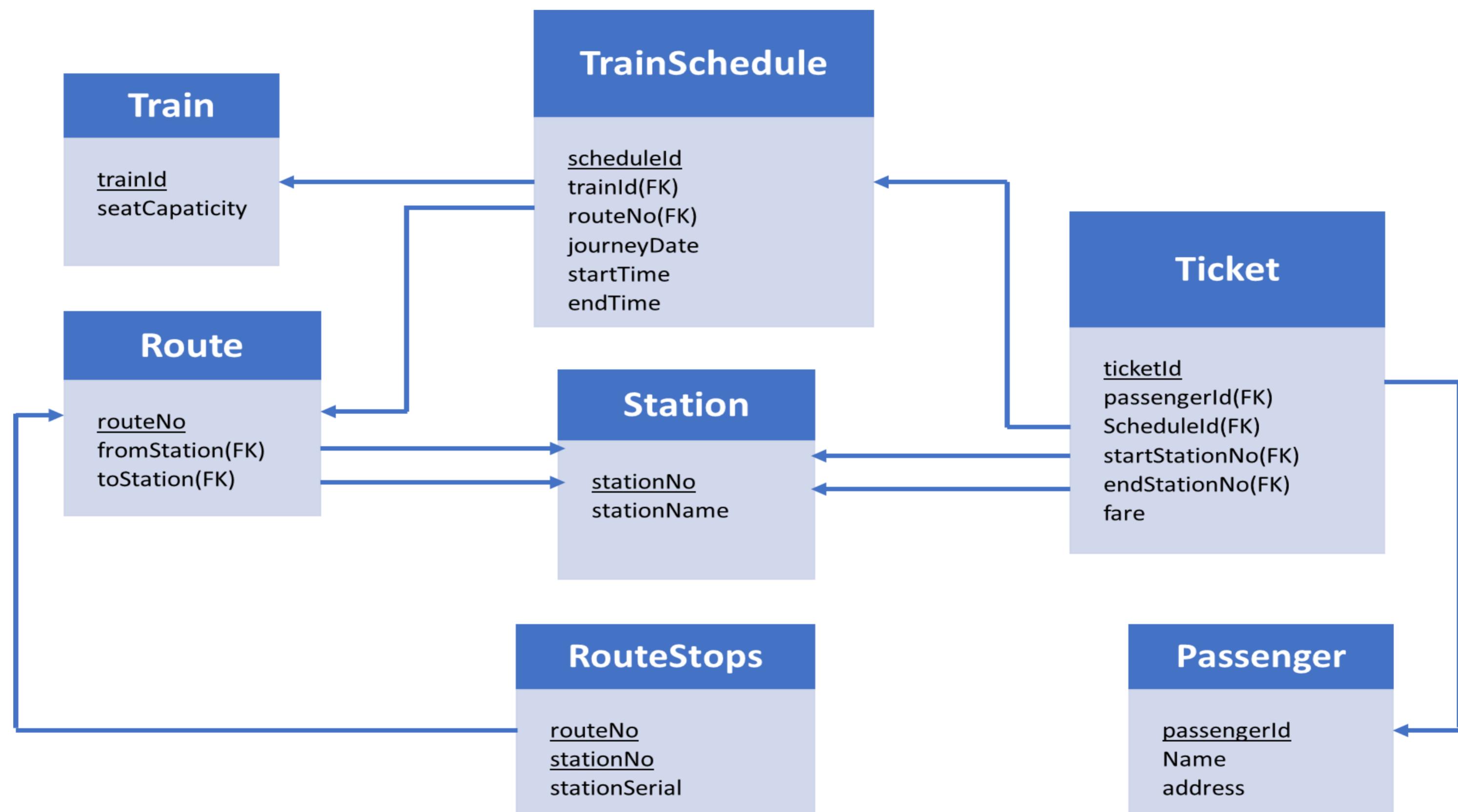


**Complaints Response**



# Project Plan

## ER Diagram





# Project Plan



## What is Project Management?

Project management is the discipline of planning, organizing, and overseeing the execution of a project from its initiation to completion. A project is a temporary attempt with a specific goal, a defined timeline, and allocated resources, including people, materials, and budget. Project management is used in various industries and settings to ensure that projects are completed efficiently and effectively.



# Project Plan



## Components of Project Management

There are five main key components for executing a project. It includes

- Project conception & initiation
- Project definition & planning
- Project launch or execution
- Project performance & control
- Project closing



# Project Plan



## Project Management Techniques

In the three major phases of project management, scheduling is an important phase that involves listing activities, milestones, and deliverables within a project. A well-developed project schedule ensures the project is completed on time and produces the desired quality of outcomes. PERT (Program Evaluation and Review Technique) and CPM (Critical Path Method) are the mathematical analysis of the scheduling techniques.



