Your Restaurant

BRD

Introduced by G23

Introduction

Executive Summary

Mobile applications can be one of the best ways to keep consumers engaged with a brand as they are on the move. With the increase in demand for smart phones and efficiency of wireless networks, the demand for mobile applications has increased incredibly. Android is one of the most popular open source platforms that offers the developer's full access to the framework API's so as to build innovative applications. The main aim of this project is to build an Android application that helps the users to find a Restaurant in a specified location and according to the specified tastes. The main features provided by the Your Restaurant application are as follows:

- Basic Search where the user can search for a particular restaurant based on any keyword and Advanced Search where the user can specify the category, rating and the distance range for the restaurants.
- Google Maps that shows the top 5 restaurants in the city of the current location and the routes to a particular restaurant.
- The users can write a review, see the reviews and invite a friend/colleague to meet at a particular restaurant.
- Google Calendar where the user can mark an event.

Document Overview

This document introduce Your Restaurant study plan. It introduce general description, technical description, development plan, operation plan, and marketing study.

Business Objectives

- Offer easy way to search up nearby food stores based on user's location.
- Offer recommendations based on previous references.
- Offer easy and effective reviewing system for nearby restaurants.
- Offer suggestions for the best budget restaurants with affordable prices.

Background

Introduction

Restaurant or an **eatery**, is a business which prepares and serves food and drinks to customers in exchange for money. Meals are generally served and eaten on the premises, but many restaurants also offer take-out and food delivery services, and some offer only take-out and delivery. Restaurants vary greatly in appearance and offerings, including a wide variety of cuisines and service models ranging from inexpensive fast food restaurants and cafeterias to mid-priced family restaurants, to high-priced luxury establishments.

In Western countries, most mid- to high-range restaurants serve alcoholic beverages such as beer and wine. Some restaurants serve all the major meals, such as breakfast, lunch, and dinner (e.g., major fast food chains, diners, hotel restaurants, and airport restaurants). Other restaurants may only serve a single meal (e.g., a pancake house may only serve breakfast) or they may serve two meals (e.g., lunch and dinner).

Types of Restaurants

Restaurants are classified or distinguished in many different ways. The primary factors are usually the food itself (e.g. vegetarian, seafood, steak); the cuisine (e.g. Italian, Chinese, Japanese, Indian, French, Mexican, Thai) or the style of offering (e.g. tapas bar, a sushi train, a tastet restaurant, a buffet restaurant or a yum cha restaurant). Beyond this, restaurants may differentiate themselves on factors including speed (see fast food), formality, location, cost, service, or novelty themes (such as automated restaurants).

Restaurants range from inexpensive and informal lunching or dining places catering to people working nearby, with modest food served in simple settings at low prices, to expensive establishments serving refined food and fine wines in a formal setting. In the former case, customers usually wear casual clothing. In the latter case, depending on culture and local traditions, customers might wear semi-casual, semi-formal or formal wear. Typically, at mid- to high-priced restaurants, customers sit at tables, their orders are taken by a waiter, who brings the food when it is ready. After eating, the customers then pay the bill. In some restaurants, such as workplace cafeterias, there are no waiters; the customers use trays, on which they place cold items that they select from a refrigerated container and hot items which they request from cooks, and then they pay a

cashier before they sit down. Another restaurant approach which uses few waiters is the buffet restaurant. Customers serve food onto their own plates and then pay at the end of the meal. Buffet restaurants typically still have waiters to serve drinks and alcoholic beverages. Fast food restaurants are also considered a restaurant.

The travelling public has long been catered for with ship's messes and railway restaurant cars which are, in effect, travelling restaurants. Many railways, the world over, also cater for the needs of travelers by providing railway refreshment rooms, a form of restaurant, at railway stations. In the 2000s, a number of travelling restaurants, specifically designed for tourists, have been created. These can be found on trams, boats, buses, etc.

1. Ethnic

Ethnic restaurants specialize in ethnic or national cuisines. For example, Greek restaurants specialize in Greek cuisine.

2. Fast food

Fast food restaurants emphasize speed of service. Operations range from small-scale street vendors with food carts to multibillion-dollarcorporations like McDonald's and Burger King. Food is ordered not from the table, but from a front counter (or in some cases, using an electronic terminal). Diners typically then carry their own food from the counter to a table of their choosing, and afterward dispose of any waste from their trays. Drive-through and take-out service may also be available. Fast food restaurants are known in the restaurant industry as QSRs or quick-service restaurants.

