GET YOUR FOOD

A Mini Project-1 Report submitted in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE & ENGINEERING

By

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<u>CERTIFICATE</u>

This is to certify that the Mini Project-1 entitled "Tasty Touch", is being submitted by M.Hema Sai Sri, P.Tulasi Lakshmi, M.Atchutha, K.V.Tanuja bearing the Regd. No. 18B01A0599, 18B01A05A8, 18B01A0597, 18B01A0594 in partial fulfillment of the requirements for the award of the degree of "Bachelor of Technology in Computer Science & Engineering" is a record of bonafide work carried out by them under my guidance and supervision during the academic year 2020–2021 and it has been found worthy of acceptance according to the requirements of the university.

Internal Guide

Head of the Department

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1. INTRODUCTION

Now a days everyone are busy with their works. They can't waste their time on waiting in the restaurant to get their order. It increases the wastage of their time and reduces their patience.

We are here with ONLINE FOOD ORDERING SYSTEM i.e., "Tasty Touch".

This is a website used to maintain several activities of the hotel. It is used for reducing the difficulty for peoples to buy the things by going to hotel. It is safe for customer since it avoids the customer to travel to buy food at night times. This website allows the customer to order any food item any time to their home. Tasty Touch also provide food at less price with no tax. This also reduces the travelling charges of the customer. It allows the customer to order the food in an easier way.

Tasty Touch website allows the user to register and login to the website. After login, the website displays the Menu Page which contains different categories in food like Veg ,Non-veg,..... He can order any items on his wish. He can add/delete items from the cart. The Restaurant Operator can add item or delete items in menu page also he can change the Cost any time for any item as cost won't be stable all the time also the variety of items get increases day by day . Restaurant Operator will be able to see the orders that were placed by customer so he can send the details of customer to delivery boy to deliver food. Customers can order the food at less price with no tax. Having Cartegorical menu in the website is helpful for customers to place orders in an easier way. The customer can pay the amount after the food is reached i.e., at the time of delivery. It helps the customer to order food in just one click.

Delivery is the process of transporting goods from a source location to a predefined destination. In online food ordering system the customer demand for the restaurant to deliver to their door what he needs. Here food delivery will be executed after a phone call. Make delivery with phone calls will cost a lot of money and time. So here is an online food website for restaurant food delivery.

"Tasty Touch" makes food delivery process more easy. It increases the sales of the restaurant. It increases the customer satisfaction. It reduces cost and time for the seller.

2. SYSTEM ANALYSIS

2.1. Existing System

Existing Systems is Zomato application.

- These websites allows the people to order any food item from any restaurant and at any time.
- They also allow the people to order food at less price.

2.2. Proposed System

"Tasty Touch" website allows the user to create his profile. The customer can order the food items any time. The customers can Order items on his wish. He can add/delete items from the cart. He can also add his favorite food into favourites page. The Customer orders will be visible to Restaurant Operator so that he will accept that order and sends Order details to delivery boy. He can order the food item to any location he wants. The customer can order the food at less price with no tax. The customer can pay the amount after the food is reached i.e., at the time of delivery. It helps the customer to order food in just one click. This website offers fast delivery, so that the customer need not wait for a longer time and the food will be delicious. The customer is also provided with a facility to order any food item any number of times. The order of the customer is not limited.

2.3. Feasibility Study

Generally the feasibility study is used for determining the resource cost, benefits and whether the proposed system is feasible with respect to the organization. The proposed system feasibility could be as follows. There are six types of feasibility which are equally important are:

- Technical feasibility
- Economic feasibility
- Behavioural feasibility

Technical Feasibility

Technical feasibility deals with the existing technology, software and hardware requirements for the proposed system. The proposed system "Hand Gesture Detection" is planned to run on python. Thus, the project is considered technically feasible for the

development. The work for the project can be done with current equipment, existing software technology and available personnel. Hence the proposed system is technically feasible.

Economic Feasibility

This method is most frequently used for evaluating the effectiveness of a python. It is also called as benefit analysis. In this project "Hand Gesture Detection" is developed on current equipment, existing software technology Since the required hardware and software for developing the system is already available in the organization, it does not cost must developing the proposed system.

