System Functions

Module Functions

1. Search up nearby Restaurants

- Description: User can check out nearby restaurants based on his / her location. User can search up a specific food item.
- Inputs: they input either partial or full name of the food. For example, you can just type "Pizza" and search for all Pizza items from all restaurants in the current location OR just entre his/her location .
- Outputs: The search result will contain a list of different restaurants.
- Pre-conditions: internet connection ,GPS permission.
- Post-conditions: internet connection .

2. Getting Food Menus

- Description: When a user launches the application, a list of restaurants within the current location will be displayed in the phone. Further detailed information of a restaurant will be displayed as the user selects a restaurant from the list.
- Inputs: select a restaurant from the list.
- Outputs: the user can get the entire menu of the selected restaurant. Each food contains detail information which helps user to have better idea so that they can order the food from the phone.
- Pre-conditions: internet connection ,GPS permission.
- Post-conditions: internet connection .

3. Adding Comments

- Description: With the picture, rating and comment features available on the phone, this phone application is better suited for users to give instant feedback about the food items.
- Inputs: select a food item or restaurant.
- Outputs: Users can read and write any comments for food items in the system making an overall better experience for every user.
- Pre-conditions: internet connection, Firebase, ML Kit .
- Post-conditions: internet connection .

4. Chat Rooms

- Description: Creating chat rooms allows the user to interact with live sessions with the restaurant giving him / her more experience about the food menu and items, also the user can take a picture with the phone and upload it to our server

- Inputs: users select a restaurant and its food category.
- Outputs: they can take and upload pictures to the server. Allowing users to have this feature can motivate users to use our food application more frequently.
- Pre-conditions: internet connection, Firebase, ML Kit .
- Post-conditions: internet connection .

5. Barcode Scanning

- Description: Scan for all supported barcode formats at once, without having to specify the format you're looking for. Or, boost scanning speed by restricting the detector to only the formats you're interested in.
- Inputs: Input images must contain barcodes that are represented by sufficient pixel data. In general, the smallest meaningful unit of the barcode should be at least 2 pixels wide (and for 2-dimensional codes, 2 pixels tall).
- Outputs: Structured data stored using one of the supported 2D formats are automatically parsed. Supported information types include URLs, contact information, calendar events, email addresses, phone numbers, SMS message prompts, ISBNs, WIFI connection information, geographic location, and AAMVAstandard driver information.
- Pre-conditions: Authentication from the camera, Firebase, ML Kit
- Post-conditions: Structured data for the Database and support for on sale discounts.

6. Text Extraction

- Description: Recognize text in any Latin-based language to automate tedious data entry for credit cards, Menus, and business cards.
- Inputs: input images must contain text that is represented by sufficient pixel data. Ideally, for Latin text, each character should be at least 16x16 pixels. For Chinese, Japanese, and Korean text, each character should be 24x24 pixels.
- Outputs: Text Parsed and Formatted in Block, Paragraph, Word, and Symbol way for accessing or storing in the database.
- Pre-conditions: Authentication from the camera, Firebase, ML Kit
- Post-conditions: Text Extraction in Real Time

7. Multi Language Support

- Description: This application will support two languages (Arabic & English) for a better user interface
- Inputs: choose the language
- Outputs: , Users will be able to search and write with the available languages so it can be more convenient for them.

- Pre-conditions: Authentication from the camera, Firebase, ML Kit
- Post-conditions: Text Extraction in Real Time