3. Fast casual

Fast casual restaurants are primarily chain restaurants, such as Chipotle Mexican Grill and Panera Bread. More of the food is prepared at the restaurant than is the case at fast food chains. Fast casual restaurants usually do not offer full table service, but many offer non-disposable plates and cutlery. The quality of food and prices tend to be higher than those of a conventional fast food restaurant but may be lower than casual dining

4. Casual dining

A casual dining restaurant is a restaurant that serves moderately-priced food in a casual atmosphere. Except for buffet-style restaurants, casual dining restaurants typically provide table service. Chain examples include Harvester in the United Kingdom and TGI Friday's in the United States. Casual dining comprises a market segment between fast food establishments and fine dining restaurants. Casual

dining restaurants often have a full bar with separate bar staff, a larger beer menu and a limited wine menu. They are frequently, but not necessarily, part of a wider chain, particularly in the US. In Italy, such casual restaurants are often called "trattoria", and are usually independently owned and operated.

5. Premium casual

Premium casual restaurants originate from Western Canada and include chains such as Cactus Club Cafe, Earl's and JOEY. Premium casual restaurants are described as upscale fast casual. Similarly to casual dining, they typically feature a dining room section and a lounge section with multiple screens. They are typically found downtown or in shopping districts and attract young professionals and millennial's with an urban ambiance. Premium casual restaurants carry a wide range of menu options including burgers, steaks, seafood, pizza, pasta and Asian foods.

6. Family style

Family style restaurants are a type of casual dining restaurants where food is often served on platters and the diners serve themselves. It can also be used to describe family-friendly diners or casual restaurants. The difference between casual dining and family style is that there is no alcohol.

7. Fine dining

Fine dining restaurants are full service restaurants with specific dedicated meal courses. Décor of such restaurants features higher-quality materials, with establishments having certain rules of dining which visitors are generally expected to follow, often including a dress code.

Variations

Most of these establishments can be considered subtypes of fast casual drinking restaurants or casual dining restaurants.

8. Barbecue

A barbecue restaurant is a restaurant that specializes in barbecue-style cuisine and dishes.

9. Brasserie and bistro (soul food)

A brasserie in the US has evolved from the original French idea of a type of restaurant serving moderately priced hearty meals—French-inspired "comfort foods"—in an unpretentious setting. Bistros in the US usually have more refined

decor, fewer tables, finer foods and higher prices. When used in English, the term *bistro* usually indicates a continental menu.

10. Buffet

Buffets offer patrons a selection of food at a fixed price. Food is served on trays around bars, from which customers with plates serve themselves. The selection can be modest or very extensive, with the more elaborate menus divided into categories such as salad, soup, appetizers, hot entrées, cold entrées, and dessert and fruit. Often the range of cuisine can be eclectic, while other restaurants focus on a specific type, such as home-cooking, Chinese, Indian, or Swedish. The role of the waiter or waitress in this case is relegated to removal of finished plates, and sometimes the ordering and refill of drinks. In Italy, a kind of semi-buffet is featured in either a tavola calda, serving hot foods, and a tavola fredda, which serves cold food. Either can be found in bars and cafes at meal times or in dedicated sites, sometimes with seating and service at a counter.

In the United States, Buffets, Inc. (now known as Ovation Brands), is a large buffet chain corporation which owns Old Country Buffet, Country Buffet, and HomeTown Buffet. HomeTown Buffet popularized the "scatter buffet", which refers to the layout of separate food pavilions. Other American restaurant chains well known for their buffets include Golden Corral, which features food products presented in pans, Souplantation/Sweet Tomatoes (known in particular for its soups and salads), Gatti's Pizza, CiCi's Pizza, Fresh Choice (a smaller competitor of Souplantation), Pancho's Mexican Buffet, Ryan's and Ponderosa Steakhouse. Sizzler is another prominent restaurant offering a buffet.

11. Cafe

British cafes and American diners are informal eateries offering a range of hot meals and made-to-order sandwiches or rolls.Coffeehouses or cafés (with an accent over the e) are not restaurants because they primarily serve and derive the majority of their revenue from hot drinks. Many cafes are open at breakfast time and will serve full hot breakfasts all day. In some areas, cafes offer outdoor seating. The word comes from the French "café", which designates a coffee shop and/or bar in France.