Behavioural Feasibility

This project has been implemented by python and it satisfies all conditions and norms of the organization and the users. This proposed system "Hand Gesture Detection" Application has much behavioral feasibility because users are provided with a better facility.

3. SYSTEM REQUIREMENTS SPECIFICATION

3.1. Software Requirements

HTML(Hyper Text Markup Language)
CSS(Cascading Style Sheet)
JavaScript
Apache Tomcat(Server)
PHP

3.2. Hardware Requirements

RAM – 1GB Processor – Intel core i5 Hard Disk – 512GB

MySQL

4. SYSTEM DESIGN

4.1 Introduction

System design is the process of designing the elements of a system such as the architecture, modules and components, the different interfaces of those components and the data that goes through that system.

System Analysis is the process that decomposes a system into its component pieces for the purpose of defining how well those components interact to accomplish the set requirements. The purpose of the System Design process is to provide sufficient detailed data and information about the system and its system elements to enable the implementation consistent with architectural entities as defined in models and views of the system architecture.

The purpose of the design phase is to plan a solution of the problem specified by the requirement document. This phase is the first step in moving from problem domain to the solution domain. The design of a system is perhaps the most critical factor affecting the quality of the software, and has a major impact on the later phases, particularly testing and maintenance. The output of this phase is the design document. This document is similar to a blue print or plan for the solution, and is used later during implementation, testing and maintenance.

The design activity is often divided into two separate phase-system design and detailed design. System design, which is sometimes also called top-level design, aims to identify the modules that should be in the system, the specifications of these modules, and how they interact with each other to produce the desired results. At the end of system design all the major data structures, file formats, output formats, as well as the major modules in the system and their specifications are decided.

A design methodology is a systematic approach to creating a design by application of set of techniques and guidelines. Most methodologies focus on system design. The two basic principles used in any design methodology are problem partitioning and abstraction. A large system cannot be handled as a whole, and so for design it's partitioned into smaller systems. Abstraction is a concept related to problem partitioning. When partitioning is used during design, the design activity focuses on one part of the system at a time. Since the part being designed interacts with other parts of the system, a clear understanding of the interaction is essential for property designing the part.

4.2. UML Diagrams

UML Diagrams is a rich visualizing model for representing the system architecture and design. These diagrams help us to know the flow of the system.

Some of them are:

- Use case diagram
- Sequence diagram
- Collaboration diagram
- State chart diagram

USE CASE DIAGRAMS

A Use Case Diagram in the Unified Modelling Language (UML) is a type of behavioural diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases.

The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted. Interaction among actors is not shown on the use case diagram. If this interaction is essential to a coherent description of the desired behavior, perhaps the system or use case boundaries should be re-examined. Alternatively, interaction among actors can be part of the assumptions used in the use case.

Use cases:

A use case describes a sequence of actions that provide something of measurable value to an actor and is drawn as a horizontal ellipse.

Actors:

An actor is a person, organization, or external system that plays a role in one or more interactions with the system.

System boundary boxes:

A rectangle is drawn around the use cases, called the system boundary box, to indicate the scope of system. Anything within the box represents functionality that is in scope and anything outside the box is not.

Four relationships among use cases are used often in practice.

Include:

In one form of interaction, a given use case may include another. "Include is a Directed Relationship between two use cases, implying that the behaviour of the included use case is inserted into the behaviour of the including use case.

The first use case often depends on the outcome of the included use case. This is useful for extracting truly common behaviours from multiple use cases into a single description. The notation is a dashed arrow from the including to the included use case, with the label "«include»". There are no parameters or return values. To specify the location in a flow of events in which the base use case includes the behaviour of another, you simply write include followed by the name of use case you want to include, as in the following flow for track order.

Extend:

In another form of interaction, a given use case (the extension) may extend another. This relationship indicates that the behaviour of the extension use case may be inserted in the extended use case under some conditions. The notation is a dashed arrow from the extension to the extended use case, with the label "«extend»". Modellers use the «extend» relationship to indicate use cases that are "optional" to the base use case.

