**“Zomato”**

**A**

**PROJECT REPORT**

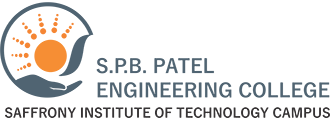
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**CERTIFICATE**

This is to certify that the dissertation entitled  **“College Bus“** has been carried out by **Harsh Rajeshbhai Pethani (180390107038), Shivang Devendrabhai Khatri (180390107009), Kirtan Mansukhbhai Sutariya (180390107053), Harshkumar Yashvantbhai Patel (180390107020)** under my guidance in fulfilment of Design Engineering-1A (3130008) in Computer Engineering (4th semester) Gujarat Technological University Ahmedabad during Academic Year 2019-20.

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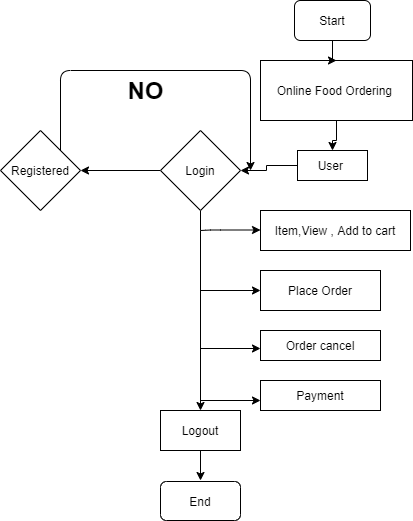
**1.Domain Introduction**

* Food is the basic necessity of Mankind. Without food humans can’t survive because, we get energy by consuming the food.
* In the past, food industry was not technically advanced. As the generations are passing, this industry is getting evolved.
* In current scenario this industry uses advanced technology. They started using various Applications and Web-sites. This made the industries growth at high rate.

**2 .Introduction of Zomato :-**

**2.1 – Product Description :-**

* The main use of the product “ZOMATO” is ordering the food online through the website or the application.
* The Flowchart is shown below :



* Other features of the Product:-
  1. Food reviews
  2. Restaurant reviews
  3. Offer zone
  4. Filters and sorting
  5. Nearby restaurants
  6. Premium memberships
  7. Pictures of the dishes
  8. Coupons
  9. Table Booking in the Restaurants

**2.2 – Sub-System / Sub-Components of Zomato :**

* + 1. **Subsystem :**

* **Functions :**

–>There are total 12 to 15 functions which are included in the Zomato application.

–>These functions are listed below :

- Inventory supply tracking

- Ingredient level management

- Customer profiling

- Sales analytics

- Digital invoicing via SMS

- MIS reports generation

- Menu price update

- Menu items alternation

- Digital invoicing via mail

- Stealth

- Online payment gateway

- Inventory supply tracking

- Point of sale configuration

* **Features :**

1. Food reviews
2. Restaurants reviews
3. Offer zone
4. Filters and sorting
5. Nearby restaurants
6. Premium memberships
7. Pictures of dishes
8. Coupons
9. Table Booking in the Restaurants

* **Components :**

–>The Components used for this is:

1. *PHP 7 -*

-**PHP** is a server side scripting language. that is **used** to develop Static websites or Dynamic websites or Web applications.

-**PHP** stands for Hypertext Pre-processor, that earlier stood for Personal Home Pages.

-**PHP** scripts can only be interpreted on a server that has **PHP** installed.

1. *JavaScript -*

-**JavaScript** is a client scripting language which is **used** for creating web pages.

-It is a standalone language developed in Netscape.

-It is **used** when a webpage is to be made dynamic and add special effects on pages like rollover, roll out and many types of graphics

*3. Python -*

-It's often **used** as a “scripting language” for web applications.

-This means that it can automate specific series of tasks, making it more efficient.

-Consequently, **Python** (and languages like it) is often **used** in software applications, pages within a web browser, the shells of operating systems and some games.

1. *C# -*

-**C#** was developed by Microsoft and is **used** in essentially all of their products.

-It is mainly **used** for developing desktop applications and, more recently, Windows 8/10 applications.

-It is also a part of . NET so it is **used** alongside languages like ASP in web development and apps.