12. Cafeteria

A cafeteria is a restaurant serving ready-cooked food arranged behind a food-serving counter. There is no table service. Typically, a patron takes a tray and pushes it along a track in front of the counter. Depending on the establishment, servings may be ordered from attendants, selected as ready-made portions

already on plates, or self-serve their own portions. Cafeterias are common in hospitals, corporations and educational institutions. In Italy it's very common and known as "mensa aziendale".

In the UK, a cafeteria may also offer a large selection of hot food and the use of the term cafeteria is deprecated in favour of **self-service restaurant**. Cafeterias have a wider variety of prepared foods. For example, it may have a variety of roasts (e.g. beef, ham, turkey) ready for carving by a server, as well as other main courses, rather than simple offerings of hamburgers or fried chicken.

13.   Coffee House

Coffeehouses are casual restaurants without table service that emphasize coffee and other beverages; typically a limited selection of cold foods such as pastries and perhaps sandwiches are offered as well. Their distinguishing feature is that they allow patrons to relax and socialize on their premises for long periods of time without pressure to leave promptly after eating, and are thus frequently chosen as sites for meetings.

14.   Destination restaurant

A **destination restaurant** is one that has a strong enough appeal to draw customers from beyond its community. The idea of a destination restaurant originated in France with the Michelin Guide, which rated restaurants as to whether they were worth a special trip or a detour while one travelled by car in France.

15.   Greasy spoon

A greasy spoon is a colloquial term for a British cafe, American diner or other small eatery which tends to serve food at a low cost. Generally fried foods are served, and in the United Kingdom, such places frequently serve all-day breakfasts and strong builder's tea. They are commonly found in working-class areas.

16.   Tabletop cooking

Customers are seated as in a casual dining setting. Food items are prepared by the establishments for cooking on embedded gas stoves, induction cookers, or charcoal grills; the customer has control over the heating power of the appliance.

17.   Mongolian barbecue

Despite the name, the Mongolian barbecue form of restaurant is not Mongolian, rather is derived from Taiwan and inspired by Japanese teppanyaki.

Customers create a bowl from an assortment of ingredients displayed in a buffet fashion. The bowl is then handed to the cook, who stir-fries the food on a large griddle and returns it on a plate or in a bowl to the consumer.

18.   Pub

Traditionally, pubs were primarily drinking establishments with food in a secondary position, whereas many modern pubs rely on food as well, to the point where gastropubs are often known for their high-quality fine-dining style pub food and concomitantly high prices. A typical pub has a large selection of beers and ales on tap.

19.   Teppanyaki-style

Many restaurants specializing in Japanese cuisine offer the teppanyaki grill, which is more accurately based on a type of charcoal stove that is called shichirin in Japan. Diners, often in multiple, unrelated parties, sit around the grill while a chef prepares their food orders in front of them. Often the chef is trained in entertaining the guests with special techniques, including cracking a spinning egg in the air, forming a volcano out of differently-sized onion slices, and flipping grilled shrimp pieces into patrons' mouths, in addition to various props. Also referred to as hibachi.

Restaurant staff

A restaurant's proprietor is called a *restaurateur*, this derives from the French verb *restaurer*, meaning "to restore". Professional cooks are called chefs, with there being various finer distinctions (e.g. sous-chef, chef de partie). Most restaurants (other than fast food restaurants and cafeterias) will have various waiting staff to serve food, beverages and alcoholic drinks, including busboys who remove used dishes and cutlery. In finer restaurants, this may include a host or hostess, a maître d'hôtel to welcome customers and to seat them, and a sommelier or wine waiter to help patrons select wines. A new route to becoming a restauranter, rather than working one's way up through the stages, is to operate a food truck. Once a sufficient following has been obtained, a permanent restaurant site can be opened. This trend has become common in the UK and the US.

Chef's table.

The chef's table at Marcus restaurant, in Knightsbridge

A chef's table is a table located in the kitchen of a restaurant, reserved for VIPs and special guests. Patrons may be served a themed tasting menu prepared and served by the head chef. Restaurants can require a minimum party and charge a higher flat fee. Because of the demand on the kitchen's facilities, chef's tables are generally only available during off-peak times.

History By region

1. Greece and Rome

In Ancient Greece and Ancient Rome, thermopolia (singular *thermopolium*) were small restaurant-bars that offered food and drinks to customers. A typical thermopolium had L-shaped counters in which large storage vessels were sunk, which would contain either hot or cold food. Their popularity was linked to the lack of kitchens in many dwellings and the ease with which people could purchase prepared foods. Furthermore, eating out was considered an important aspect of socializing.