Generalization:

In the third form of relationship among use cases, a generalization/specialization relationship exists. A given use case may have common behaviours, requirements, constraints, and assumptions with a more general use case. In this case, describe them once, and deal with it in the same way, describing any differences in the specialized cases. The notation is a solid line ending in a hollow triangle drawn from the specialized to the more general use case (following the standard generalization notation

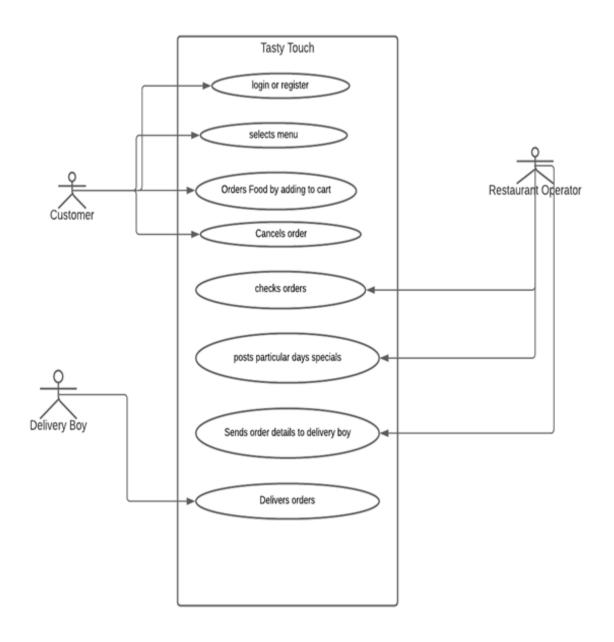
Associations:

Associations between actors and use cases are indicated in use case diagrams by solid lines. An association exists whenever an actor is involved with an interaction described by a use case. Associations are modelled as lines connecting use cases and actors to one another, with an optional arrowhead on one end of the line. The arrowhead is often used to indicating the direction of the initial invocation of the relationship or to indicate the primary actor within the use case.

Identified Use Cases

The "user model view" encompasses a problem and solution from the preservative of those individuals whose problem the solution addresses. The view presents the goals and objectives of the problem owners and their requirements of the solution. This view is composed of "use case diagrams". These diagrams describe the functionality provided by a system to external integrators. These diagrams contain actors, use cases, and their relationships

USE CASE DIAGRAM FOR ONLINE FOOD DELIVERY SYSTEM:



CLASS DIAGRAM:

In software engineering, a class diagram in the Unified Modeling Language is **a type of static structure diagram** that describes the structure of a system by showing the system's classes, their attributes, operations and the relationships among objects. Purpose of Class Diagrams

- Shows static structure of classifiers in a system
- Diagram provides a basic notation for other structure diagrams prescribed by UML
- Helpful for developers and other team members too
- Business Analysts can use class diagrams to model systems from a business
 A UML class diagram is made up of:
- · A set of classes and
- A set of relationships between classes

CLASS NAMES: Customer, Server, Delivery Boy, Restaurant Operator

ATTRIBUTES:

<u>For Customer</u>: LoginId, Name, Phone number, Address, MailId, Password <u>For Server</u>: CustomerDetails, RestaurantList, FoodItemList, Menu, Cart

For Delivery Boy: CustomerName, CustomerAddress, Amount

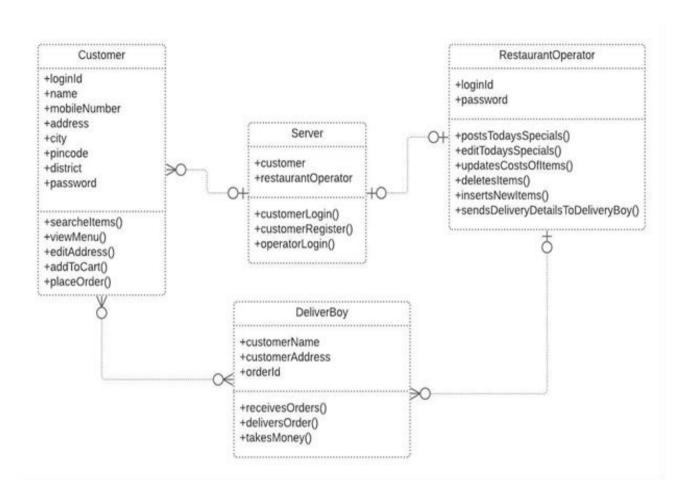
<u>For Restaurant : Operator</u>: Customer Name, Order Details, upload Food Items, delete Food Items, Maintaing Today Specials, Confirms Order

