

**A
REPORT
ON
“ONLINE TICKET RESERVATION”**

**SUBMITTED IN FULFILLMENT OF THE REQUIREMENT FOR THE
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Abstract:

The online reservation system is basically derived from the GDS (global distribution system) also known as a CRS (computer reservation system). The online reservation system has its database centrally located which is accessed through an Application Programming Interface (API). With the invent of online reservation system the traveller and the railway got the freedom to book a seat anywhere at any time at their convenience. The traveler can book a ticket at a click of a mouse saving the time and money for the travelling. It has also become a hassle free transaction for both the railway and the traveler. The online reservation system involves three main actors the database, online operator and a database scheduler. The database scheduler updates the database, the online operator accepts and confirms the booking and updates the database.

PROBLEM STATEMENT:

The existing railway reservation system has many shortcoming associated with it. In the existing system railway used to set train reservation levels higher than seating capacity to compensate for passenger cancellation and no-shows accounting to overbooking in the agent frequently to do so thus wasting time and money for all. In the existing system integration of different railways on a single platforms was not met. With the advent of the online reservation system these flaws can be overcome.

PROPOSED STATEMENTS:

The new online reservation system maintains the database centrally giving the clients the information required from anywhere in the world whenever required. This system requires the use of API through which it interacts the data from a central database monitors all the data exchanges that are made at the client side to it and updates it automatically. Through online reservation system customer is able to book & purchase a ticket thus saving time money for the customer and an railway/agent. As the information is stored centrally the customer never loses his ticket as in the existing system.

INTRODUCTION

Railway Ticketing is looking for an online solution to provide travelers with all facilities on internet. Providing the facilities like information of regarding trains, seat availability, online reservation/cancellation, information about train running etc.

Improve Railway Ticketing is looking for an online solution to provide travelers with all facilities on internet. Providing the facilities like information of regarding trains, seat availability, online reservation/cancellation, information about train running etc. The role of local rail services is primarily centered on improving accessibility to the key regional and sub-regional centers. Targeted development of the network through new and improved services, opening up access to communities and ensuring major new economic development areas are connected to the rail network, where a strong case can be made for investment, taking account of the strategic role of the rail network.

The Improve Railway Ticketing is doing path-breaking work in the area of fusing IT and domain expertise for cutting edge technology projects to improve Railways' operational efficiency and customer services. Under the new system, the moment the computer shows waiting list in a train, information will also be

there on all trains on that route. Once journey details and other reservation information are fed, the accommodation options for all trains on the route will be flashed simultaneously on the computer screen.

The Improve Railway Ticketing will allow the passenger and the ticket booking official to view all options in one go. Thus other passengers will not have to spend much time in the Improve Railway Ticketing centre as waiting time for them will be considerably reduced. The responsibility for the provision of rail Services and associated infrastructure is, however, split between a large number of different organizations. The Government recently published a White Paper, 'The Future of Rail', which sets out the conclusions of the Department of Transport's review of the rail industry. The White Paper outlines a new structure for the railways, building on the principles of public and private partnership and identifies The following changes:

The Government will take charge of setting the strategy for the railways; Network Rail will be given clear responsibility for operating the network and for its performance; Track and train companies will work more closely; There will be more local decision making in England; The Office of Rail Regulation will cover safety, performance and cost.

System Analysis

Purpose of the System:

This system provides an online solution to provide travelers by giving facilities like information regarding trains, seat availability, online reservation or cancellation etc.

Existing System:

- ❖ This system doesn't provide register the multiple trains at a time
- ❖ This system doesn't provide online help to the public

⇧ This system doesn't provide agents registration and book the bulk tickets

⇧ This system doesn't provide late running trains information before 3 hours

Proposed System:

The development of this new system contains the following activities, which try to develop on-line application by keeping the entire process in the view of database integration approach.

⇧ This system provide online help to the public

⇧ This system provide agents registration and book the bulk tickets

⇧ This system provide late running trains information before 3 hours

⇧ In case of waitlisted tickets user must have an option of booking in multiple trains by paying only the cost of highest amount

⇧ Whichever ticket gets confirmed first is sent to the user and all others are automatically cancelled and any amount left is refunded

⇧ Online status of the tickets must be provided in real time.