In Pompeii, 158 thermopolia with service counters have been identified throughout the town. They were concentrated along the main axis of the town and the public spaces where they were frequented by the locals.

2. China

In China, food catering establishments that may be described as restaurants have been known since the 11th century in Kaifeng, China's capital during the first half of the Song dynasty (960–1279). Probably growing out of the tea houses and taverns that catered to travelers, Kaifeng's restaurants blossomed into an industry catering to locals as well as people from other regions of China. There is

a direct correlation between the growth of the restaurant businesses and institutions of theatrical stage drama, gambling and prostitution which served the burgeoning merchant middle class during the Song dynasty. Restaurants catered to different styles of cuisine, price brackets, and religious requirements. Even within a single restaurant much choice was available, and people ordered the entree they wanted from written menus. An account from 1275 writes of Hangzhou, the capital city for the last half of the dynasty:

The people of Hangzhou are very difficult to please. Hundreds of orders are given on all sides: this person wants something hot, another something cold, a third something tepid, a fourth something chilled; one wants cooked food, another raw, another chooses roast, another grill.

The restaurants in Hangzhou also catered to many northern Chinese who had fled south from Kaifeng during the Jurchen invasion of the 1120s, while it is also known that many restaurants were run by families formerly from Kaifeng.

3. Dining out in France before the restaurant

Dining out in Paris went through several phases before the restaurant. (Developments in the rest of France typically lagged behind the capital.) In the thirteenth century, inns and taverns already served varied food - bread, cheese, bacon, roasts, etc. Parisians could also buy what was essentially take-out from roasters and pastry-cooks, who also could cater meals ("pastry" here meant any food served in dough, often meat pies, for instance). The Flemish word "cabaret" became increasingly known going forward; an early cabaret was very like a tavern (theoretically a wine shop, but in practice serving food as well), yet cabarets became a more elite option. At the start of the sixteenth century, cabarets, taverns and inns all served meals. Statutes of the time list ingredients which would have allowed for some places to serve very sophisticated meals. These statutes also stated that the official prices per item were to be posted at the entrance; this was the first official mention of menus. By the end of the century, cabarets served the best food and a number, such as the Petit Maure, had particular reputations.

But it was also at the end of the century (1599) that cooks-caterers (later known as "traiteurs") got their first statutes. While cabarets continued to serve good meals and often to an elite clientele, the traiteurs gradually laid claim to all sophisticated food service, ultimately limiting taverns and cabarets to serving little more than roast or grilled meats. Towards the end of the seventeenth century, both inns and then traiteurs began to offer "host's tables" (*tables d'hôte*), where one paid a set price to sit at a collective table and eat a

predetermined meal. Despite a common claim however, this was not the only way to dine and items, in at least some cases, could still be ordered individually (whether hand-held menus were already available is unknown). Nor were diners obliged to sit at a common table other than at a table d'hôte

4. The birth of the modern restaurant – Paris in the 18th century

The term "restaurant" was first associated with an eatery in 18th century Paris, when Mathurin Roze de Chantoiseau founded a "restorer" (*restaurateur*) on the Rue des Poulies (now part of the rue du Louvre). (Chantoiseau himself said it was founded in 1766, but the first mentions are from 1767; note that in 1782 Le Grand d'Aussy named Boulanger as the founder and this is the version which has persisted until recently; however, Spang firmly demonstrates that it was Roze de Chantoiseau.) Chantoiseau's new establishment - effectively a health food outlet - resembled a café in being (unlike earlier eateries) elegantly decorated. Its main product was a special type of bouillon called a "restorant" (*restaurant*). (Note that if the first restaurant *served* bouillons, it was never, as is sometimes claimed, the special type of restaurant later known as a bouillon (restaurant). However, Chantoiseau offered other supposedly restorative foods (including macaroni). Others soon imitated him.[15] Meanwhile, Chantoiseau himself became a traiteur, even as many traiteurs added "restaurateur" to their names, becoming "traiteurs-restaurateurs".

In the seventeen-eighties, as the Revolution approached, elite cooks from grand households began to open grander versions of these places which, even if they were officially "traiteurs-restaurateurs" (that is hybrids of traiteurs and restaurateurs), became known simply as "restaurateurs" (Use of the term "restaurant" for the establishment itself only became common in the nineteenth century). With the Revolution, the emigration of aristocratic employers led more cooks to open their own places.[16] Elegance was now common in the best restaurateurs; however the original idea of serving restorative bouillons had faded away.

