# Discussion:

This Project was fun to create. It was nice experience to create Zoo database with details which involves Employee, Animal Details, Animal Guide, Animal Type, Customer, Ticket, etc. In this Discussion we will explain in detail what each table does. Let’s talk more about Customer table which represents who visits the Zoo. Which includes Customer Id, this is linked to their ticket which shows which customer bought the ticket, Customer id is also linked to the zoo which customer has visited or will visit in the future. Second table is Ticket Table, ticket table includes Ticket id, price, Valid Date and Customer Id. After that We have a Employee Table, In this table We have Employee id, First Name of the employee, Last Name of the employee, Phone number of the employee, Salary associated with employee as well as Zoo id which lets the user know which zoo that employee works for. Next comes Animal Type, which has animal type id, name of the animal, characteristics of the animal type, Zoo Region, Diet of the animal, and Population of that animal type. After that We have created a Animal Table, which has animal id, which shows what animal that is in the zoo, Animal Type Id which shows the kind of the animal that is. Such as Mammals, Reptles, Birds, etc. Gender, animal’s cage number, and their feeding time. Then we have Animal Detail table, which has Animals heights, weights, Age , Animal Id, And animal detail Id. Then we have a table called Animal Guide, Which shows when it was updated, intro of the zoo, and Animal guide id. represents the animal guide offered by associated zoo, which introduced the information of zoo and links to information of animal kind.

After that we have a table called Customer to Zoo Visit. Which represents the relationship table customer and table zoo, which means that customer can visit the zoo many times and zoo can be visited by many customer, then we have table called Employee to Ticker Counter, which represents the relationship between the table employee and table ticket, which means that employee can manage many tickers and ticket can be managed by many employees. Then we have a table called Employee to Animal Care, this represents the relationship between Employee table and Animal table, which means that employee can look after many animals and animals can be looked after many Employees. Last but not the least we have a Animal type to animal guide table. Which represents the relationship table animal guide and table animal type which means that an animal guide can contain many animal types and animal types can belong to many animal guides. In the relation Schema I have made a mistake and put anialType instead of AnimalType. Which was hard to fix after putting all these efforts and connecting relational Schema table to other table.

Let’s talk more about writing some query for this project. There were some query which was easy and there were some which was hard to write there was plenty of trial and error but it was fun doing this project I have included most of the query from chapter 6 and 7 from the text book and some were copied directly from there. We have failed many times when we were building this project but then once we can figure out how everything works it becomes much easy to just play around and get rewarded at the end. we have included our tests in this project tests are for the query which is also included in this project. We have included my code in this document as well for others to analyze. I must say that this data base project taught me many things and I have also learned a lot from doing this project on my own. And the last thing I will say is that This was created on SQL Server Express. Since we have included all the Code int this project it will be easy to see how tables are created and how query is used to pull the data from the table. Also, we have added the code for how the data is added to the table to pull from the table.