OPERATIONS:

For Customer: Select Menu(), SearchFood(), AddItem(), orderOnline(), EditCart()

<u>For Server</u>: CheckLogin(), DisplayFood(), GetPrice() <u>For Delivery Boy</u>: DeliverFood(), ReceiveAmount()

CLASS DIAGRAM FOR ONLINE FOOD DELIVERY SYSTEM:



SEQUENCE DIAGRAMS:

Sequence Diagrams are interaction diagrams that detail how operations are carried out. They capture the interaction between objects in the context of a collaboration. Sequence Diagram captures:

- the interaction that takes place in a collaboration that either realizes a use case or an operation.
- high-level interactions between user of the system and the system, between the system and other systems, or between subsystems.

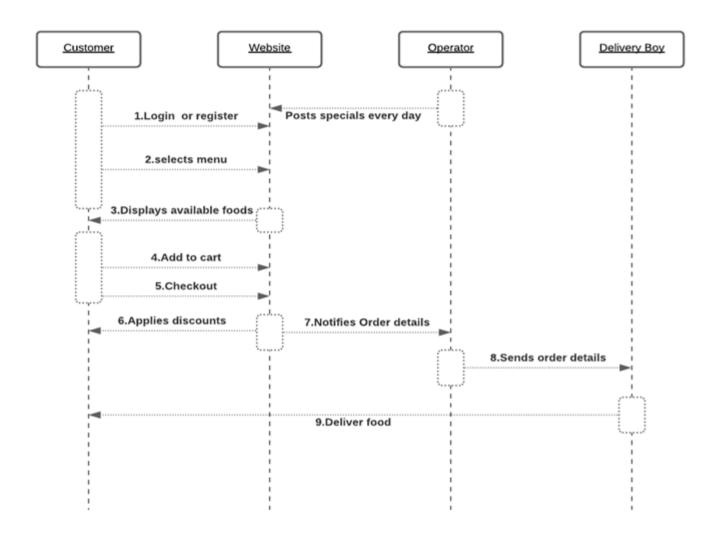
Purpose of Sequence Diagram

- Model the high-level interaction between active objects in a system.
- Model the interaction between object instances within a collaboration that realizes a
 use case.
- Model the interaction between objects within a collaboration that realizes an operation.
- Either model generic interactions or specific instances of a interaction.

OBJECTS: Customer, Server, Delivery Boy.

The customer logins the website and selects the restaurants or food items and add them to the cart. The customer places the order and the server sends the information to the delivery boy. The Delivery Boy delivers the order.

SEQUENCE DIAGRAM FOR ONLINE FOOD DELIVERY SYSTEM:



ACTIVITY DIAGRAMS:

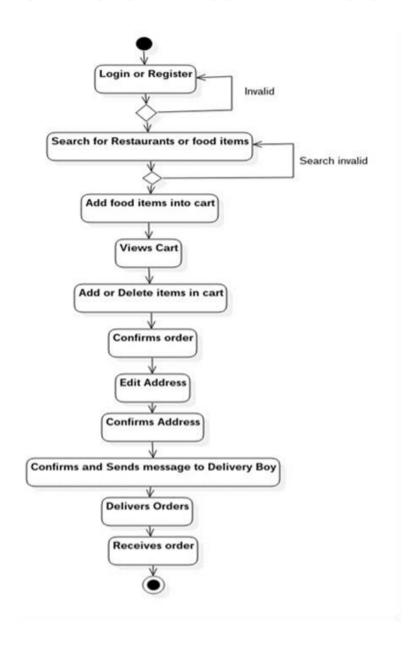
Activity diagram is another important behavioral diagram in uml diagram to describe dynamic aspects of the system. Activity diagram is essentially an advanced version of flow chart that modeling the flow from one activity to another activity.

Purpose of Activity Diagrams

- Draw the activity flow of a system.
- Describe the sequence from one activity to another.
- Describe the parallel, branched and concurrent flow of the system.

First the customer enters the credentials. If the credentials are invalid he must login again otherwise the website will be opened. If the customer searches for the food item which is available in the website then he can add that food items into cart otherwise, he need to search again. The food items which are added to the cart will be displayed with the price and the customers can order it.