The first luxury restaurant in Paris, called the Taverne Anglaise, was opened at the beginning of 1786, shortly before the French Revolution, by Antoine Beauvilliers, the former chef of the Count of Provence, at the Palais-Royal. It had mahogany tables, linen tablecloths, chandeliers, well-dressed and trained waiters, a long wine list and an extensive menu of elaborately prepared and presented dishes. In June 1786 the Provost of Paris issued a decree giving the new kind of eating establishment official status, authorizing *restaurateurs* to receive clients and to offer them meals until eleven in the evening in winter and midnight in summer. A rival restaurant was started in 1791 by Méot, the former chef of the

Duke of Orleans, which offered a wine list with twenty-two choices of red wine and twenty-seven of white wine. By the end of the century there were other luxury restaurants at the Grand-Palais: Huré, the Couvert espagnol; Février; the Grotte flamande; Véry, Masse and the Café de Chartres (still open, now Le Grand Vefour).

5. United States

In the United States, it was not until the late 18th century that establishments that provided meals without also providing lodging began to appear in major metropolitan areas in the form of coffee and oyster houses. The actual term "restaurant" did not enter into the common parlance until the following century. Prior to being referred to as "restaurants" these eating establishments assumed regional names such as "eating house" in New York City, "restorator" in Boston, or "victualing house" in other areas. Restaurants were typically located in populous urban areas during the 19th century and grew both in number and sophistication in the mid-century due to a more affluent middle class and to suburbanization. The highest concentration of these restaurants were in the West, followed by industrial cities on the Eastern Seaboard.

Guides

Restaurant guides review restaurants, often ranking them or providing information to guide consumers (type of food, handicapaccessibility, facilities, etc.). One of the most famous contemporary guides is the Michelin series of guides which accord from 1 to 3 starsto restaurants they perceive to be of high culinary merit. Restaurants with stars in the Michelin guide are formal, expensive establishments; in general the more stars awarded, the higher the prices.

The main competitor to the Michelin guide in Europe is the guidebook series published by Gault Millau. Unlike the Michelin guide which takes the restaurant décor and service into consideration with its rating, Gault Millau only judges the quality of the food. Its ratings are on a scale of 1 to 20, with 20 being the highest.

Per Se in New York City has three Michelin stars, and is rated at or near the top of multiple Zagat lists.

In the United States, the Forbes Travel Guide (previously the Mobil travel guides) and the AAA rate restaurants on a similar 1 to 5 star (Forbes) or diamond (AAA) scale. Three, four, and five star/diamond ratings are roughly equivalent to the Michelin one, two, and three star ratings while one and two star ratings typically indicate more casual places to eat. In 2005, Michelin released a New York City guide, its first for the United States. The popular Zagat Survey compiles

individuals' comments about restaurants but does not pass an "official" critical assessment. FreshNYC recommends plausible New York City restaurants for busy New Yorkers and visitors alike.

The *Good Food Guide,* published by the Fairfax Newspaper Group in Australia, is the Australian guide listing the best places to eat. Chefs Hats are awarded for outstanding restaurants and range from one hat through three hats. The *Good Food Guide* also incorporates guides to bars, cafes and providers. *The Good Restaurant Guide* is another Australian restaurant guide that has reviews on the restaurants as experienced by the public and provides information on locations and contact details. Any member of the public can submit a review.

Nearly all major American newspapers employ food critics and publish online dining guides for the cities they serve. Some news sources provide customary reviews of restaurants, while others may provide more of a general listings service.

More recently Internet sites have started up that publish both food critic reviews and popular reviews by the general public

Economics

Many restaurants are small businesses, and franchise restaurants are common. There is often a relatively large immigrant representation, reflecting both the relatively low start-up costs of the industry (thus making restaurant ownership an option for immigrants with relatively few resources) and the cultural importance of food.

1. Canada

There are 86,915 commercial foodservice units in Canada, or 26.4 units per 10,000 Canadians. By segment, there are:[24]

- 38,797 full-service restaurants
- 34,629 limited-service restaurants
- 741 contract and social caterers
- 6,749 drinking places

Fully 63% of restaurants in Canada are independent brands. Chain restaurants account for the remaining 37%, and many of these are locally owned and operated franchises.

2. European Union

The EU-27 has an estimated 1.6m businesses involved in 'accommodation & food services', more than 75% of which are small and medium enterprises.

3. United States

Workers in the kitchen at Delmonico's Restaurant, New York, 1902.

