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MULTI PURPOSE METRO RAIL LINE SYSTEM

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ABSTRACT

In the fast forward world of technology, Everyone is running behind the mobile application and they need all the information on the mobile phone itself. Nowadays the Mobile application users have increased and it equals the population. So Data Storage also is increased and maybe occurs some data traffic in the cloud storage. So we can move with priority wise data storage to reduce data traffic. The application had offloading the data to the mobile device for storing the data to the cloud. The application has performed a new task or existing task has required the mobile to have individual storage for the running application. Data storage has to achieve the high-performance level and flexibility to store in the cloud datacenter. The main aim is to achieve the data prioritization which tasks performed at a time multiple data to be stored in the cloud storage with priority wise. The unprioritized data will be established and take more attention to priority wise data. The process model will be taking part in the resource allocation method. In this paper, we look at the duty assignment for the metro rail project for three metropolitan cities. Previously they wanted to follow a roaster wise shift and in case of an emergency situation also an alternate person will be allocated for the current situation. This process is only accessible by admin. In case of emergency work or person, leave means we want to search for the alternate person for that occupation. It will take too long to fix the person for that job role and anyone running takes over for that job. For running staff it will affect their mileage and they lose the increment or promotion. To fix this issue we have developed the application for the cabin office staff to book the shift or roaster update that can be assigned to the running staff through that application. This application is most useful for the cabin staff and reduces human power in the office and it will not be affected by running staff for the alternate solution. In this application, we can know about the achievements of the running staff from joining date to retirement date.

Keywords : Mobile app, MMRS, Smart Ticketing System

1.INTRODUCTION

The project to reduce the manual work in the cabin office and time consuming for the office staff. In manual work, it may raise a problem for manpower any other technical issue it may happen. This work will be affected means the entire process makes delay means delay of trains will be increased and it takes over with higher end. To reduce the manpower and work for the staff this application has implemented. In this application, office staff

can assign a job with their mobile phone itself and they can see the latest news about the railways. Office staff can add the achievements of the running staff about their profession from starting of the service to the end of the service. It makes it more useful for the running staff to know about the neighbor staff working profession. The Job alert notification for the staff will be received immediately and to maintain the right time for the job. It will reduce manpower and reduce time efficiency.The main scope of the project is to reduce the manual work in the cabin office and time consuming for the office staff. In manual work, it may raise a problem for manpower any other technical issue it may happen. This work will be affected means the entire process makes delay means delay of trains will be increased and it takes over with higher end. To reduce the manpower and work for the staff this application has implemented. In this application, office staff can assign a job with their mobile phone itself and they can see the latest news about the railways. Office staff can add the achievements of the running staff about their profession from the start of the service to the end of the service. It makes it more useful for the running staff to know about the neighbor staff working profession. The Job alert notification for the staff will be received immediately and to maintain the right time for the job. It will reduce manpower and reduce time efficiency.

2.MODULES:

1. Checking Internet Connectivity.
2. Authentication and Authorization
3. Admin
4. User
5. Builders
6. Budget Constraints
7. Ranking Range
8. Storage

1. Checking Internet Connectivity:

First, check that mobile data is turned on and you have a data connection. Open your Settings app "Wireless and Networks" or "Connections" Mobile data or Cellular data. On some devices, you may need to select "Data usage" before you see this. Turn mobile data on.

2. Authentication and Authorization:

Authentication is the process of determining whether someone or something is, in fact, who or what it declares itself to be. Authentication technology provides access control for systems by checking to see if a user's credentials match the credentials in a database of authorized users or in a data authentication server. Users are usually identified with a user ID, and authentication is accomplished when the user provides a credential, for example, a password, that matches that user ID. Most users are most familiar with using a password, which, as a piece of information that should be known only to the user, is called a knowledge authentication factor.

Authorization is the process of giving someone permission to do or have something. In multi-user computer systems, a system administrator defines for the system which users are allowed access to the system and what

privileges of use (such as access to which file directories, hours of access, amount of allocated storage space, and so forth).Assuming that someone has logged in to a computer operating system or application, the system or application may want to identify what resources the user can be given during this session. Thus, authorization is sometimes seen as both the preliminary setting up of permissions by a system administrator and the actual checking of the permission values that have been set up when a user is getting access.

3. Admin:

Admin can view all the user and user details they only have access to have seen the details. They will maintain the overall data with the most secure and immediate response will be passed to the end-users. They have to analyze the product confirmation once the user is given a request for the sale.