ACTIVITY DIAGRAM FOR ONLINE FOOD DELIVERY SYSTEM:



5. SYSTEM IMPLEMENTATION

5.1. Introduction

Online ordering system that we are proposing here greatly simplifies the ordering process for both the customer and the restaurant. System presents an interactive and upto-date menu with all available options in an easy to use manner. Customer can choose one or more items to place an order which will land in the Cart. Customer can view all the order details in the cart before checking out. At the end, customer gets order confirmation details. Once the order is placed it is entered in the database and retrieved in pretty much real time. This allows Restaurant Employees to quickly go through the orders as they are received and process all orders efficiently and effectively with minimal delays and confusion. "Tasty Touch" is a website designed primarily for use in the food delivery industry. This system will allow hotels and restaurants to increase scope of business by reducing the labor cost involved. The system also allows to quickly and easily manage an online menu which customers can browse and use to place orders with just few clicks. Restaurant employees then use these orders through an easy to navigate graphical interface for efficient processing.

5.2 Project Modules

1. Launch Page:

In launch page both customer and operator any one can login . If the customer did not have an account, he/she has to register in order to create an account to use the website. The customer is asked to enter the details like name, phone number, email id, address, city, pin code, district, state and password to create an account. All these details will be stored in the database.

2. Admin Menu Page:

In this page operator can upload new food items or he can also edit the existing food items like cost.

3. Customer Menu Page:

After the customer has entered the website, the customer is displayed a list of Categorical Menu. He can select any menu from the page to view items in that selected menu page. The food items are Veg, Non-Veg, Today Specials, Starters, Ice creams, Milkshakes.

4. Food Items:

When the customer open any menu from the menus page, he will be directed to the food items of that particular menu he can order anything he want. When the customer selects any of these food items, he will be displayed all the list of the items of the respective food item. The customer can add the item into the cart if he/she wants to order the food.

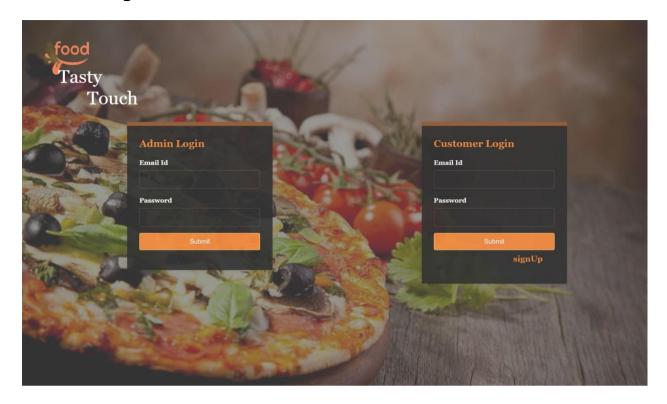
5. Cart:

All the items the customer selected will be added into the cart page. In this page the customer can also delete the food items he doesn't want to order. The cost of the items and the total cost will also be displayed. The customer has to checkout and enter his address to order the food.

6.Orders Page:

In this page restaurant operator can view the orders placed by the customer so that he will accept the orders and sends details to the delivery boy.

1.Launch Page:



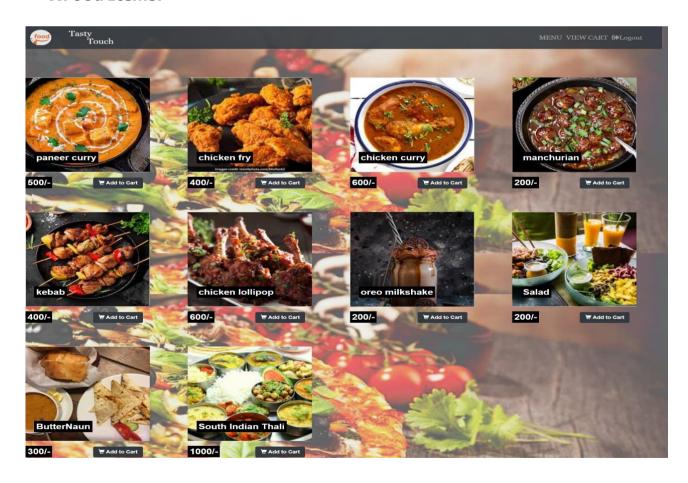
2.Admin Menu Page:



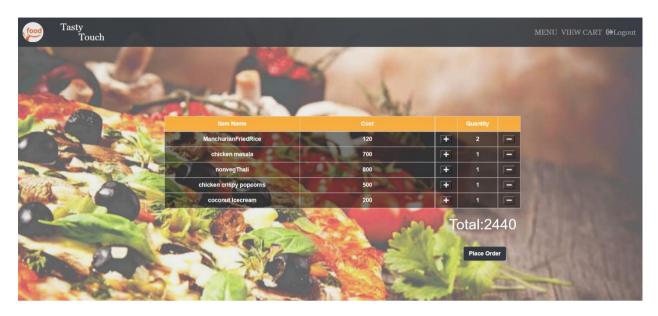
3. Customer Menu Page:



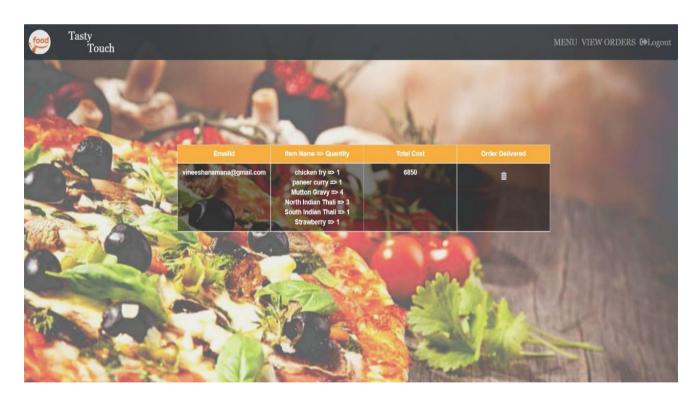
4.Food Items:



5.Cart:



6.Orders Page:



6. SYSTEM TESTING

6.1. Introduction:

Software Testing is an important element of the software quality assurance and represents the ultimate review of specification, design and coding. The increasing feasibility of software as a system and the cost associated with the software failures are motivated forces for III planned through testing.

TESTING OBJECTIVES

These are several rules that can save as testing objectives:

- Testing is a process of executing program with the intent of finding an error.
- A good test case is one that has a high probability of finding an undiscovered error.

Test Levels

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or darkness in a work product. It provides a way to check the functionality of components, sub assemblies, assemblies and/or a finished product. Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

6.2. Testing Methods

Unit Testing

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flow should be validated. It is the testing of individual software units of the application.

Integration Testing

Integration tests are designed to test integrated software components to determine if they run as one program. Testing is event driven and is more concerned with the basic outcome of screens or fields.

Functional Testing

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements, system documentation, and user manuals. Organization and preparation of functional tests is focused on requirements, key functions, or special test cases.

System Testing

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test.

White Box Test

White Box Testing is a testing in which in which the software tester has knowledge of the inner workings, structure and language of the software, or at least its purpose. It is purpose. It is used to test areas that cannot be reached from a black box level.

Black Box Test

Black Box Testing is testing the software without any knowledge of the inner workings, structure or language of the module being tested. Black box tests, as most other kinds of tests, must be written from a definitive source document, such as specification or requirements document, such as specification or requirements document.

Unit Testing

Unit testing is usually conducted as part of a combined code and unit test phase of the software lifecycle, although it is not uncommon for coding and unit testing to be conducted as two distinct phases.

Integration Testing

Software integration testing is the incremental integration testing of two or more integrated software components on a single platform to produce failures caused by interface defects.

Acceptance Testing

User Acceptance Testing is a critical phase of any project and requires significant participation by the end user.

7. CONCLUSION

The system is developed in considering all issues related to all customer which are included in this project. Wide range of people can use this if they know how to operate android smart phone. Various issues related to Mess/ Tiffin Service will be solved by providing them a full fledged system. Thus, implementation of Online Food Ordering system is done to help and solve one of the important problems of people. Based on the result of this research, it can be concluded: It helps customer in making order easily; It gives information needed in making order to customer. The Food website application made for restaurant and mess can help restaurant and mess in receiving orders. With online food ordering system, a restaurant and mess menu online can be set up and the customers can easily place order. Also with a food menu online, tracking the orders is done easily, it maintain customer's database and improve the food delivery service. The restaurants and mess can even customize online restaurant menu and upload images easily. Having a restaurant menu on internet, potential customers can easily access it and place order at their convenience.