As of 2006, there are approximately 215,000 full-service restaurants in the United States, accounting for $298 billion in sales, and approximately 250,000 limited-service (fast food) restaurants, accounting for $260 billion. Starting in 2016, Americans spent more on restaurants than groceries.

In October 2017, *The New York Times* reported there are 620,000 eating and drinking places in the United States, according to the Bureau of Labor Statistics. They also reported that the number of restaurants are growing almost twice as fast as the population.

One study of new restaurants in Cleveland, Ohio found that 1 in 4 changed ownership or went out of business after one year, and 6 out of 10 did so after three years. (Not all changes in ownership are indicative of financial failure.)[30] The three-year failure rate for franchises was nearly the same.[31]

Restaurants employed 912,100 cooks in 2013, earning an average $9.83 per hour. The waiting staff numbered 4,438,100 in 2012, earning an average $8.84 per hour.

Jiaxi Lu of the *Washington Post* reports in 2014 that, "Americans are spending $683.4 billion a year dining out, and they are also demanding better food quality and greater variety from restaurants to make sure their money is well spent."

Dining in restaurants has become increasingly popular, with the proportion of meals consumed outside the home in restaurants or institutions rising from 25% in 1950 to 46% in 1990. This is caused by factors such as the growing numbers of older people, who are often unable or unwilling to cook their meals at home and the growing number of single-parent households. It is also caused by the convenience that restaurants can afford people; the growth of restaurant popularity is also correlated with the growing length of the work day in the US, as well as the growing number of single parent households.[35] Eating in restaurants has also become more popular with the growth of higher income households. At the same time, less expensive establishments such as fast food establishments can be quite inexpensive, making restaurant eating accessible to many.

Employment

The restaurant industry in the United States is large and quickly growing, with 10 million workers. 1 in every 12 U.S. residents work in the business, and during the 2008 recession, the industry was an anomaly in that it continued to grow. Restaurants are known for having low wages, which they claim are due to thin profit margins of 4-5%. However, comparatively, Walmart has a 1% profit margin.

As a result of these low wages, restaurant employees suffer from three times the poverty rate as other U.S. workers, and use food stamps twice as much.[36]

Restaurants also employ marginalized groups. They are the largest employer of people of color. Restaurants rank as the second largest employer of immigrants. These workers statistically are concentrated in the lowest paying positions in the restaurant industry. In the restaurant industry, 39% of workers earn minimum wage or lower.

Regulations

In many countries, restaurants are subject to inspections by health inspectors to maintain standards for public health, such as maintaining proper hygiene and cleanliness. As part of these inspections, cooking and handling practices of ground beef are taken into account to protect against the spread of E coli poisoning. The most common kind of violations of inspection reports are those concerning the storage of cold food at appropriate temperatures, proper sanitation of equipment, regular hand washing and proper disposal of harmful chemicals. Simple steps can be taken to improve sanitation in restaurants. As sickness is easily spread through touch, restaurants are encouraged to regularly wipe down tables, door knobs and menus.

Depending on local customs and the establishment, restaurants may or may not serve alcoholic beverages. Restaurants are often prohibited from selling beverages without a meal by alcohol sale laws; such sale is considered to be activity for bars, which are meant to have more severe restrictions. Some restaurants are licensed to serve alcohol ("fully licensed"), or permit customers to "bring your own" alcohol (BYO / BYOB). In some places restaurant licenses may restrict service to beer, or wine and beer.

System Description

About "Your restaurant"

First and foremost, who doesn't love to eat?

Of course, all of us do love eating. Not only is it important to have the appropriate calories to keep living, but also because eating has its own special taste of enjoyment.

Imagine all of your favorite restaurants in one single place, always along with you in between your hands in almost every day-to-day life. With only picking up your smart phone and opening up our application ''your restaurant'' you are good to go! Just pick the meal you would love to have and select the place you would love to visit and move right on.

The easiest it could be to fulfill your utter pleasure which no one could say else.

Our system in general

Our system is a self-explanatory system that helps users get a list of all possible restaurants available in various districts of Egypt.

User interactive

Just by a simple click our customer gets:

- restaurants customers ratings and reviews about the serving quality

- the route to the nearest restaurant via a map

Confidentiality

We understand the power of collaboration and we trust and consider in human resources, so our system provides a way to express the standard which is in a great deal affects in various decisions.

Revision

So, our system is from users to users: It displays restaurants customer's ratings and reviews about the serving quality.

So, make sure everything is safely considered in our app which helps share our thoughts and opinions to give them to all who are in such need.