4. User

The modules provide the user details. If the user new to the application means they want to register to this application after they can access this application easily. The user can register the details with proper validation and all the fields will be required for the registration process. Users can see the builders as per their requirements and it will be made more useful for the builders selection . They can see about builders details with the complete specification as per the user needs and they can choose the builders and give the request for construction with the full details about its specification. Users can edit the profile with proper validation and they can update the profile then email id and name will be constant. They can see the order list, order status for their reference after that they will give feedback about the product as well as application.

5. Builders

The modules provide the builder details. If the user new to the application means they want to register to this application after they can access this application easily. The user can register the details with proper validation and all the fields will be required for the registration process. Builders can add the design and their specification of budgets constraints for the user reference. Builders can edit the profile with proper validation and they can update the profile then email id and name will be constant. They can see the request list, construction status for their reference after that they will give status about the construction to the respective users for their reference.

6. Budget Constraints

These modules provide information about the Budget constraints details for the individual users. Even before you enter the planning phase, address areas where your project could face changes at any point in the process. Since many project managers out there attribute their going over-budget to changes that occur along the way, hash out some potential scenarios first. The user can see the budget according to their user specification and compare it with all the builders.

7. Ranking Range

These modules provide the builders ranking information with the full specification of the projects. The builders ranking will be evaluated with rate, place, experience, specifications and projects. So the user can easily prefer the builders with the following details and it will be shown in the first. It makes decisions for users easily and it will get clearance about the builder's value.

8. Storage

This module gives the information about the storage for the entire application.It will be secured and maintained by the admin. Because nowadays in the current world data loss happens frequently through the location or email id. So we secured the data with high credential and it makes more security levels for the user details. The data storage will have happened with split up and no chance for the data traffic also it will get a response immediately.

3. SYSTEM DESIGN:

Software design sits in the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to produce a model or representation of an entity that will later be built. Beginning, once system requirement has been specified and analyzed, system design is the first of the three technical activities -design, code and test that is required to build and verify software. The importance can be stated with a single word "Quality". Design is the place where quality is fostered in software development. The design provides us with representations of software that can assess for quality. Design is the only way that we can accurately translate a customer's view into a finished software product or system. Software design serves as a foundation for all the software engineering steps that follow. Without a strong design, we risk building an unstable system – one that will be difficult to test, one whose quality cannot be assessed until the last stage. During design, progressive refinement of data structure, program structure, and procedural details are developed, reviewed and documented. System design can be viewed from either a technical or project management perspective. From the technical point of view, the design comprises four activities – architectural design, data structure design, interface design, and procedural design.

4. NORMALIZATION:

It is a process of converting a relation to a standard form. The process is used to handle the problems that can arise due to data redundancy, i.e. repetition of data in the database, maintain data integrity as well as handling problems that can arise due to insert, update, delete anomalies.Decomposing is the process of splitting relations into multiple relations to eliminate anomalies and maintain anomalies and maintain data integrity. To do this we use normal forms or rules for structuring relations.

1) Insertion anomaly: Inability to add data to the database due to the absence of other data.
2) Deletion anomaly: Unintended loss of data due to the deletion of other data.
3) Update anomaly: Data inconsistency resulting from data redundancy and partial update
4) Normal Forms: These are the rules for structuring relations that eliminate anomalies.

4.1 FIRST NORMAL FORM:

A relation is said to be in first normal form if the values in the relation are atomic for every attribute in the relation. By this, we mean simply that no attribute value can be a set of values or, as it is sometimes expressed, a repeating group.

4.2 SECOND NORMAL FORM:

A relation is said to be in the second normal form if it is in first normal form and it should satisfy any one of the following rules.

★ The primary key is not a composite primary key

★ No, no key attributes are present

★ Every now key attribute is fully functionally dependent on a full set of the primary key.

