# Project

Web Development 2021/2022

*Theme: Food Order and Delivery Web Application*

**Goals:**

The main idea and goal behind this project are to provide food service and opportunity for work.

Our project idea was based on problem solving concept. As growing stress in work and not being able to have a proper meal on time, we are here to solve the problem that this growing world is facing nowadays. After all days of the stressful jobs what a human body want is proper sleep which depends upon the proper meal human have. It takes a long to cook, eat and wash the dishes. So, with partnership with multiple restaurant owners and any food service company. We have goal to provide the customer’s choice food, hot dinner on time. And not only that restaurant will also be able to sell their food and jobless people will also get the job to deliver the food on correct location on time.

Delivery guy will be provided kilometer measurer for their devices so later their total kilometer can be noted by company from device and would be paid depending on their total kilometer traveled.

**Functional Requirement:**

As of the project requirement project must be dynamic. The main idea behind project is to implement a solution for a problem of management and the data manipulation. Every web application has its own functional requirement. So, our web application also has some of the functional requirement. And they are as following: -

* The system must allow users to login from same login interface where they have option to choose the role of users.
* The system must allow users to login their account by using their username or email and password.
* The system must provide user interface to the all the users depending on their roles.
* The system must allow users to reset password using the forgot password label.
* The system must perform the basic crud operations.
* The system must provide dashboard section every user to show important data in more enhanced option and in visual way.
* The system must allow the user to view the cart of orders.
* The system must allow user to view restaurant details and menus and allow user to choose quantity.
* The system must allow restaurant to make changes on availability of food.
* The system must notify the restaurant about orders and should automatically add payment to revenue.
* The system must allow delivery guy to choose status of availability and should notify free delivery guy about orders.
* The system should provide search filter to customers.
* The system must provide unique code to every order and food for verification
* The system must auto generate id for all users and other useful entities.
* The system must provide ability to every user to confirm their task completion options so that system can work properly, and there will be no fraud activity.

These are the some of the basic and overview of the functional requirements but as project goes in development process there can be addition of more features and we can add more functional requirements.

**Site Map of the website:**

Site Map is visual representation of website where you provide information about the pages and flow of pages. In a simple word you can say that site map helps people to visualize the structures of a website.

It is like designing how house should look like before building. Before you build house, you need structural architectural information. It is same but in the context of website. You need to describe all the pages and need to interconnect the pages to describe the flow.

For our food services website also, we have created sitemap. To visualize

the interconnection of the pages of our site. Although we are visualizing the connection and haven’t implemented in code. But in future there can be furthermore addition or deletion of some pages. So here are sitemaps made by using ***“Google Drawings”***:

**Diagram, timeline

Description automatically generatedHome and Customer Sitemap:**

Fig: Site Map for the Landing Page and Customer Logged in Landing Page

**Delivery Guy and Restaurant Partner Sitemap**

**Diagram, timeline

Description automatically generated**

Fig: Sitemap for the registered delivery guy and for restaurant partner

**Admin Sitemap:**

Admin has the control over all the users and orders in the system. Here is how the sitemap of the admin look like:

Diagram

Description automatically generated

Fig: Sitemap for the logged in Admin

Use-Case Diagram

Use case diagrams are usually referred to as behavior diagrams used to describe a set of actions (use cases) that some system or systems (subject) should or can perform in collaboration with one or more external users of the system (actors). Each use case should provide some observable and valuable result to the actors or other stakeholders of the system.

For the web application of food-delivery system I have created use-case diagram. I have created use case diagram for each module using ***“Visual Paradigm Community”*** as you can see down below: -

Diagram

Description automatically generated**Admin Use-Case Module:**

Fig: Use-Case Diagram for Admin

In this module admin is involved. Admin login to the web application. After the login admin can manage all the users and orders, menus. It can perform CRUD operations to every entity.

**Diagram

Description automatically generatedCustomer Use-Case Module:**

Fig: Use-Case Diagram for the Customer

In this module Customer is involved. Customer can login or register to the web application. After the login Customer can make order, add food items to cart, make order and make payment. Customer can cancel order also.

Customer can edit its profile and navigate restaurant and food menus.

**Delivery-Guy Use-Case Module:**

**Diagram

Description automatically generated**

Fig: Use-Case diagram for the Delivery Guy

In this module Delivery Guy is involved. Delivery Guy can login or register to the web application. After the login Delivery Guy can turn on and off their status of availability. They can view their past orders. And depending on their active status they will receive new orders if they are free. And has option to accept and cancel order. They have access to modify their profile only.