# Project Plan



## Project Management Techniques

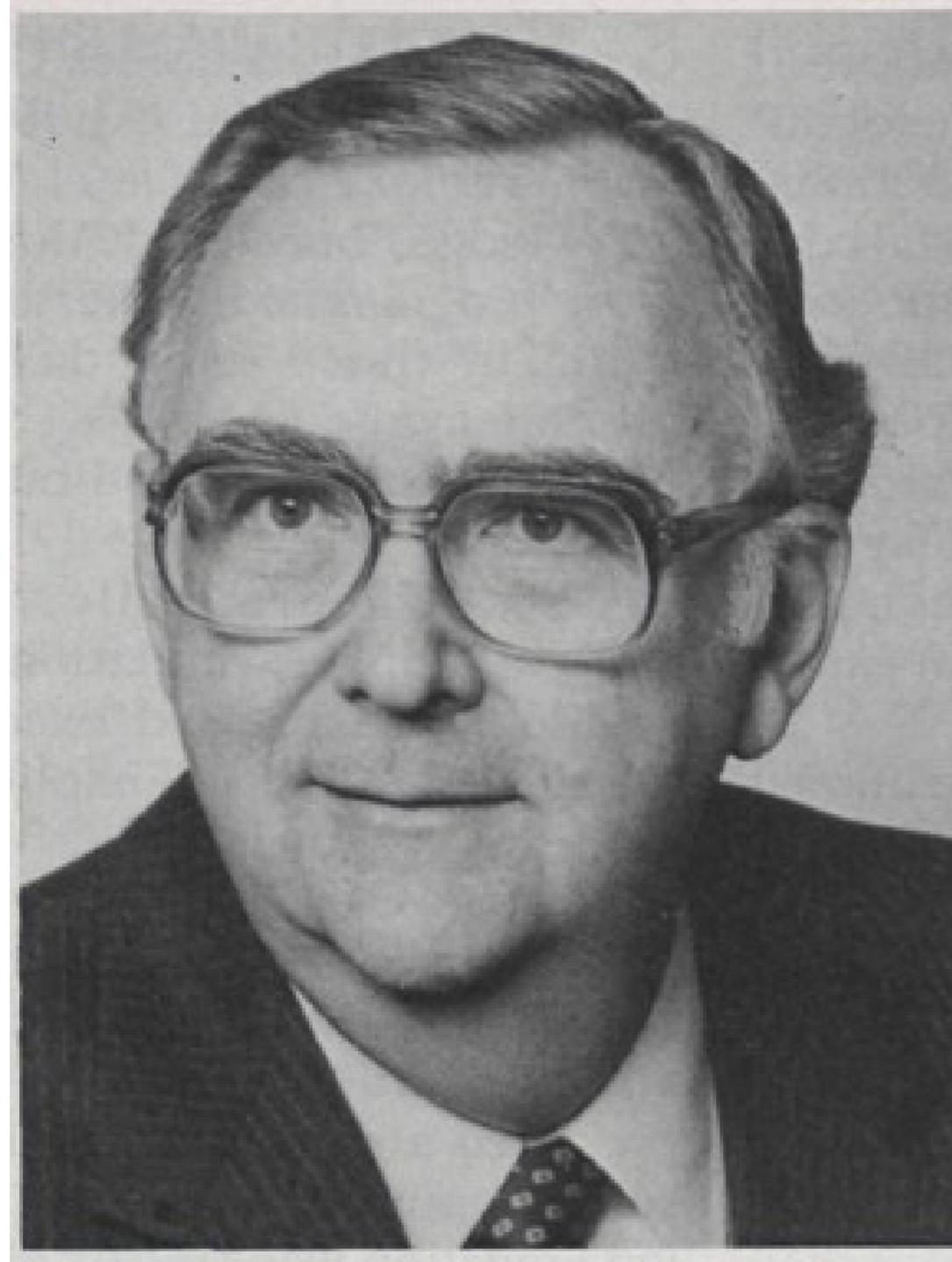
Here, we have chosen the CPM method to complete our project. CPM is a network-based project scheduling technique that identifies the critical path in a project. The critical path is the sequence of tasks that, if delayed, we will not be able to extend the project's duration. CPM helps project managers focus on the most important tasks to ensure the project is completed on time.



# Project Plan



## Critical Path Method Founders



**JAMES E. KELLEY, JR.**



**MORGAN R. WALKER**



# Project Plan



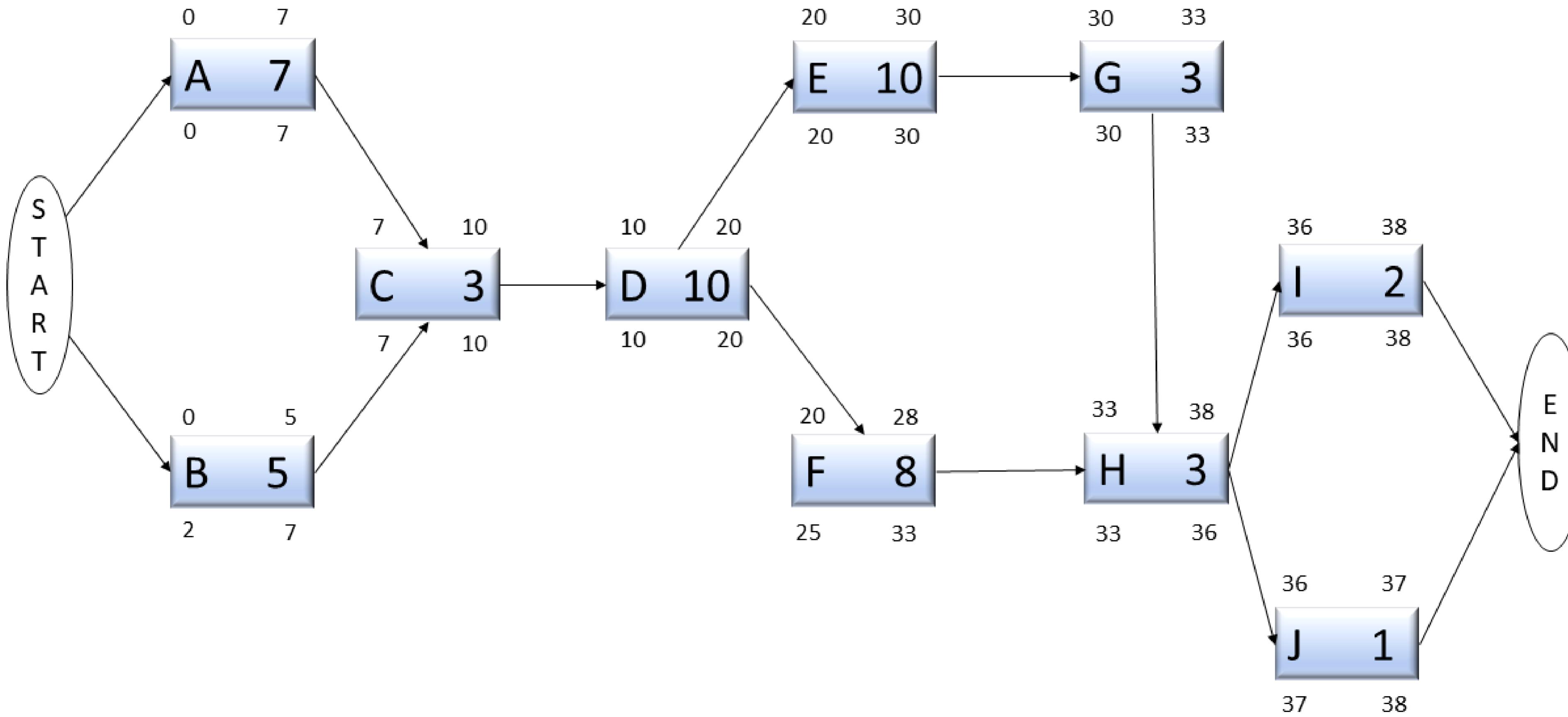
## Project Information

Activity	Activity Name	Predecessor	Duration (Days)
A	Requirement	--	7
B	Analysis	--	5
C	Design	A, B	3
D	Implementation	C	10
E	Testing	D	10
F	Development	D	8
G	Overview	E	3
H	Report	G, F	3
I	Slide	H	2
J	Banner	H	1