Feasibility Study

TECHNICAL FEASIBILITY:

Evaluating the technical feasibility is the trickiest part of a feasibility study. This is because, at this point in time, not too many detailed design of the system, making it difficult to access issues like performance, costs on (on account of the kind of technology to be deployed) etc. A number of issues have to be considered while doing a technical

Analysis.

i) Understand the different technologies involved in the proposed system:

Before commencing the project, we have to be very clear about what are the technologies that are to be required for the development of the new system.

ii) Find out whether the organization currently possesses the required technologies:

iii) Is the required technology available with the organization?

iv) If so is the capacity sufficient?

For instance –

“Will the current printer be able to handle the new reports and forms required for the new system?”

OPERATIONAL FEASIBILITY:

Proposed projects are beneficial only if they can be turned into information systems that will meet the organizations operating requirements. Simply stated, this test of feasibility asks if the system will work when it is developed and installed. Are there major barriers to Implementation? Here are questions that will help test the operational feasibility of a project:

→ Is there sufficient support for the project from management from users? If the current system is well liked and used to the extent that persons will not be able to see reasons for change, there may be resistance.

- Are the current business methods acceptable to the user? If they are not, Users may welcome a change that will bring about a more operational and useful systems.
- Have the user been involved in the planning and development of the project?
- Early involvement reduces the chances of resistance to the system and in
- General and increases the likelihood of successful project.
- Since the proposed system was to help reduce the hardships encountered. In the existing manual system, the new system was considered to be operational feasible.

SYSTEMS DEVELOPMENT LIFE CYCLE

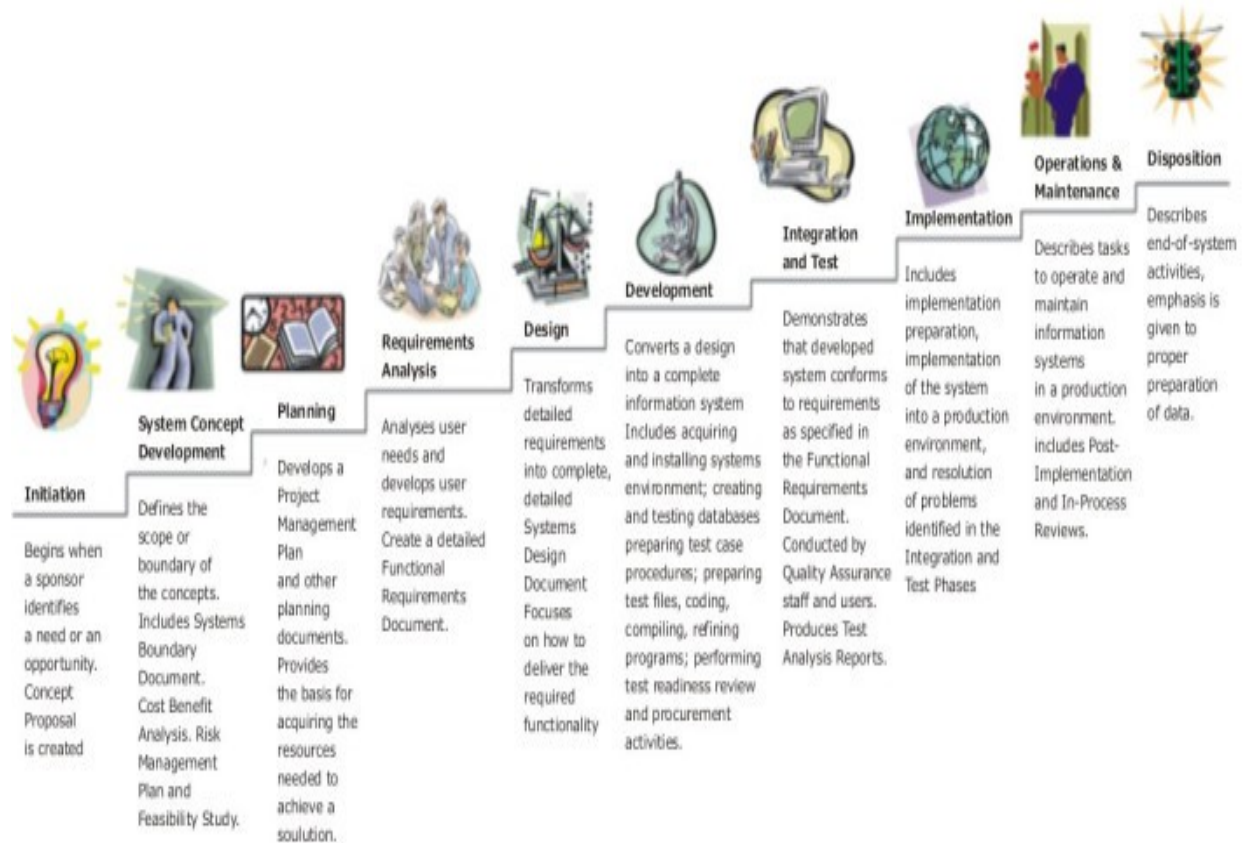
Software Development Life Cycle is a process used by software industry to Design, develop and test high quality Softwares. The SDLC aims to produce a high quality software that meets or exceeds customer expectations, reaches completion within time and cost estimates.

