Parking Lot Application Project Description
CSC 540 - Database Application Programming

Team:

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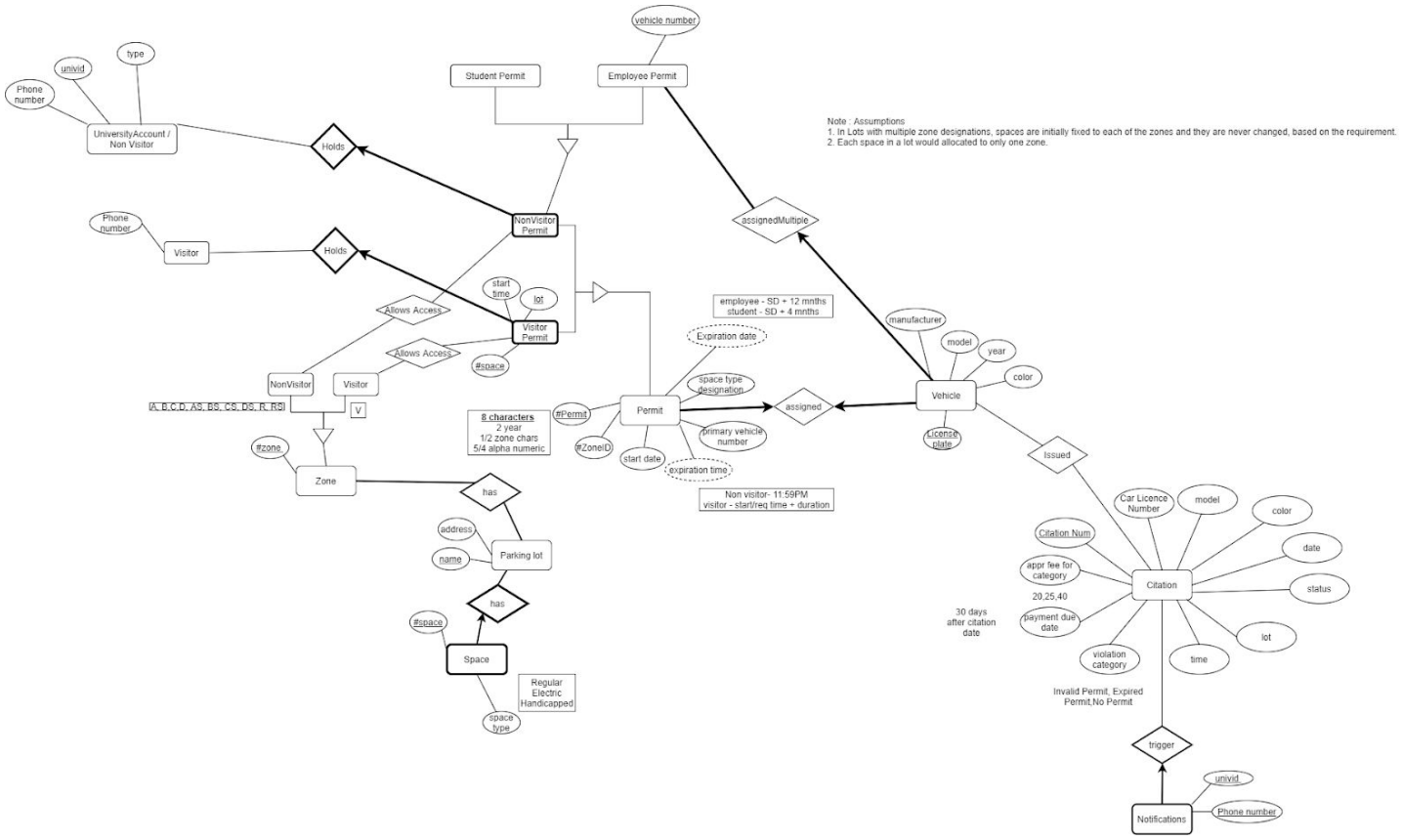
[Initial ER Model Link]



Project Plan:

1. Incorporate feedback provided on the current ER Model.
2. Identify anomalies in the database design and improve overall design through Database Normalization and decompositions taught in the lecture.
3. Write prototypes for the listed sample queries to make sure that the current ER Model is able to capture components required to provide required data.
4. Implement the SQL application development using JDBC and PL/SQL.
5. Convert the Normalized ER Model into Relational Schema using DDL(Data Definition Language), DML(Data Manipulation Language) over JDBC.
6. Assign the User roles to the schema, to restrict the access just to administrators on specific entities.
7. Decide the main classes of the system, and create a class diagram for that if necessary, decide the methods for those classes, enumerations and data types that would be required for this implementation.
8. Implement the Admin function and user functions as individual APIs.
9. Test the working of each of these APIs by creating table entries for each API.
10. Perform transaction management using the sample queries and specify the checkpoints, commits in the transaction.
11. Implement concurrency control and transaction management serializability.
12. Decide upon the selections and options for the User Interfaces for the System
13. Implement the simple graphical user interface with administrator view and user view with a main menu on the top with the assigned queries.
14. Perform Transaction Management for the reporting queries and test whether the DB system is able to handle requested queries and provide the expected results.

Task Assignment Plan:

Niranjan Pandeshwar: 1,3,5,7,8,10
Prathamesh Pandit: 1,2,5,6,9,11
Shreyas Muralidhara: 2,4,6,9,10,12
Sreemoyee Ray: 3,4,7,8,13,14