**Diagram

Description automatically generatedRestaurant Use-Case Module:**

Fig: Use-Case Diagram for the Restaurant Partner

In this module Restaurant partner is involved. Restaurant partner can login or register to the web application. After the login restaurant can view order, perform CRUD operations to menu items. And edit availability of the food items.

Restaurant partners can edit its profile info for users and perform other security operations.

**Overall System Use-Case Module:**

Diagram

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Fig: - Use Case Diagram of overall system

In this module all actors are involved. Admin has main control over system. This use-case diagram shows the overall working of the system. How action of one actor interact with another actor.

**Entity-Relationship Diagram:**

Entity Relational Diagram simply ER diagram is the relational diagram that shows the relationship of entities that are set to be stored in database. It illustrates logical structure of databases. This diagram is a way to logically group objects such as tables, views, stored procedures etc. Think of this diagram as a container of objects.

Diagram

Description automatically generated“An entity-relationship diagram (ERD) is a graphical representation of an information system that shows the relationship between people, objects, places, concepts or events within that system. An ERD is a data modeling technique that can help define business processes and can be used as the foundation for a relational database.” Here is the ER-Diagram for website using the ***“MySQL Workbench”****:*

Fig: - ER Diagram for the data of Food Service Website

**Wireframes:**

Wireframe is not complete designing of the website. But it is design of website pages which only give surficial design information of how the website pages will look. It contains information like where will be cards, box, sidebar, navbar, header, footer. And how will all these design panels will locate in the page. So, using the application ***“Pencil”*** here are some wireframes of the major pages of our food service website:

**Table

Description automatically generatedLanding Home Page Wireframe:**

Fig: - Wireframe for the landing page in website

**Services Page Wireframe for Customer:**

Graphical user interface

Description automatically generated with medium confidence

Fig: Wireframe for the Services Page

**Login Page Wireframe:**

A picture containing diagram

Description automatically generated

Fig: Wireframe of the login page

A picture containing shape

Description automatically generated **Registration Page Wireframe:**

Fig: - Wireframe of the registration page

**Graphical user interface, application

Description automatically generated All Users Dashboard Wireframe:**

Fig: - Wireframe of the Dashboard for all Users

Mockup:

Mockup are made using wireframe. We can say mockup in more of wireframe but contains more detail information of page. It is like house design along with interior design. Mockup is the schematic visualization of the website layout filled with all elements and web blocks and panels. Here are some of the mockups of our website built using “Pencil”. So below are the five major pages mockup: -

**Graphical user interface

Description automatically generatedMenu Editing Page Mockup for Restaurant Partner: -**

Fig: Mockup of Menu Editing Page of Logged in Restaurant Partner

Graphical user interface

Description automatically generated**Customer Registration Page Mockup for Users: -**

Fig: - Mockup of the customer registration page

A picture containing graphical user interface

Description automatically generated**All Users Sign in Page Mockup: -**

Fig: - Mockup of login page for all users

**Admin Dashboard Mockup: -**

Graphical user interface

Description automatically generated

Fig: Mockup of Admin Dashboard

Graphical user interface

Description automatically generated**Customer Home Page Mockup: -**

Fig: Mockup of Customer Home Page

**Conclusion:**

All the images provided above pages along with short information are the necessary steps every developer must follow before starting to implement the web application.

Designing the website play very vital role in development of website. Hence designing is the part of development of website. Designing helps to visualize team how website will work and how it should look like and what are entities involved.

In our web designing process, we have performed following implementation: -

* First noted our website idea superficially basically we can call theme of project and we noted website functionality which it must perform. As development is not instantaneous, it is process which grows and progress with time. There can be some changes to the operation and addition of new ideas also.
* For the development first we created wireframes and mockup using the ***“Pencil”*** Application.
* Then we created use-case diagram using ***“Visual Paradigm”*** to show the interaction of actor to with use-cases in website.
* Then we created sitemap using ***“Google Drawing”*** to show the interconnection between pages of website.
* At last, we created the Entity Relationship Diagram using ***“MySQL Workbench”*** application to show the relationship of entities that are set to be stored in database.

**Future Development Plan:**

On the day-to-day life development of technology has made super easier. For the people struggling to have a proper hot meal and who are tired of having home food but want to have a proper restaurant quality meal with proper services our website application will come to play vital role to solve that problem which people are facing in today’s busy world.

Since designing, gathering entities, understanding and creating relationship are completed. For our web application furthermore development our team will be using the page designing language like HTML CSS and making it responsive we will be using JavaScript. Website must be dynamic and have well designed database to reduce the time of access between pages, so for that we will be using server-side scripting language PHP and it is fast and has C language like syntax and database language MySQL.

Thank you!!!

**-Professor** **-Group No. 18**

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