4.3 THIRD NORMAL FORM:

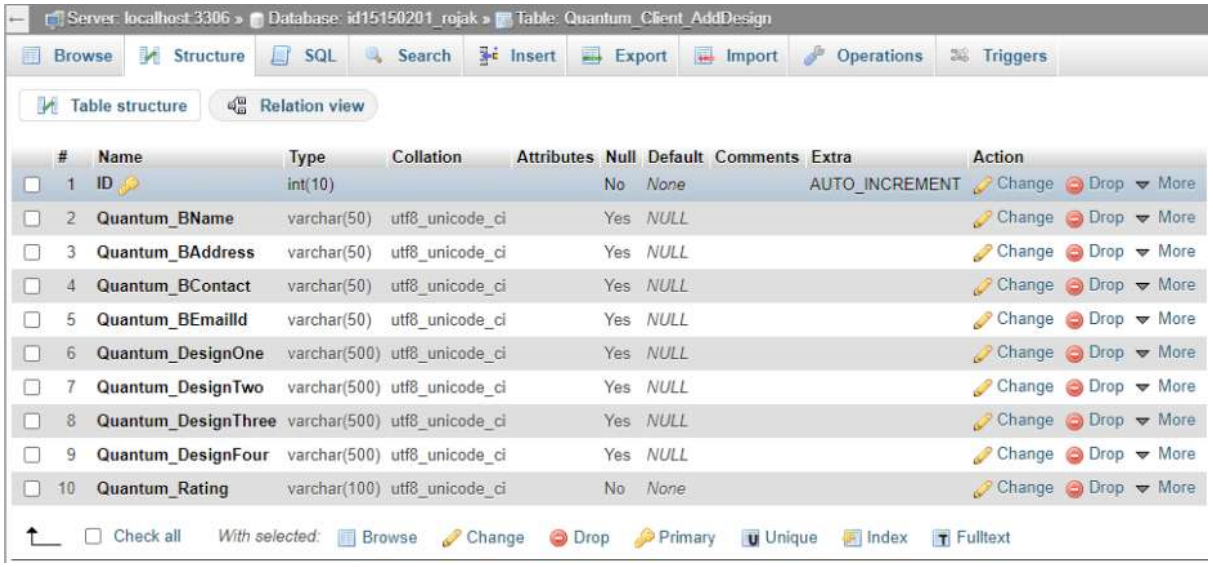
A relation is said to be in third normal form if there exists no transitive dependencies.

★ Transitive Dependency: If two key attributes depend on each other as well as on the primary key, then they are said to be transitively dependent.

The above normalization principles were applied to decompose the data in multiple tables, thereby making the data to be maintained in a consistent state.

5. TABLE DIAGRAM:

"Fig 5.1"



"Fig 5.2"