SDLC is the acronym of Software Development Life Cycle. It is also called as Software development process. The software development life cycle (SDLC) is a framework defining tasks performed at each step in the software development process.

ISO/IEC 12207 is an international standard for software life cycle processes. It aims to be the standard that defines all the tasks required for developing and maintaining software.

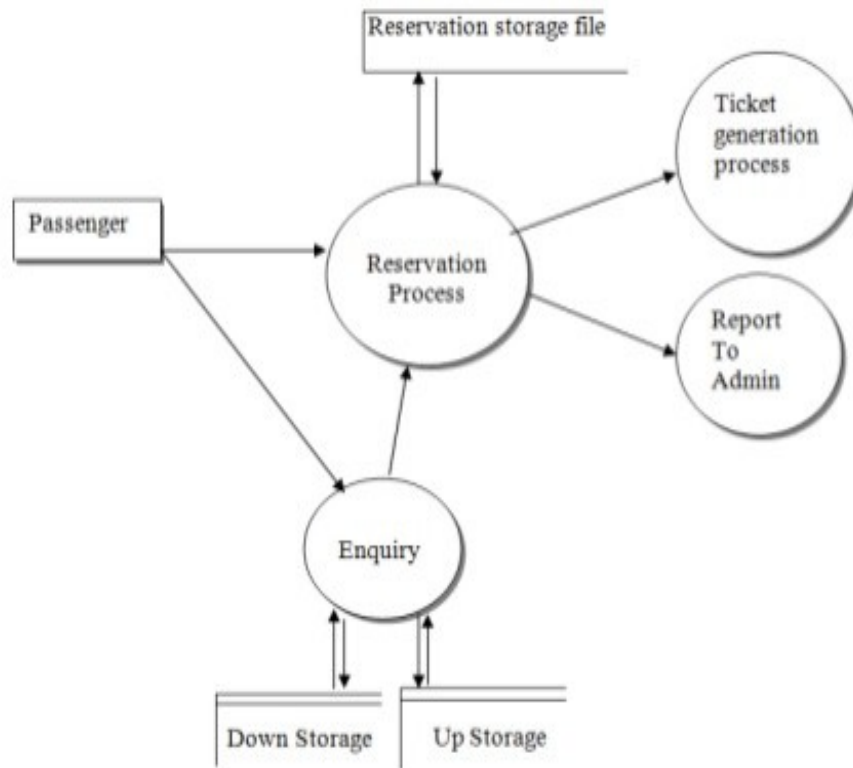
Systems Development Life Cycle (SDLC)