8. Bibliography

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- 1. Joel Murach and Michael Urban, "Murach's Java Servlets and JSP", 3rd Edition, Published June 2014.
- 2. K. Santosh Kumar, "JDBC, Servlets, and JSP Black Book", New Edition, Publisher: Dreamtech Press India Pvt. Ltd, Published: May 13 2008.

For Website References

<u>Java-web, Servlet and JSP Tutorial - edu4Java</u> <u>JDBC Tutorial - Tutorialspoint</u>

9. APPENDIX

9.1. Introduction to Java

Java is a popular programming language, created in 1995. It is owned by Oracle, and more than **3 billion** devices run Java.

It is used for:

- Mobile applications
- Desktop applications
- Web applications
- Web servers and application servers
- Games
- Database connection
- And much, much more!

Uses of Java

- Java works on different platforms (Windows, Mac, Linux, Raspberry Pi, etc.)
- It is one of the most popular programming language in the world
- It is easy to learn and simple to use
- It is open-source and free
- It is secure, fast and powerful
- It has a huge community support (tens of millions of developers)
- Java is an object oriented language which gives a clear structure to programs and allows code to be reused, lowering development costs
- As Java is close to C++ and C#, it makes it easy for programmers to switch to Java or vice versa

9.2. Introduction to HTML

HTML stands for Hyper Text Markup Language. It is used to design web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. Markup language is used to define the text document within tag which defines the structure of web pages. This language is used to annotate (make notes for the computer) text so that a machine can understand it and manipulate text accordingly. Most of markup (e.g. HTML) languages are human readable. Language uses tags to define what manipulation has to be done on the text. HTML is a markup language which is used by the browser to manipulate text, images and other content to display it in required format. HTML was created by Tim Berners-Lee in 1991. The first ever version of HTML was HTML 1.0 but the first standard version was HTML 2.0 which was published in 1999.

<DOCTYPE! html>: This tag is used to tells the HTML version. This currently tells that the version is HTML 5.

<html>: This is called HTML root element and used to wrap all the code.

<head>: Head tag contains metadata, title, page CSS etc. All the HTML elements that can be used inside the <head> element are:

- <style>
- <title>
- <base>
- <noscript>
- <script>
- <meta>
- <title>

<body>: Body tag is used to enclosed all the data which a web page has from texts to links. All of the content that you see rendered in the browser is contained within this element.

9.3.Introduction to MySQL

MySQL is a database system used for developing web-based software applications. MySQL used for both small and large applications. MySQL is a relational database management system (RDBMS). MySQL is fast, reliable, and flexible and easy to use. MySQL supports standard SQL (Structured Query Language). MySQL is free to download and use. MySQL was developed by Michael Wideners and David Axmark in 1994. MySQL is presently developed, distributed, and supported by Oracle Corporation. MySQL written in C, C++.

Features of MySQL

MySQL server design is multi-layered with independent modules. MySQL is fully threaded by using kernel threads. It can handle multiple CPUs if they are available. MySQL provides transactional and non-transactional storage engines. MySQL has a high-speed thread-based memory allocation system. MySQL supports in-memory heap table. MySQL Handles large databases MySQL Server works in client/server or embedded systems. MySQL Works on many different platforms. Some of the most famous websites like Facebook, Wikipedia, Google (not for search), YouTube, Flickr. Content Management Systems (CMS) like WordPress, Drupal, Joomla, phpBB etc. A large number of web developers worldwide are using MySQL to develop web applications.

9.4 Introduction to JDBC:

JDBC stands for Java Database Connectivity, which is a standard Java API for database-independent connectivity between the Java programming language and a wide range of databases.

The JDBC library includes APIs for each of the tasks mentioned below that are commonly

- Making a connection to a database.
- Creating SQL or MySQL statements.
- Executing SQL or MySQL queries in the database.
- Viewing & modifying the resulting records.