System architecture
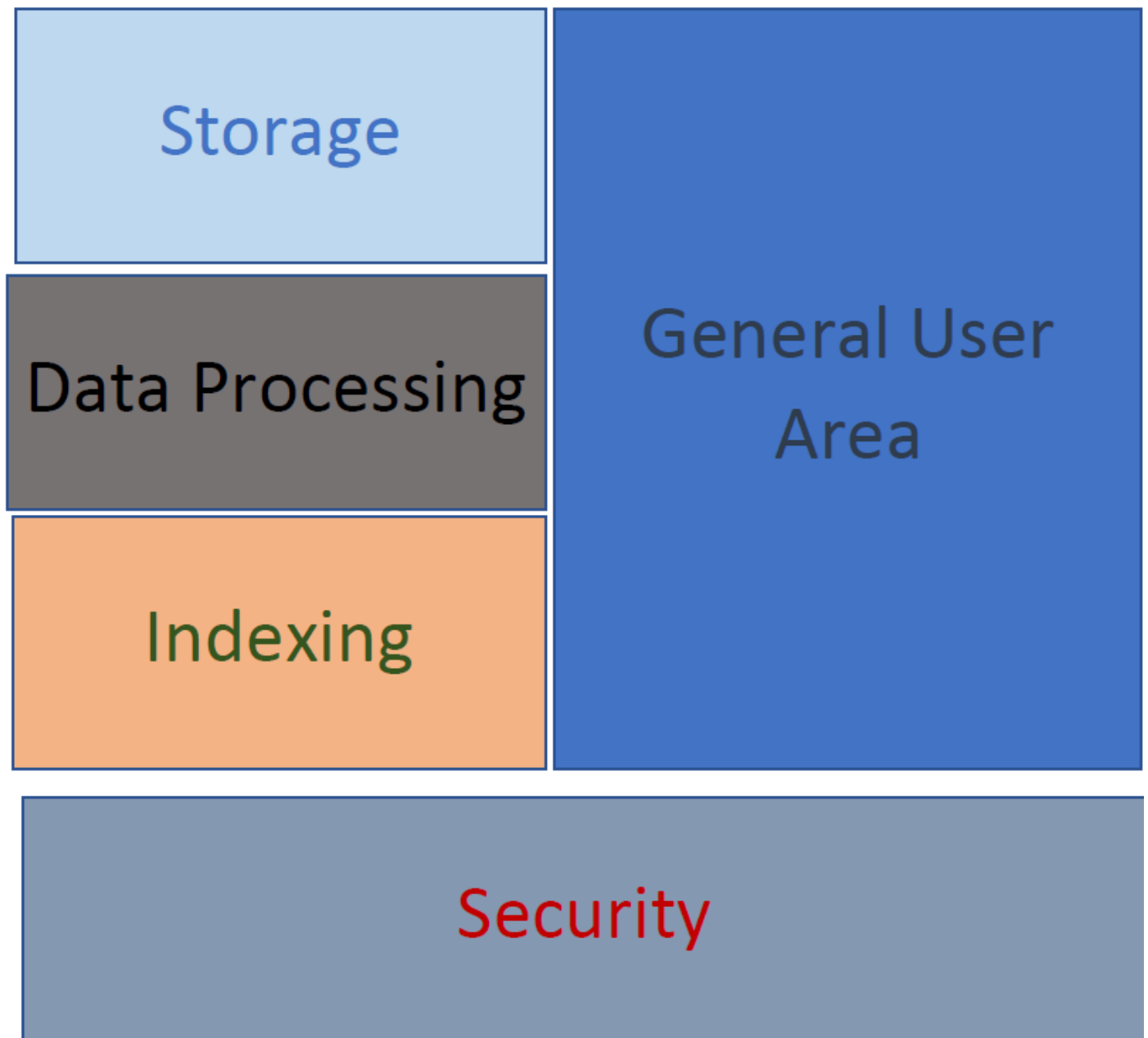
Storage

Your restaurant uses different types of storage:
● Core storage for restaurant material and user interaction.
● Archive storage for historical changes, deleted contents and old logs.
● System storage for system configuration, user's information and fresh logs.
● Indexing storage to support full text search engines.

Data Processing

- The application processes data and converts them into different language formats as our app supports different languages to cover larger areas.

- The application sections are classified depending upon data sorts such as images, texts, hyperlinks and maps redirections.

- The application processes other apps via implicit intents to redirect the user to the original place where he could find more details about our app views.