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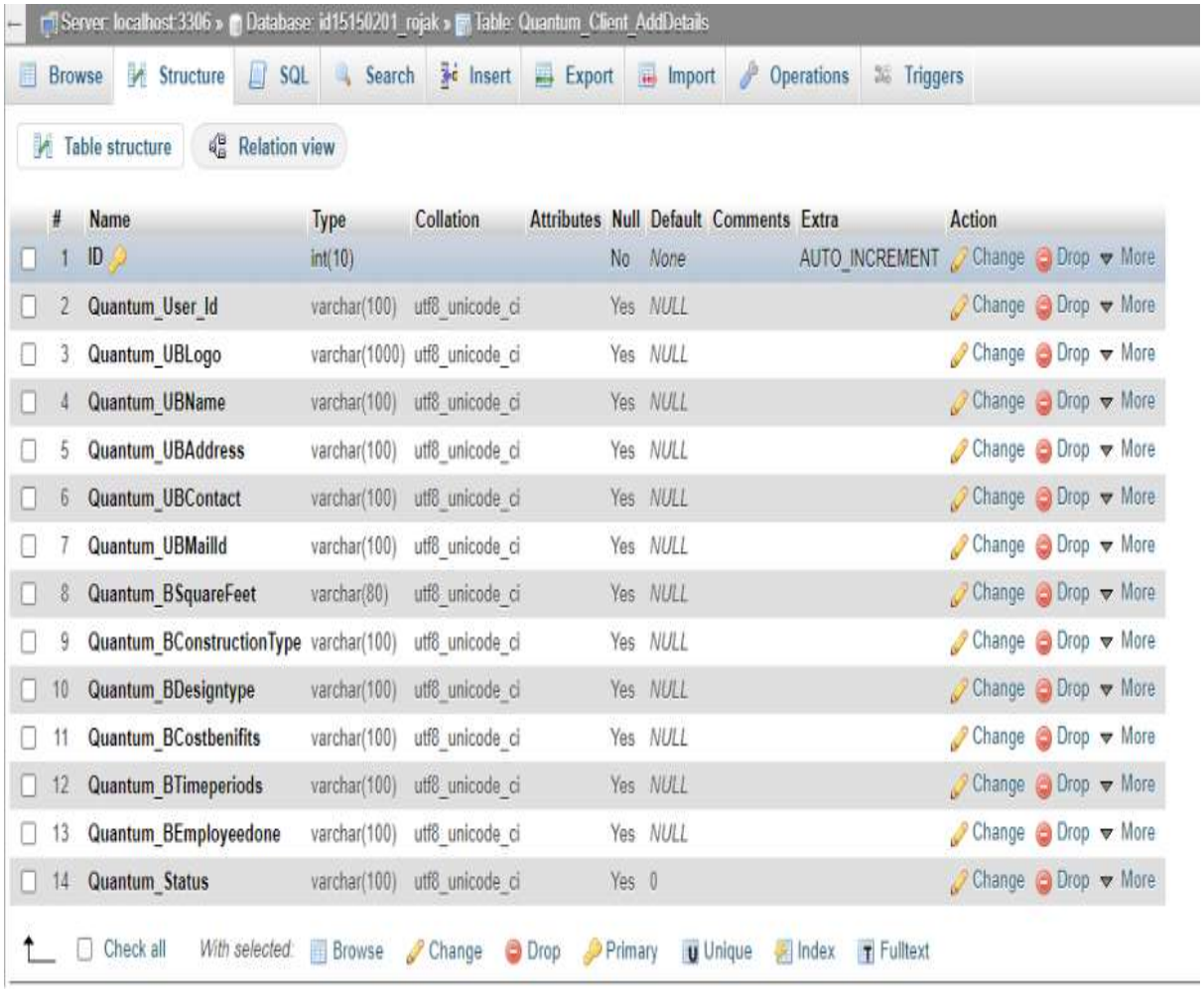
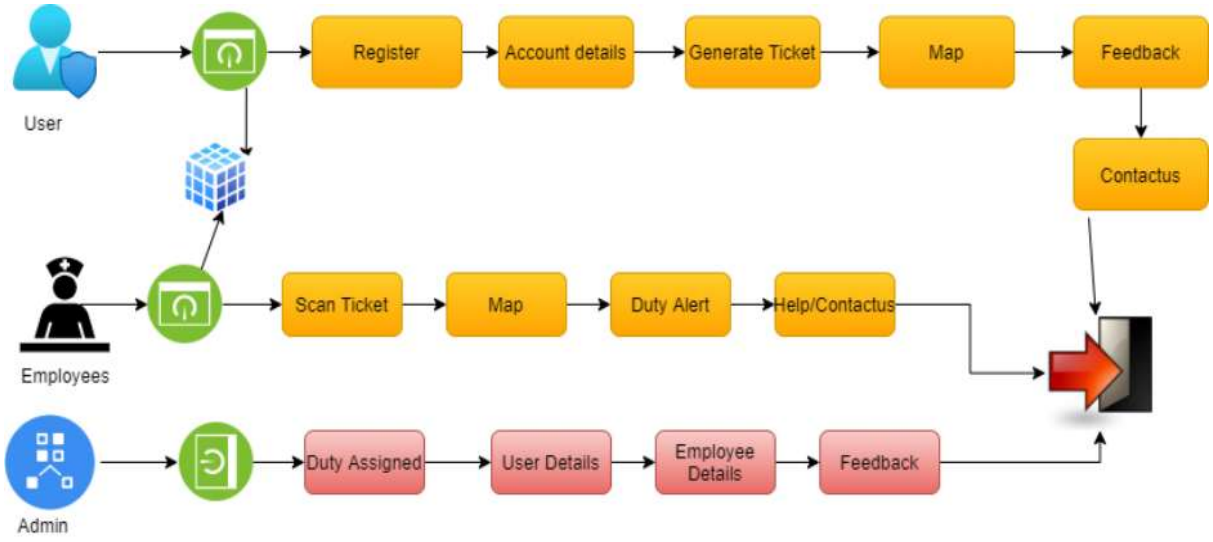


"Fig 5.3"

6. SYSTEM ARCHITECTURE:



"Fig 6.1"