Life-Cycle Phases



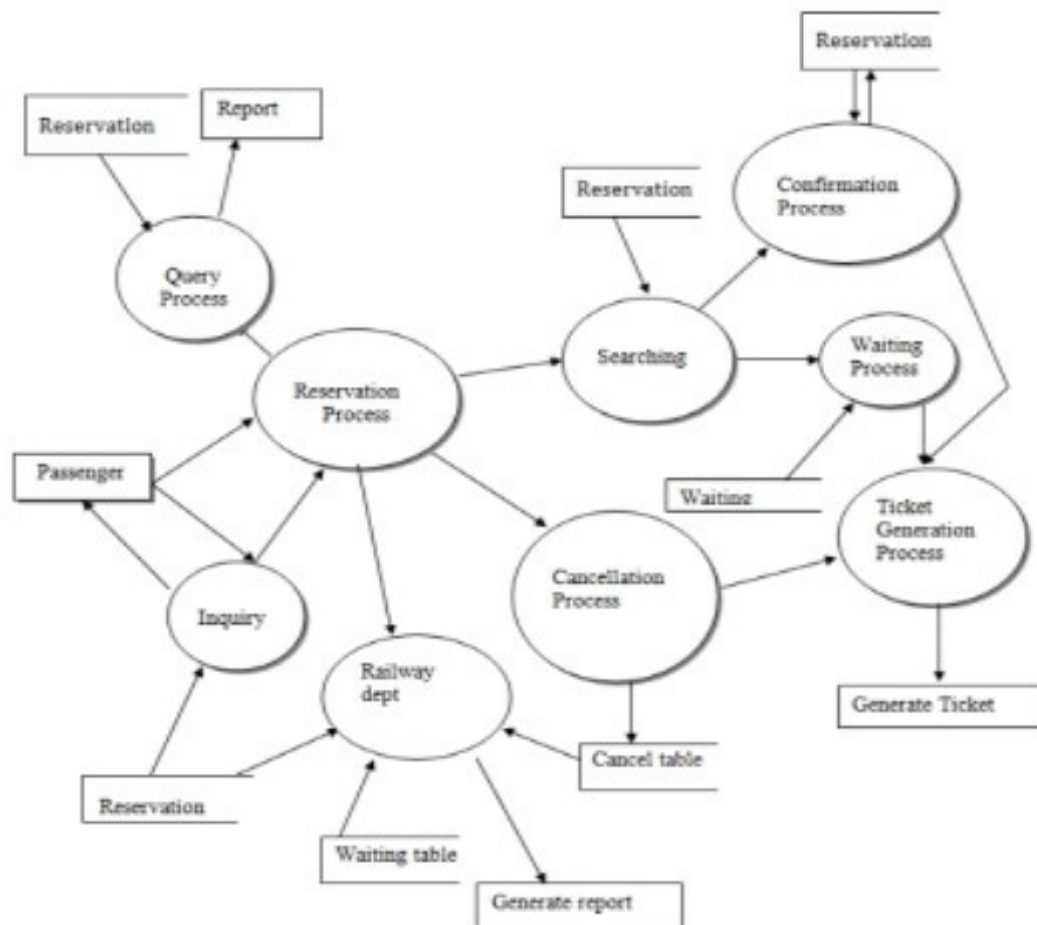
SYSTEM DEVELOPMENT LIFE CYCLE

1-level DFD:



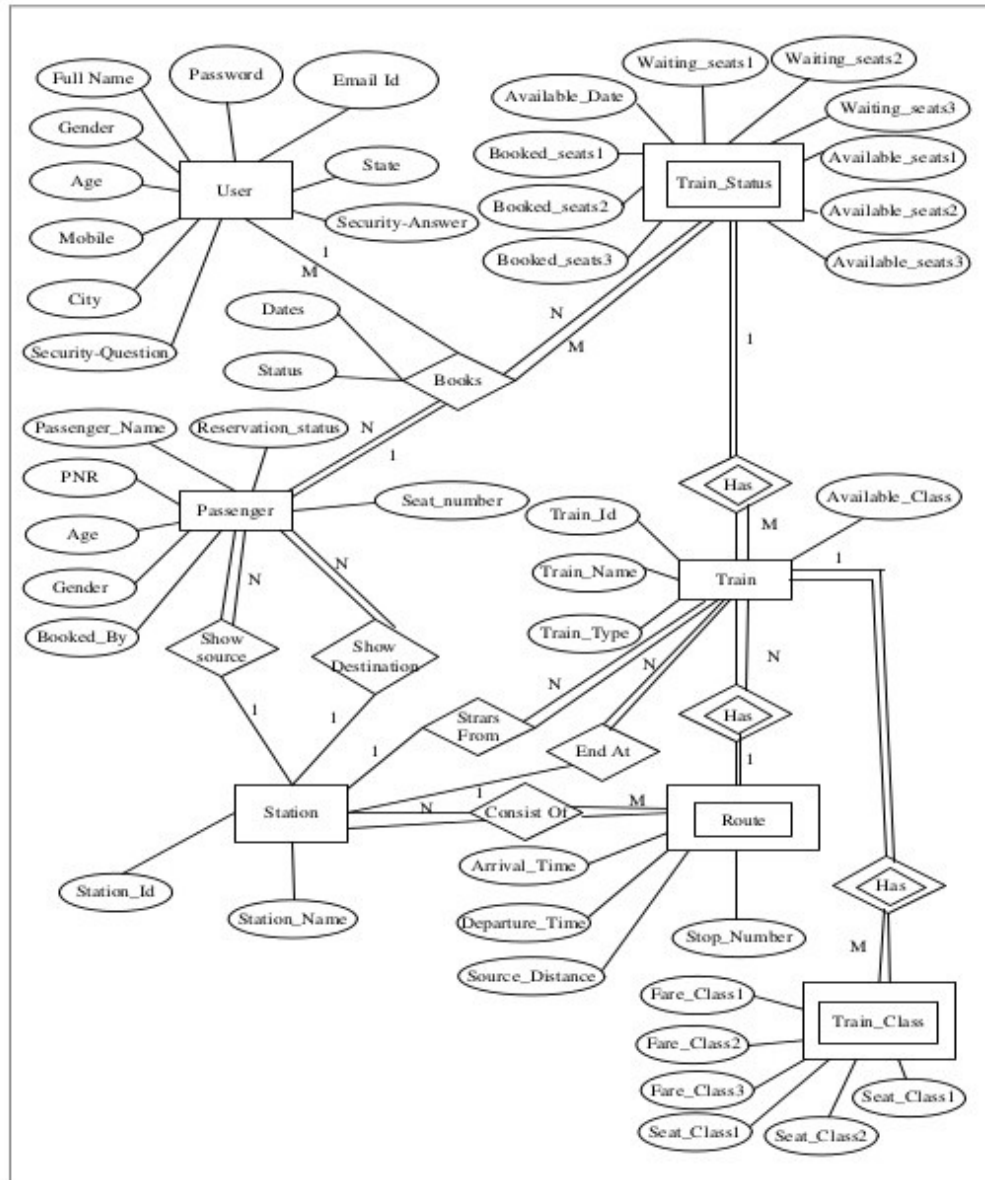
DATA FLOW DIAGRAM - 1

2-level DFD:

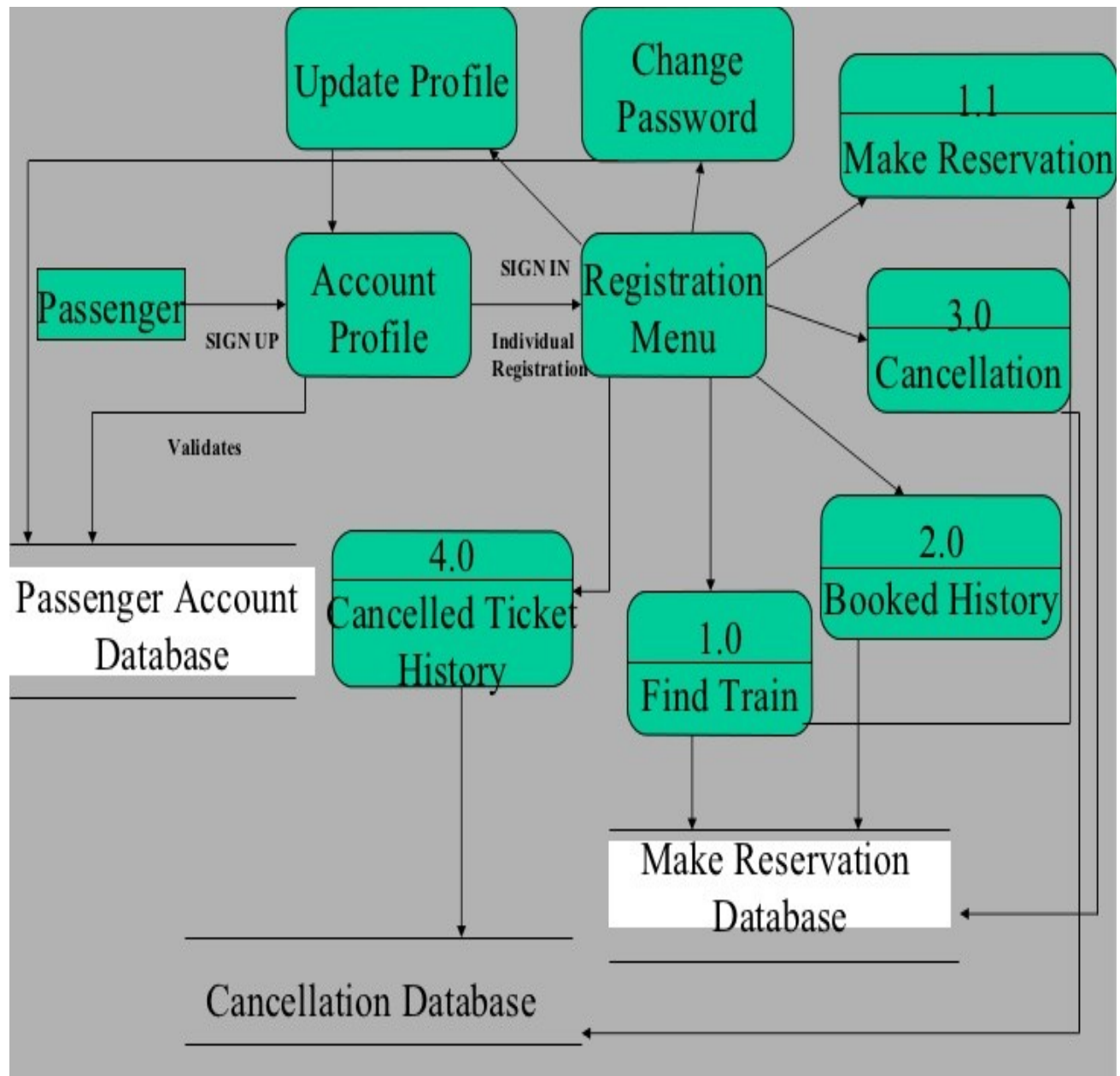


DATA FLOW DIAGRAM - 2