Indexing

This module is responsible on indexing textual contents to allow internal full text search queries. Full text search is used by final users to find certain contents. Also, it used by other modules like data processing to locate contents in a fixed time regardless the overall contents size.

General User Area

This module provides user with main system activities like displaying the restaurant names and districts over their current local area, lists of all possible offers and discounts, also, users can edit their profiles and view other user's profiles.

General system support martial are published to help users. However, users can communication with system operators to report issues or to get a direct support.

Security

Security module is responsible on user authentication and communications security. User can register/login using internal accounts or via their phones or common social accounts. We provided a secure hash first way algorithm dedicated specially for protecting user's data as these amounts of data, we are concerned about it as well as our users do.

Security module also, responsible on managing the permissions and roles. Users are either guests, logged users, restaurant owners.

Security module also, responsible on detecting the threats and preventing data theft. The system is tested against common attacks using known penetration testing tools. Data theft is prevented using various data protection techniques.

System Features

Search up nearby Restaurants

User can create an account in order check out nearby restaurants based on his / her location. User can search up a specific food item, 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. The search result will contain a list of food from different restaurants. If the user picks any of the food items from the list, the phone will display the selected food item with detail information such as food pictures, ratings, comments, and the information of the restaurant.

Getting Food Menus

Getting a restaurant's menu is one of the most important features for this phone application. 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. So, 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.

Adding Comments

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. Users can read and write any comments for food items in the system making an overall better experience for every user.

Chat Rooms

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. After users select a restaurant and its food category, 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.

Barcode Scanner

Users can use this feature as a quick access to the main restaurant page it can also be used to get many other services, for example if the restaurant has a discount on a certain food item the user can use the barcode scanner and get this discount as quick as possible.

Text Recognition

Users (restaurant owners) can use this feature to extract data from menus and sent it to our servers for processing without the need to write it by hand, this allows the user to have more accessibility and ease of use in using our app.

Multi Language Support

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

System Development and Operation

Overview

The system development is performed using Agile methodology. Initial R&D activity should be applied to experiments tools and techniques. Later continuous R&D activity will run beside the system development activities. The initial version (Prototype) of the system should take one month. After release, the system will enter an initial operation phase for three and half months. During that phase the whole development team will communicate directly with the operation and business team. Later the system will enter the final operation and maintenance phase. During that phase a minor development team will provide an indirect technical support.

Development Plan

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Study Requirements	■	■	■											
Management Planning	■	■	■											
Test Planning				■										
Implementation					■	■	■	■	■	■	■	■		
Research					■	■	■	■	■	■	■	■		
Unit Testing					■	■	■	■	■	■	■	■		
System Testing													■	■
Final Release														■

Team

Team	Role	#
Management Team	Project Manager	1
Design Team	UI Designers	3
Development Team	Team Leader	1
	Back-end Developers	3
	Mobile Developers	5
Maintenance Team	Team Leader	1
	Back-end Developers	3
	Mobile Developers	5

Tools

Your Restaurant will be developed using open source tools, languages and servers.

While Development, only online tools will be used for management, tracking, testing, and source control.

This will increase the collaboration between team members even if they are not located at the same place. Also, this will allow external teams and members to participate.

Operation	Recommended Tool
Source Control and Versioning	GitHub/Git
Tasks and issues Tracking	JIRA, Zenhub
Structured Database	MySQL
Unstructured Database	Firebase Database
Programming Languages	Java, PHP, Python
Operating Systems	Windows
Storage, Messaging, Analytics, Authentication, ML Kit	Firebase
Software SRS/SDA/SDD	Visio
UI Design	Photoshop , Illustrator

Infrastructure

Type	Name	#
Development and Testing Infrastructure	Mobile and Tablets	7 Physical + 10 Virtual
	Online Development Server (Virtual)	1 Server
Initial Production Infrastructure	Mobile and Tablets	7 Physical + 10 Virtual
	Online Development Server (Physical)	1 Server

Assumptions

- Application is developed for Android devices with minimum Kit Kat SDK and API level 19.
- Application is developed in portrait and landscape modes.
- Application can work in both online and offline mode.
- Android application on a device will support single profile only.
- Order Menu will be static list of text and image data.

References

URL: Restaurant

https://en.wikipedia.org/wiki/Restaurant?fbclid=IwAR2PWjFe52EV4peLNOX7kxQn2mtoUInoodP9wvsBOdhyPsTdikat3-fUykY