Database Design

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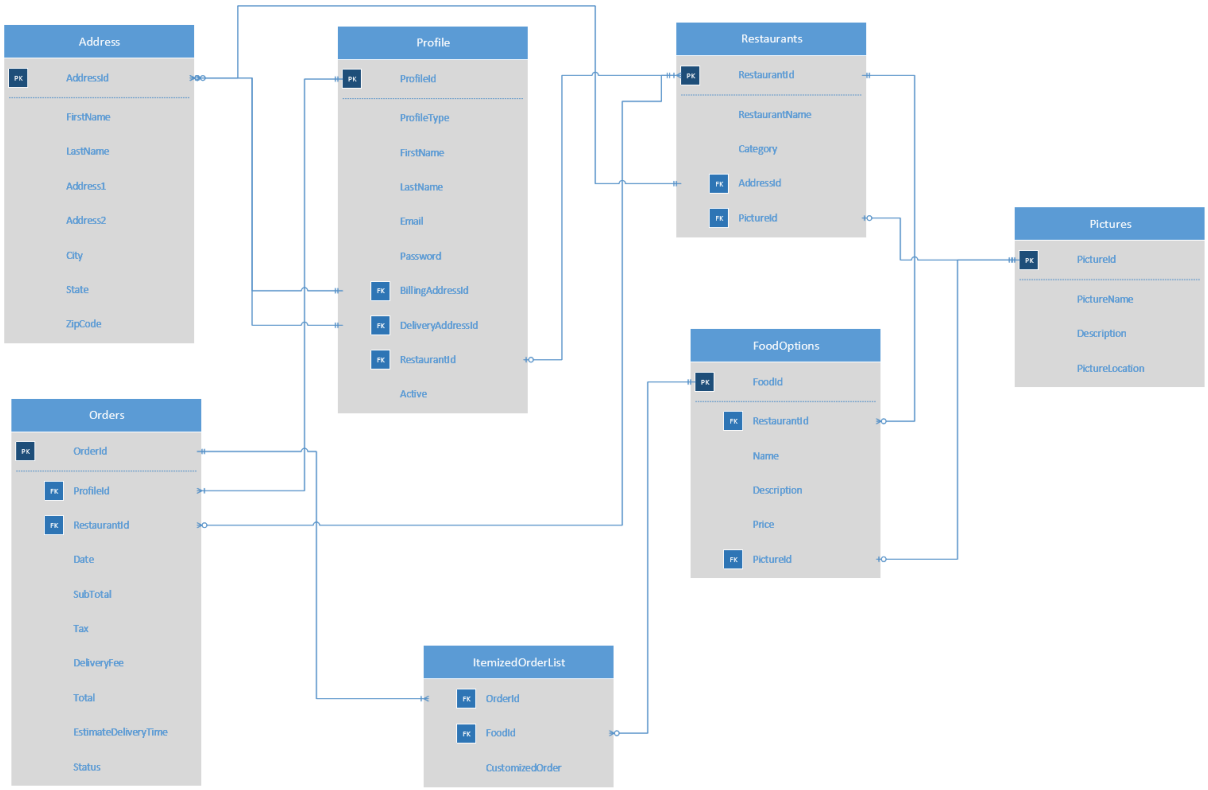

For my project, I will be utilizing Microsoft SQL Server to host a relational database. Although there are many choices when it comes to relational databases, MSSQL Server is the technology I will be using due to its great integration with ASP.NET API's, which is my framework of choice for this project.

The entity relationship diagram above represents the design of my database. It contains seven tables that are linked together with various constraints in order to achieve standardization of my data.

Profile Table
This table will host the 3 different profiles of my target groups, the customer, the restaurant owner, and the delivery staff. There will be 2 addresses associated to each profile, a billing address and a delivery address that will link to the Address table. All users will be able to register for a new profile on the Application and restaurant owners will be able to link a restaurant to their profile. There is also an active flag to determine if the user deleted the account.

Address Table
This table contains all addresses for the application in order to minimize the duplication of columns of other tables. It will contain a AddressId that will relate to the BillingAddressId and DeliveryAddressId from the Profile Table and also the AddressId from the Restaurant Table. Users will be able to add and update addresses on the UI.

Orders Table
When customers submit an order, a new OrderId will be created along with some data related to the order. Each order will be associated to a specific ProfileId and RestaurantId and each will have a status whose value is continuously updated as the restaurant owners and delivery staff update the status of the order so it can be tracked. If the order was cancelled by the user, the order status will update to cancelled.

Itemized Order List Table
In order to keep the Orders Table clean, I created this new table that will break down the items within a specific OrderId. Users will be able to click on a specific OrderId on their profile to see the breakdown of their order. It will also include a column if they had any special instructions for an item.

Restaurants Table
The restaurant will have an AddressId that will link to the Address Table. It will also have a picture that is associated with it and link to the pictures table. The restaurant can also link to a user profile if the profile is a restaurant owner.

Food Options Table
This table will link to the itemized order list table so that users can see what they ordered in the past. It also has a restaurant id associated each food item so that the menu will populate on the UI. Food items can also be linked to a picture in the Pictures table.

Pictures Table
My pictures for this application will be hosted in the local directory of the project. The pictures table will contain the address of the image as well as descriptions for ARIA tags. Restaurants and Food Options tables will link up to this.