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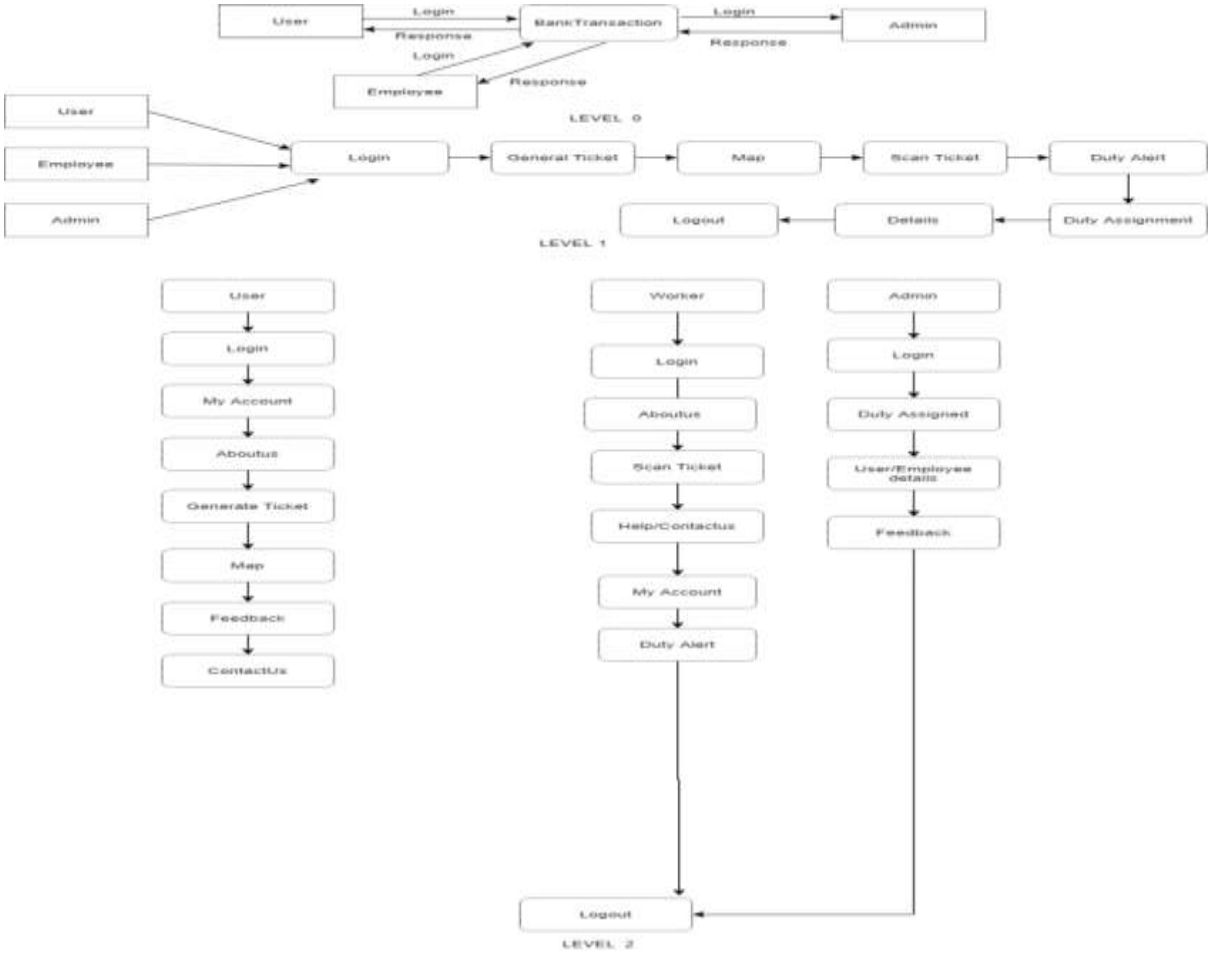
7. DATA FLOW DIAGRAM:



"Fig 7.1"

8.CONCLUSION:

In this application, we have the need for the railway staff working in the cabin office staff. Because manual working makes more time delay and updated staff details to maintain it seems too large of data will be maintained by the staff. The main motivation to reduce the manual working, time efficiency and less workload for the office staff. The staff can do all the manual work in a single application. It will reduce the manpower and workload for the office staff. It will deliver clear information to running staff about the work and updated railway news. This application can make it more useful for the office staff and running staff people. In the future development, it will concentrate on train status with an accurate location to know the train status for the running staff. The booking office staff can give the details of the goods to the respective duty staff and it will easily track the good's exact location from the user's side. Then the running staff can send the luggage booking details for the booking office. They can know the conformation of the luggage once they reach the destination point. Then staff can view the payslip for their clarification, possible to view the calendar with government holidays and improve the user interface development at a higher level.

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