# Project Plan

## Network Diagram





# Project Plan



## Total Float

(LS – ES) or (LF – EF)

$$A = 0 - 0 = 0$$

$$F = 25 - 20 = 5$$

$$B = 2 - 0 = 2$$

$$G = 30 - 30 = 0$$

$$C = 7 - 7 = 0$$

$$H = 33 - 33 = 0$$

$$D = 10 - 10 = 0$$

$$I = 36 - 36 = 0$$

$$E = 20 - 20 = 0$$

$$J = 37 - 36 = 1$$

## Free Float

$\min(ES \text{ (next task)} - EF \text{ (current Task)})$

$$A = 7 - 7 = 0$$

$$F = 33 - 28 = 5$$

$$B = 7 - 5 = 2$$

$$G = 33 - 33 = 0$$

$$C = 10 - 10 = 0$$

$$H = 36 - 36 = 0$$

$$D = 20 - 20 = 0$$

$$I = 38 - 38 = 0$$

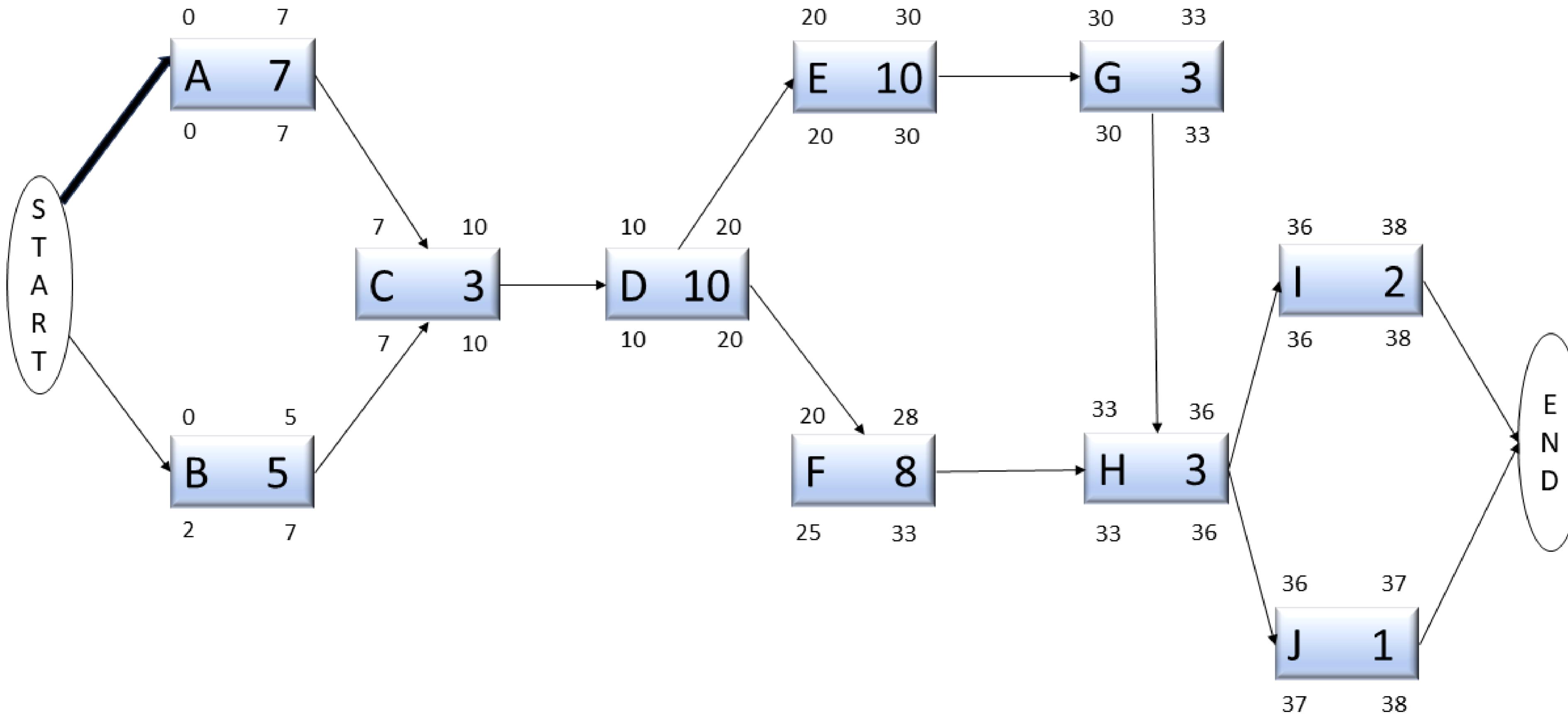
$$E = 30 - 30 = 0$$

$$J = 38 - 37 = 1$$



# Project Plan

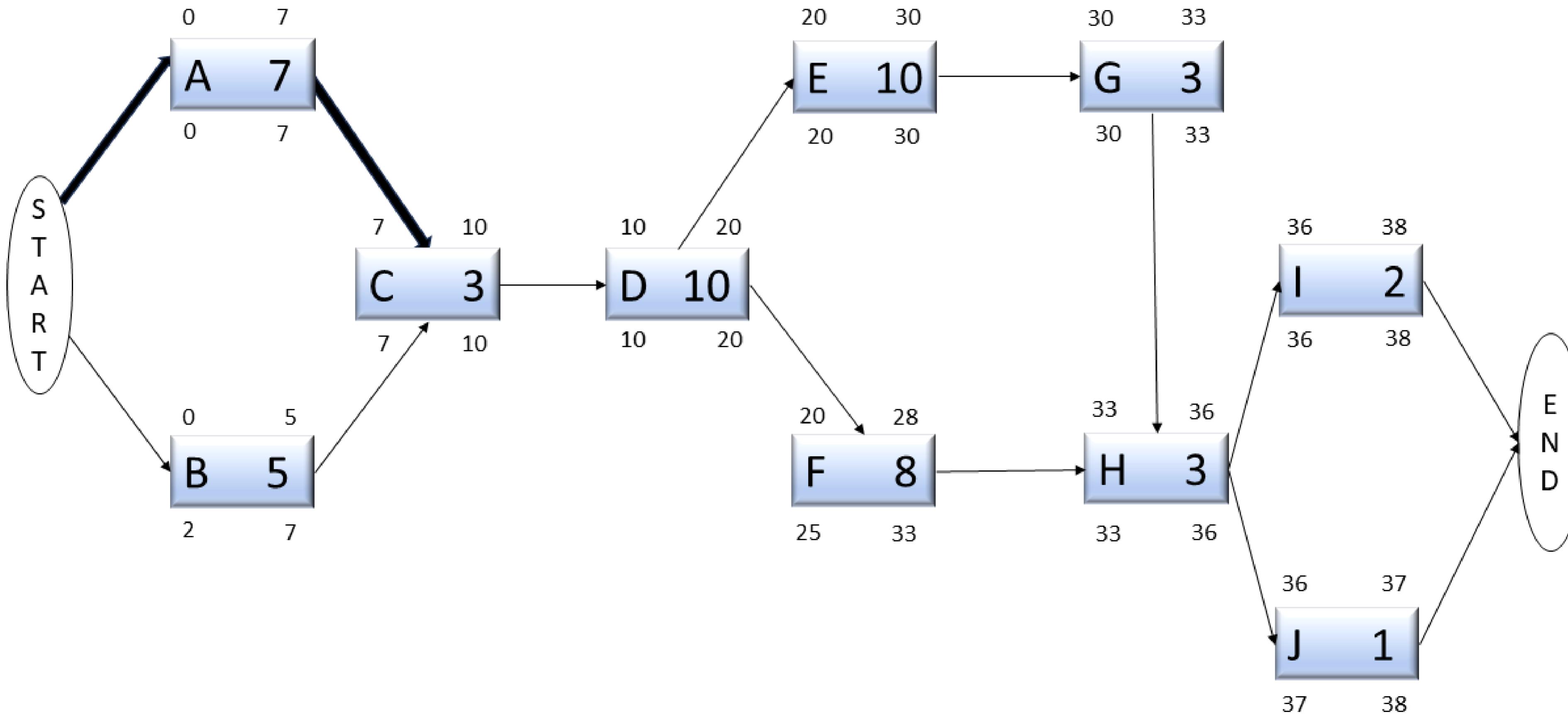
## Network Diagram





# Project Plan

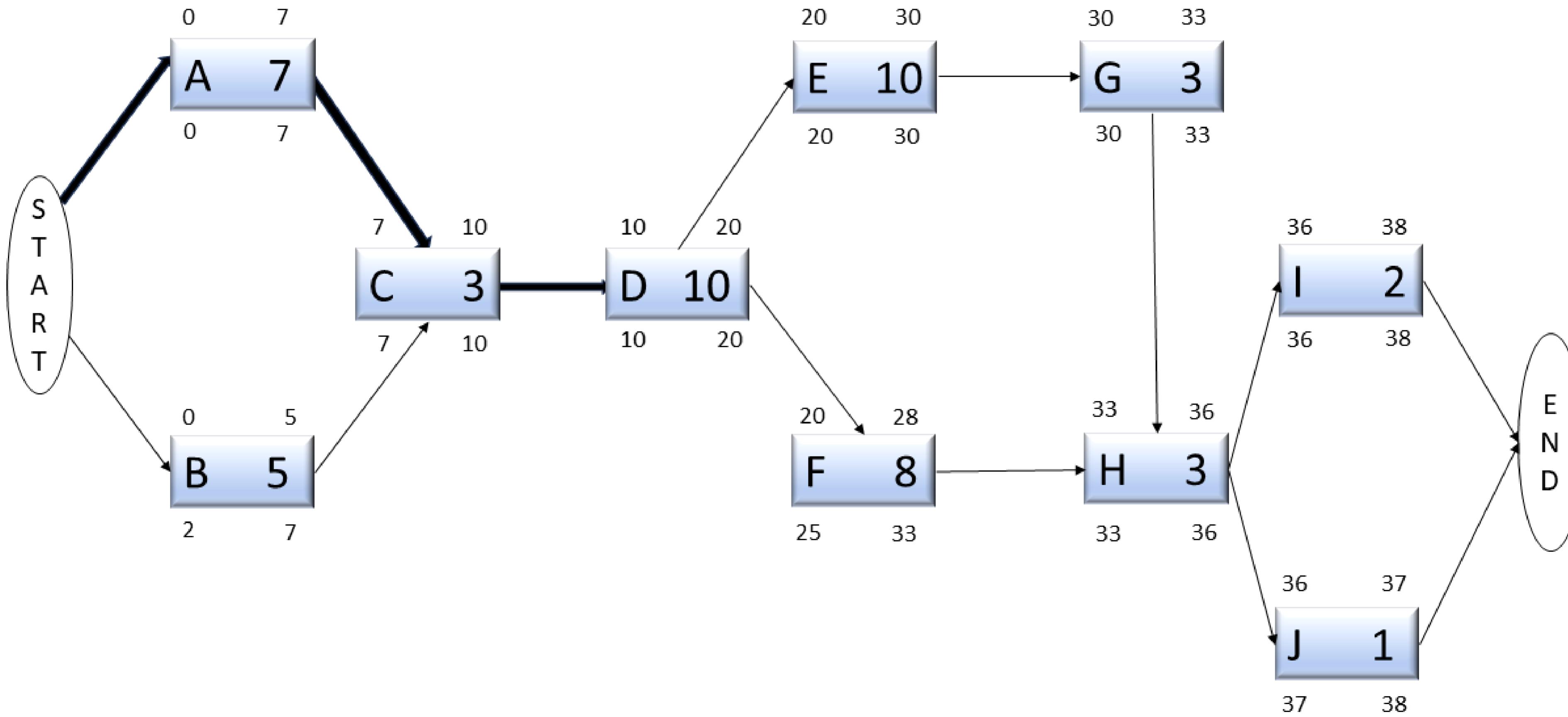