1. *ASP.NET -*

-**ASP**.**NET** is an open-source server-side web application framework designed for web development to produce dynamic web pages developed by Microsoft to allow programmers to build dynamic web sites, applications and services.

D. **Working of the sub-system :**

* In this, the sub-system understands the working of the features and the functions.
* This features and functions are combined by the means of the components used to create the application.
* This is how the sub-system works in the reverse engineering.

**2.3 – Theories / Principles on which Zomato is based on :-**

–>Some of the principles are listed below :-

1. **Database :**

* Zomato uses **MySQL** Community Edition with master / slave setup source.
* **MySQL** is Data based management based on SQL (Structured Query Language). The application is used for a wide range of purposes ,including data warehousing, e-commerce, and logging applications.
* Some advantages of using MYSQL are : Data security , On demand Scalability , High performance , Round the clock Uptime , Comprehensive transactional support and most important free source availability.

1. **Tracking System :**

* Zomato uses **Hyper Track** to allow it’s customers support teams to track your food orders.
* When you ask them where your order is , they can quickly check and let you know.
* **Hyper Track** is live location platform in the cloud offering developer tools for mobile applications developers in companies of all sizes worldwide.
* It’s toolset contains iOS and android SDKs which generate live location data.

1. **Review system :**

* Zomato uses 5 point classroom style reading model , where the distribution of scores in every city is normalised , resulting in ratings in each city being distributed over a normal curve.

1. **Payment system :**

* The updated version of Zomato now allows the user to pay via credit cards , debit cards and other net banking options.
* The option to make online payment is currently available in selected restaurants only.

**2.4 – Cost Estimation of the Product :-**

–> According to study in 2019, cost of developing applications like Zomato takes around **$6500 to $11,000.**

**3. Literature Review :-**

**3.1 – Literature review of the research papers :-**

**Paper 1:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the Paper | E-Service Quality, Perceived Value, and Customer  Loyalty Relationship of Zomato Users in Indonesia |
| 2. | Author/s | Erni Martini, Lutfi Hardito |
| 3. | Journal | International Journal of Science and Research (IJSR) |
| 3. | Year of Publication | 2018 |
| 5. | Page No. | 92 – 95 |

**Summary :** This this study used Smart PLS software for Structural Equation Modelling (SEM) technique. SEM enables the Simultaneous examination of both the path (structural) and factor (measurement) models in one model.

**Paper 2:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the Paper | Consumer experience, attitude & behavioural intention toward Online Food Delivery (OFD) Service |
| 2. | Author/s | Vincent Cheow Seren Yeo , Sajad Rezaei |
| 3. | Journal | Journal of Retailing and Consumer Services |
| 3. | Year of Publication | 2017 |
| 5. | Page No. | 150 - 162 |

**Summary :** The TAM, model of IT Continuation & Contingency Framework were used to investigate the relationship between external factors and intention towards OFD services mediated by post-usage usefulness and convenience motivation .

**Paper 3:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the Paper | Role Of NGO’s & CBO’s in Food Waste Management |
| 2. | Author/s | Ahsan, M Alamgir, M Imteaz, NN Nik Daud, R Islam |
| 3. | Journal | International Journal of Public Health |
| 3. | Year of Publication | 2012 |
| 5. | Page No. | 27 - 38 |

**Summary :** In Khulana (Bangladesh) City , the participation of Non-Governmental Org. (NGO’s) & Community Based Org. (CBO’s) has improved the waste management system. A Total of 22 NGO’s & CBO’s are mainly involved in this type of food waste management processes.

**Paper 4:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the Paper | Food Industry: An Introduction |
| 2. | Author/s | Matthew N. O. Sadiku , Sarhan Musa |
| 3. | Journal | International Journal of Trend in Scientific Research and Development |
| 3. | Year of Publication | 2019 |
| 5. | Page No. | 128 – 130 |

**Summary :** Food industry plays an important role in providing food for human consumption. It satisfies community needs with respect to availability, distribution and quality of food.

