# Functional Requirements List (Iteration 2)

**Functional Requirements**

**1. System Registration and Authentication**

* The system SHALL validate user-provided personal information during registration, including name, email, and password.
* The system SHALL securely store user credentials.
* The system SHALL authenticate users during the login process.
* The system SHALL grant access to personalized features upon successful registration and authentication.

**2. Restaurant Exploration and Management**

* The system SHALL allow users to navigate through the app to discover restaurants.
* The system SHALL enable users to search for restaurants based on ratings and preferred cuisines.
* The system SHALL facilitate admin input for adding restaurants and reviews.
* The system SHALL display restaurant listings and search results.
* The system SHALL seamlessly add new restaurants and reviews by admins.
* The system SHALL ensure a user-friendly browsing experience with easy access to top-rated restaurants.

**3. Integration with Restaurant Data Sources**

* The system SHALL communicate with restaurant APIs for data retrieval.
* The system SHALL retrieve up-to-date information on restaurant availability and menus.
* The system SHALL display real-time updates on available tables and menu items to users.

**4. Personalized Restaurant Search**

* The system SHALL provide access to the restaurant search feature.
* The system SHALL allow users to enter search keywords and select filters.
* The system SHALL utilize search algorithms to match user criteria.
* The system SHALL display search results matching the user's criteria.

**5. Admin Review Management**

* The system SHALL provide access to the restaurant management interface for admins.
* The system SHALL validate and securely store admin-contributed reviews.
* The system SHALL include admin-contributed reviews in the restaurant profiles.

**6. Sorting of Restaurant Reviews**

* The system SHALL provide access to the reviews section of a restaurant.
* The system SHALL allow users to select sorting criteria for reviews.
* The system SHALL reorder reviews based on user-selected criteria.
* The system SHALL display sorted reviews to users.

**7. Restaurant Reservation Management**

* The system SHALL offer a reservation section for users to book reservations at restaurants.
* The system SHALL allow users to select restaurant, date, time, and party size for the reservation.
* The system SHALL display available restaurants and reservation options.
* The system SHALL generate and display a confirmation message with reservation details upon booking.

**8. Favorites Management**

* The system SHALL provide users with the ability to mark restaurants or recipes as favorites.
* The system SHALL allow users to view a list of their favorite restaurants or recipes.
* The system SHALL enable users to remove restaurants from their favorites list.
* The system SHALL ensure that the favorites list is personalized and accessible from the user’s profile.

**Negative Requirements**

1. The system SHALL NOT allow users to book orders directly.
2. The system SHALL NOT include any advertisements.
3. Sensitive data, including personal information, SHALL be securely handled and protected.
4. Without express user authorization, the system SHALL NOT share user data with third parties.