## Network Diagram





# Project Plan

## Network Diagram

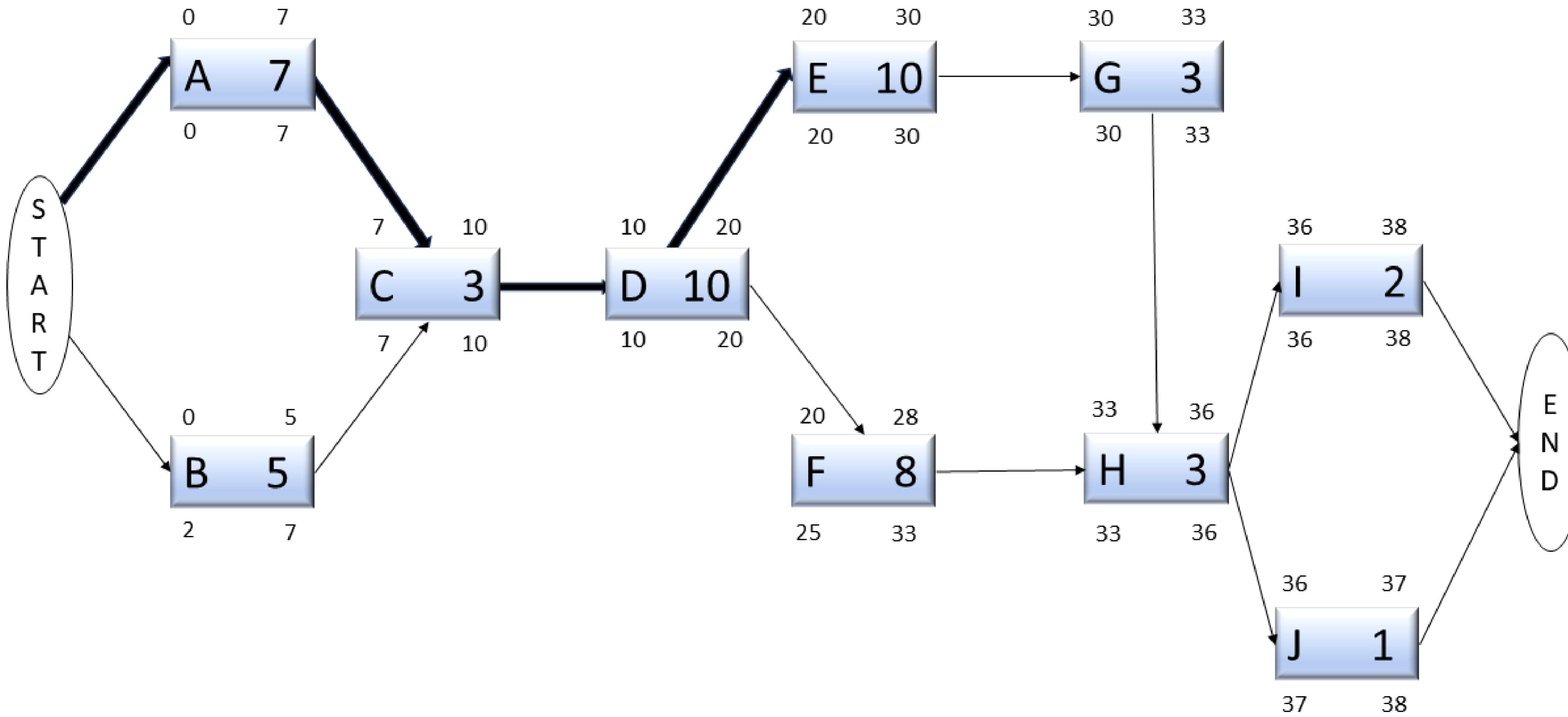




# Project Plan



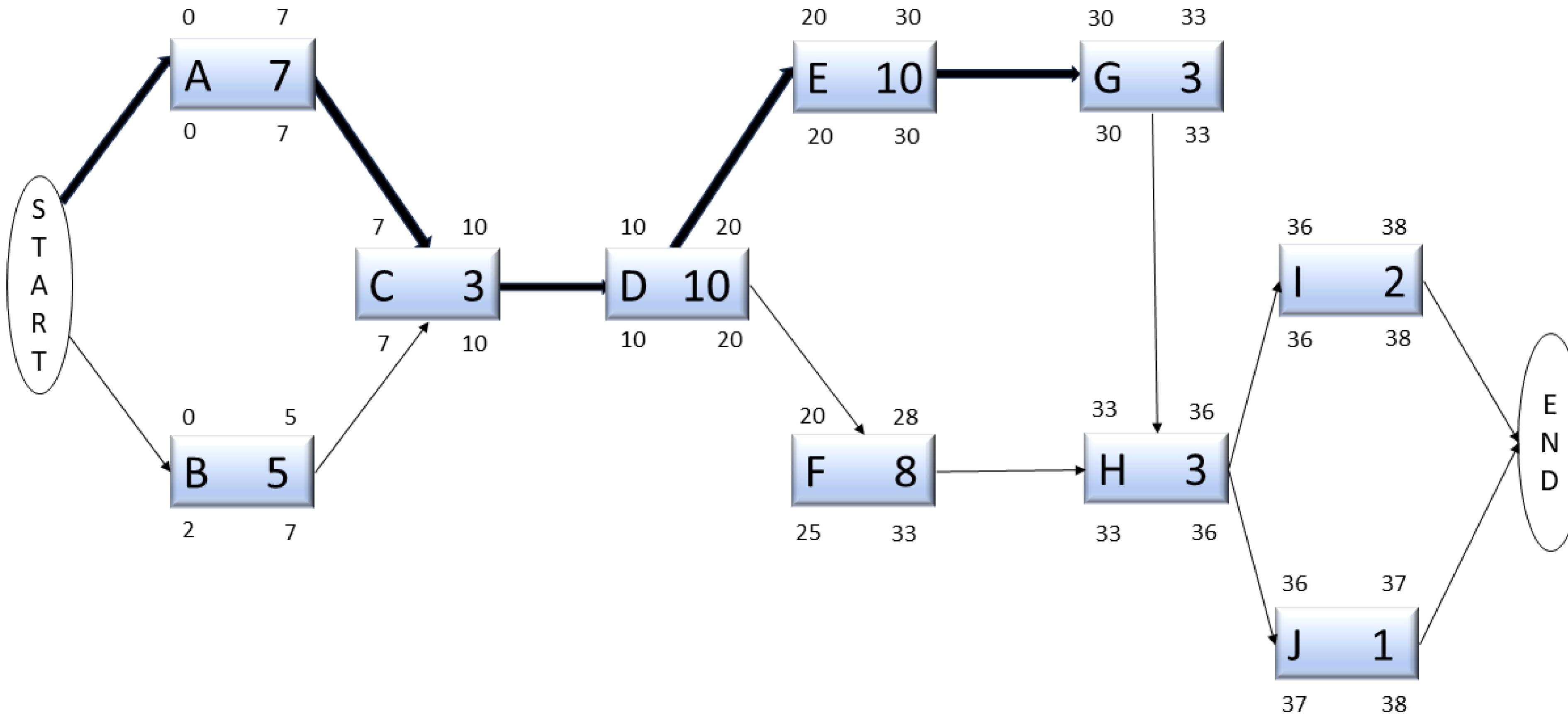
## Network Diagram





# Project Plan

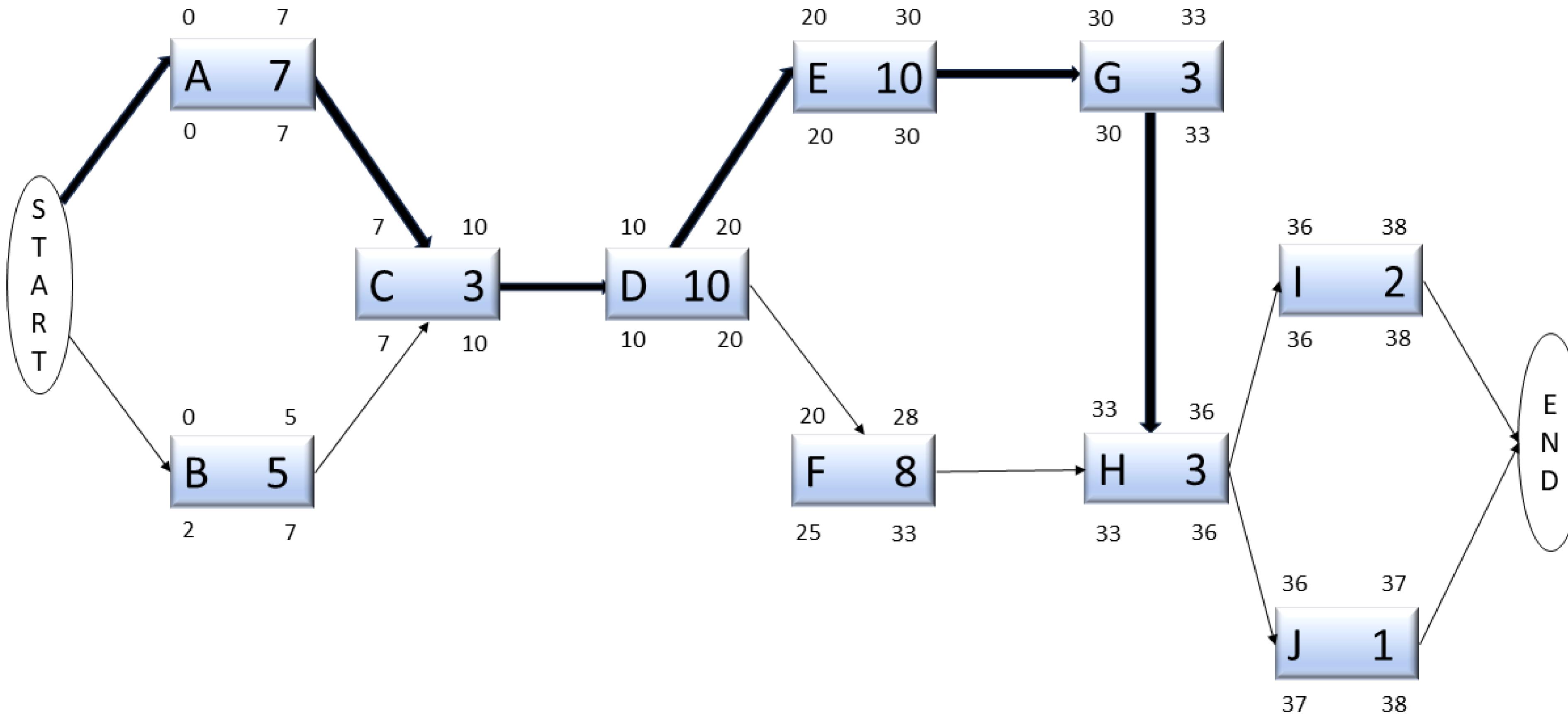
## Network Diagram





# Project Plan

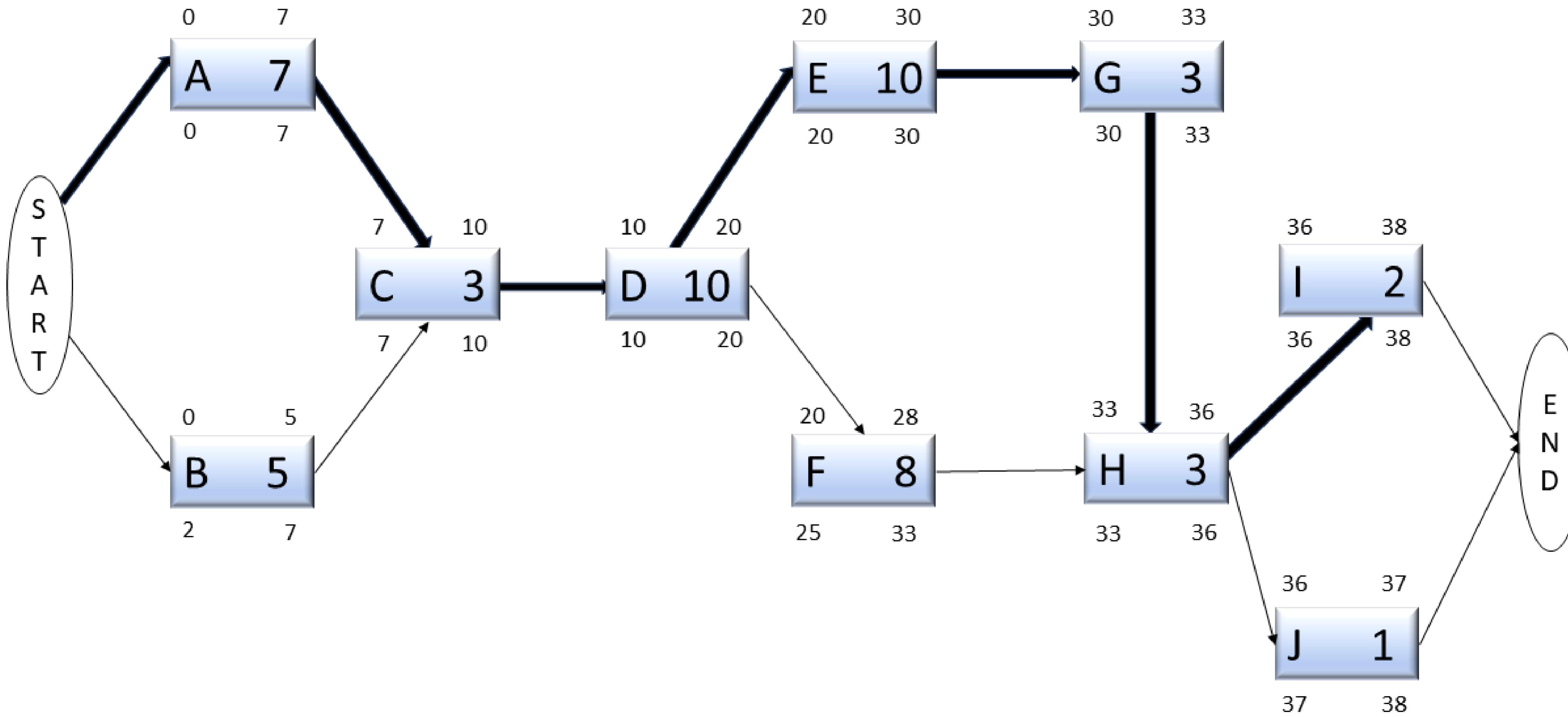
## Network Diagram





# Project Plan

## Network Diagram

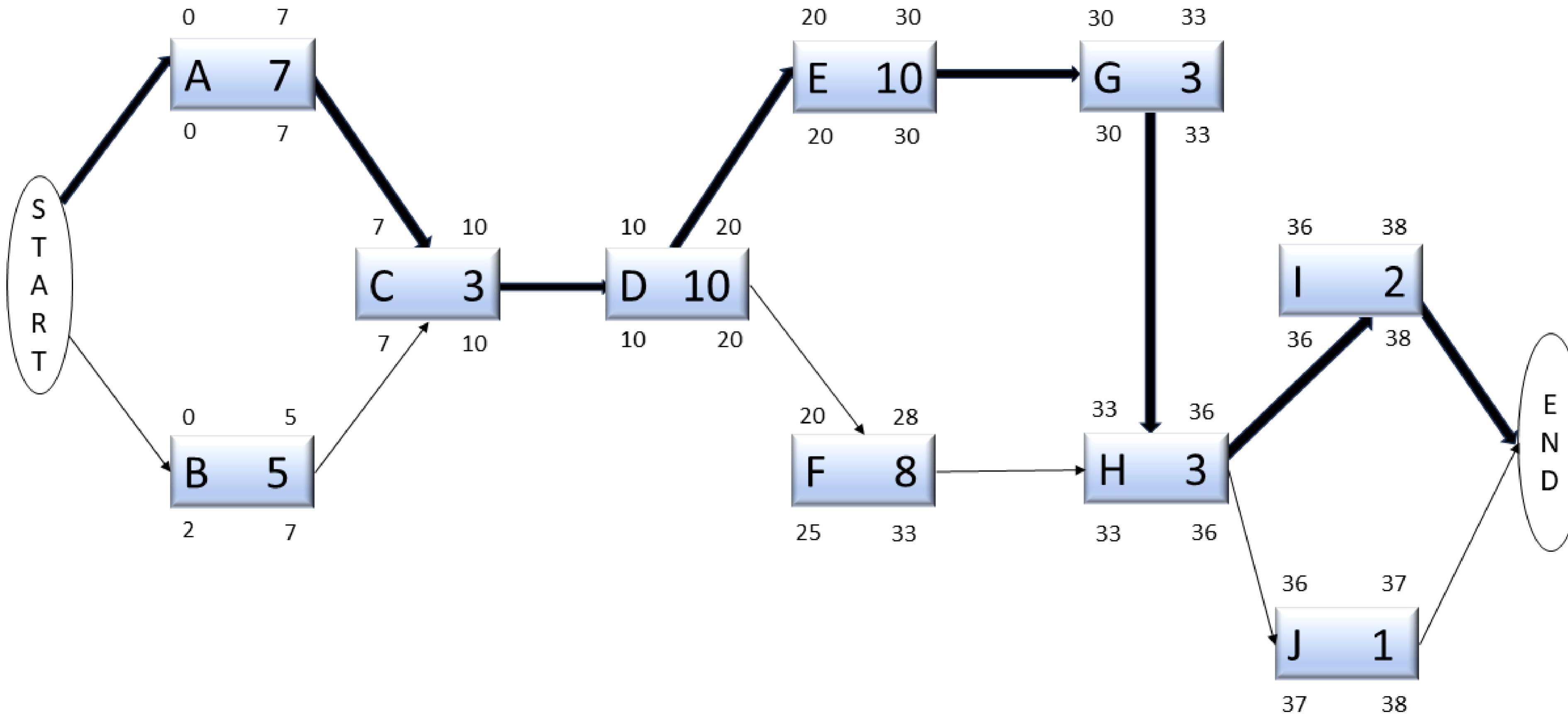




