Crave Final Report

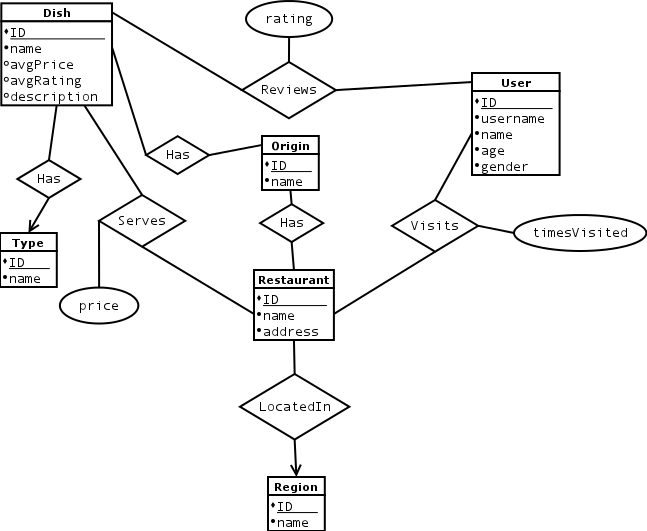
**Application Background:**

While there are many existing applications that provide access to vast databases containing information specifically regarding different restaurants and their corresponding type of cuisine, there are no widely known applications that allow you search by specific food items. For example, say you as a user are specifically in the mood for Shrimp Fried Rice. Instead of being able to search for Shrimp Fried Rice directly, you must search for Chinese restaurants, Thai restaurants, and maybe even Japanese restaurants, and then search each of their menus for the dish. This is the issue that our group is attempting to solve. A lot of the time we make decisions about what restaurant we go to based on what dish we are in the mood for, rather than a type of restaurant. Our solution to this dilemma is *Crave*.

*Crave* is a desktop application written in Java, backed by a MySql database, that allows its users to search for food dishes in the University Circle area of Cleveland. The user is able to search for items by providing keywords, and then optionally specifying the type of dish, such as burgers or sushi, and the origin of the dish, such as Italian. Each user also has a profile page with a list of restaurants that they have visited, along with suggested dishes to try based on their history.

**Data Description:**

**ER Diagram:**



**Functional Dependencies:**

**Schema:**

ENTITIES

User(I​D,​name, age, gender) ­ name not null

Restaurant(n​ame,​a​ddress,​origin) ­ origin not null Dish(n​ame,​t​ype,​o​rigin,​price, description) ­ price not null, description not null Region(n​ame)​

RELATIONS​ (Foreign Key constraints for each entity referenced)

(User ­ Dish)

Reviews(u​serID,​d​ishName,​d​ishType,​d​ishOrigin,​rating) ­ rating not null (0 → 100)

(User ­ Restaurant)

Visits(u​serID,​r​estaurantName,​r​estaurantAddress,​timesVisited) ­ timesVisited not null

(Restaurant ­ Dish)

Serves(r​estaurantName,​r​estaurantAddress,​d​ishName)​

(Restaurant ­ Region)

LocatedIn(r​estaurantName,​r​estaurantAddress,​r​egionName)​

**Indexes:**

**Triggers and Assertions:**

**User Interface:**

**Example Queries:**

**Implementation:**

*Crave* is written in Java and backed by a MySql database. Our current implementation required the database to be stored locally, but the application can be easily modified to connect to an online database. Because of the nature of both Java and MySql, our application is completely cross-platform, whether used on a local database or not. We have tested and confirmed its reliability on OS X 10.10, Windows 7, and Windows 8.

**Team Member Roles:**