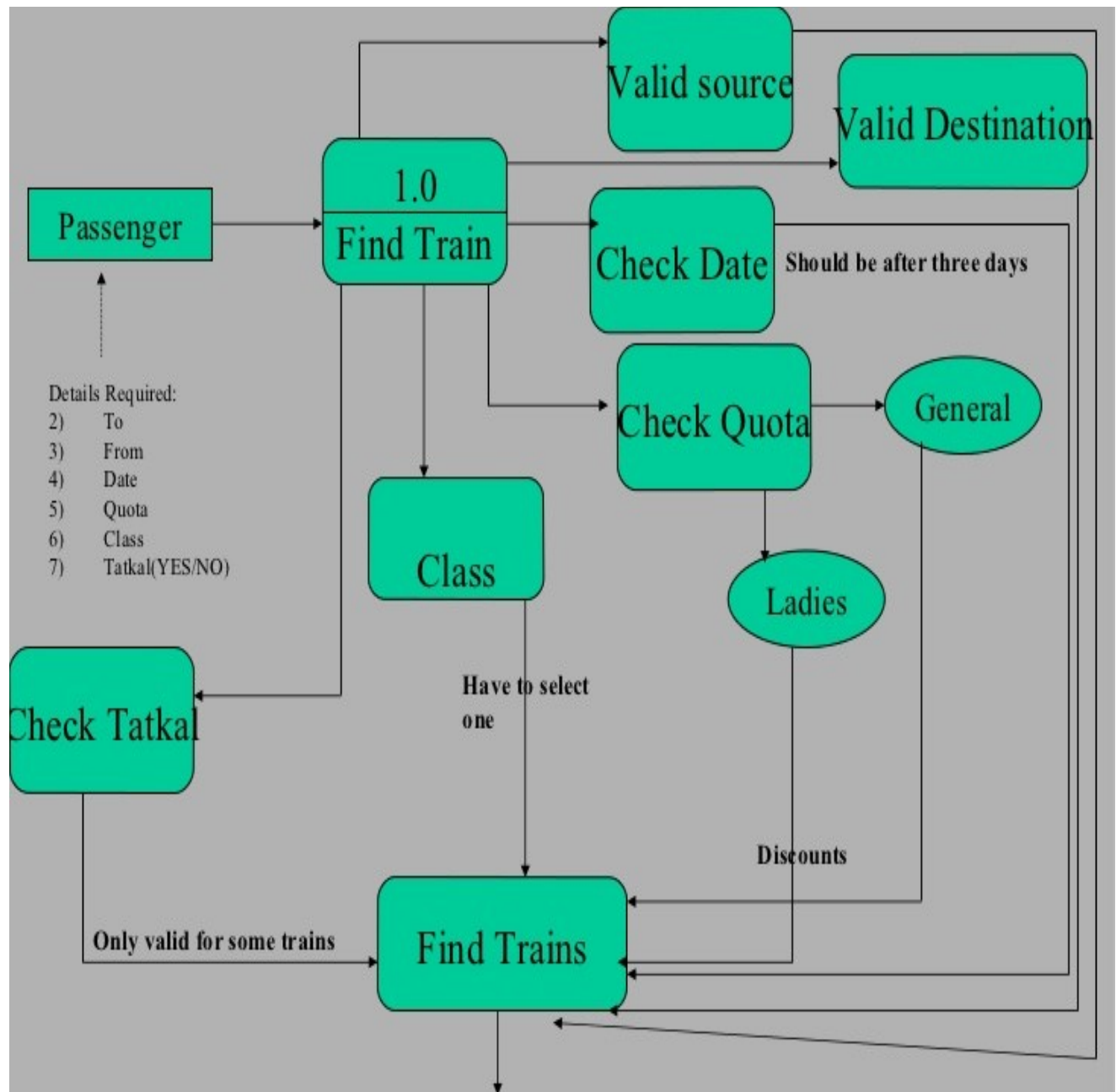
3.3 Entity Relationship Diagram:



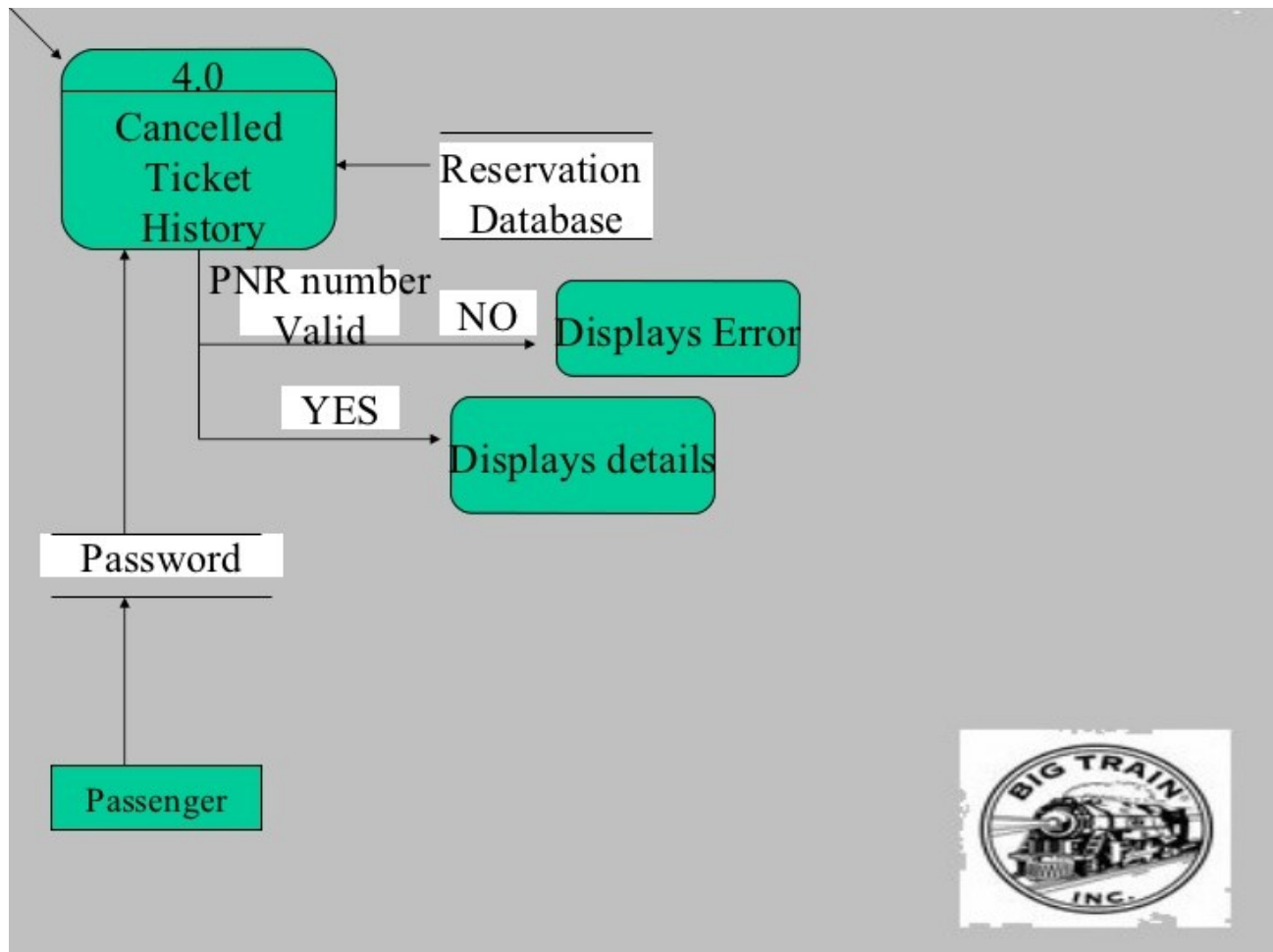
ENTITY RELATIONSHIP DIAGRAM



CONTROL FLOW DIAGRAM (PART - 1)



CONTROL FLOW DIAGRAM (PART - 2)



CONTROL FLOW DIAGRAM (PART - 3)

CONCLUSIONS

To think of life without railways is a very primitive state of existence. Railways, as we know them did not exist in any part of the world before the year 1825. It was only in 1825 that the first train ran between Stockton and Darlington in England. The first rail engine was driven by George Stephenson, the famous inventor of the steam locomotive. Later, France, USA, Germany, Holland, Russia, Italy, Spain, Austria and other important nations also came into the path of railways.

The first railway line in India between Boribunder (Bombay) and Thane was opened to traffic on 16 April 1853, 28 years after the world's first train made its initial successful run. The plans for the introduction and extension of railways were formulated by Lord Dalhousie. The construction of railways in India was undertaken to achieve a number of objectives both commercial and political. The basic purpose was to collect raw materials from different parts for export to Britain. It was also used to sell British manufactures in every part of the country.

Another compulsion for railway extension was the need to move troops safely and speedily from one part of the country to another during times of emergencies. The British suffered heavily during the revolt of 1857. The subsidiary objectives of railway development included famine prevention and opening up of coal fields.

The first railways in India were constructed and worked by Private Railway companies.

They were guaranteed a fixed rate of exchange and gained a specific return on the capital invested by them. East India Railway

Company, Madras Railway Company, Bombay- Baroda and Central India Railway Company, Bengal - Nagpur Railway Company and Great Indian Peninsula Railway

Company played important role for the construction of railway lines across the length and breadth of our country. But public opinion both in India and England was highly critical of the terms and conditions which were characterized as unduly generous for the British investors at the expense of the people of India. It was felt that private companies with a State guarantee of profits were not likely to observe economy in the outlay. The share holders got their guaranteed profits properly, even if the companies were extravagant and wasteful in construction. Accordingly the contracts with the working companies were terminated after 1925 and the management of the companies was taken over directly by the Government.

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