**Paper 5:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the Paper | Online Food Ordering System |
| 2. | Author/s | Abhishek Singh, Adithya R, Vaishnav Kanade |
| 3. | Journal | International Research Journal of Engineering and Technology |
| 3. | Year of Publication | 2018 |
| 5. | Page No. | 374 – 378 |

**Summary :** The application is based on user’s requirement and is user centred. All issues related to all user which are included in this system are developed by this system.

**3.2 – Literature review of Patents / Industrial Designs :-**

**Patent / Industrial Design 1:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the invention | A SYSTEM FOR SMART AND SECURE FOOD DELIVERY |
| 2. | Inventor/s | Ramandeep Singh |
| 3. | Year of Granted Patent | 2019 |
| 4. | Field of Invention | ELECTRONICS |

**Summary :** Disclosed is a system for smart and secure food delivery. The present invention consists of a power source; a digital lock controller with OTP (One Time Password) validation service; a microcontroller; a weighing sensor service; a location service; and an internet and SMS service. This invention is equipped with multiple compartments having either a single access door or individual access doors secure with an electronic lock that is opened by input of predefined locking/unlocking code in order to open the locked compartment.

**Patent / Industrial Design 2:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the invention | A NOVEL SYSTEM TO TRACK THE RAW MATERIAL AND FOOD SAFETY |
| 2. | Inventor/s | Rajan Miglani |
| 3. | Year of Granted Patent | 2019 |
| 4. | Field of Invention | FOOD |

**Summary:** A system to track the crop production and ensure the safety of the food until it has been processed by the food factories /hotels/etc.The system tracks the crop from purchase of the seeds to the data collected until the harvest which includes the information about the entire crop production details. The sensor tags are used to gather the information of the seeds until the crop has been processed to edible food to assure its quality and prevent any substandard in the raw material.

**Patent / Industrial Design 3:**

|  |  |  |
| --- | --- | --- |
| 1. | Name of the invention | HOMEMADE FOOD DELIVERY SYSTEM AND METHOD THEREOF |
| 2. | Inventor/s | Syed Asif Abbas |
| 3. | Year of Granted Patent | 2019 |
| 4. | Field of Invention | CIVIL |

**Summary:** A food delivery system is disclosed. The system includes a location detection module, configured to detect location of each of one or more registered consumer based on real-time analysing technique and configured to detect location of each of plurality of registered food suppliers based on the real-time analysing technique. The system includes a suggestion module, configured analyse detected location data of each of the one or more registered consumer in association to various plurality of factors by a processing technique and configured to recommend each of the one or more registered consumer with a plurality of food item from each of the plurality of food suppliers.

**SCAMPER TOOLS**

* **S – Substitute :**
* Trigger Words : Replace , Alternate , Switch , Swap , etc
* Zomato uses **MySQL** with **MEMCACHE**. But instead of this we can use **NOSQL Mongo DB** or high performance and processing Peta Bytes in the newest of the trends would be **Oracle EXDATA.**
* **C – Combine :**
* Trigger Words : Merge , Blend , Fuse , Join ,etc.
* We won’t be combining anything in our app.
* **A - Adapt :**
* Trigger Words : Change , Alter , Copy , etc.
* After taking reviews , we found that people are unable to cancel their ordered food.
* For instance , one of the reviewer said that last Sunday his friend visited to their house with food as surprise for them. But the problem was that they had ordered the food few minutes earlier and now they were not able to cancel their order.
* **M – Modify / Magnify :**
* Trigger Words : to add .
* We will add the option of giving offers regarding to the location of ordering the food through the app.
* This will help benefitting most of the users of the app.
* **P – Put to some other use :**
* Trigger Words : Apply , Exercise , Enjoy , Operate , etc.
* We can use this kind of application system in making other useful applications.
* For instance, we can use this kind of application system in making the Online order of the Laundry.
* **E – Eliminate :**
* Trigger Words : Destroy , Eradicate ,Reduce ,etc.
* After getting reviews from people we found out that there is a specific tab of video given in the app.
* According to people this tab is used very rarely and according to them it is found to be useless. So we will eliminate this tab.
* **R – Rearrange / Reverse :**
* We have nothing to rearrange in our app.