# Project Plan



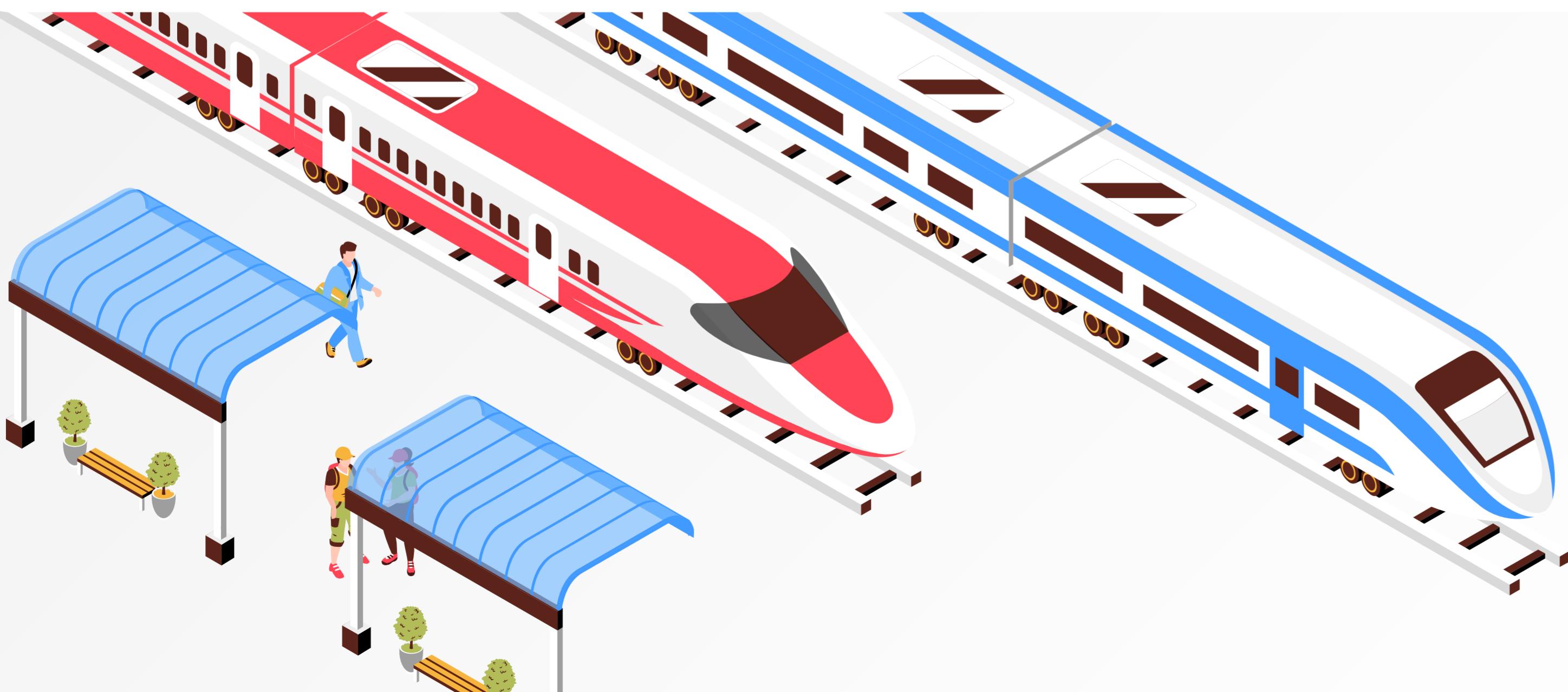
## Network Diagram





# Project Plan

- Minimum Time to complete the project – 38 Days
- Critical Activity – A, C, D, E, G, H, I
- Critical Path - A -> C -> D -> E -> G -> H -> I





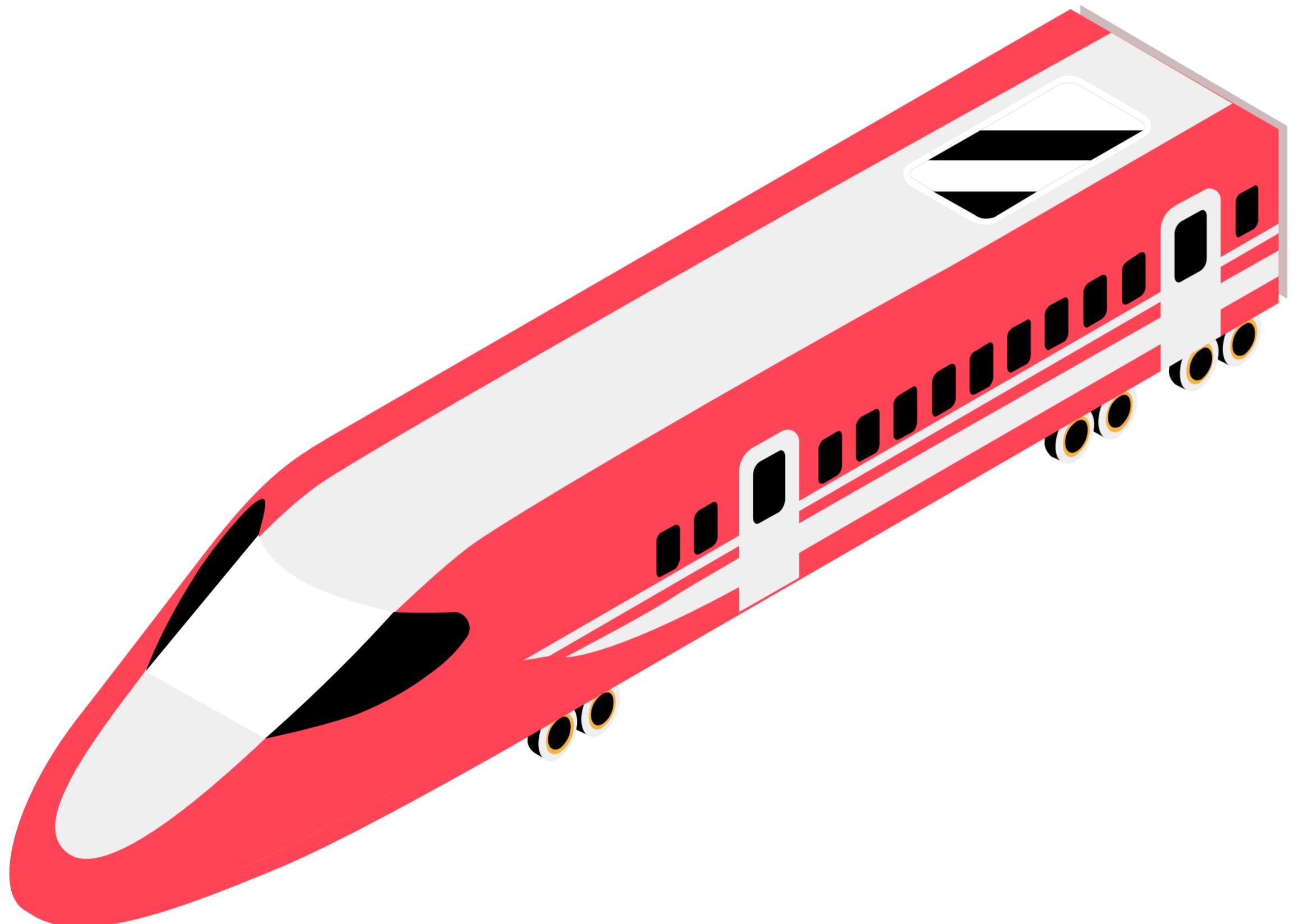
# Advantages



- The system shows operational efficiency. It gives all sorts of information about trains, stations, routes, schedules, railway administrators, ticket reservations and many more.
- Passengers can share their experiences. They can even rate their travels. Moreover there is a user help desk for any kind of complaint.



# Conclusion



In summary, a railway management system represents a pivotal step towards optimizing the railway industry. By improving efficiency, safety, and customer service, it not only streamlines operations but also enhances the passenger experience. The multifaceted benefits, from cost reduction to environmental sustainability, make it an indispensable tool for modern railways. In an era of dynamic transportation changes, this system offers railways a path to stay competitive, meet passenger expectations, and contribute to a more efficient, secure, and sustainable future for rail travel.