

**Term of Reference**

Information Systems Management

An Exclusive website for

eat-in / take-away Restaurant

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Background to the project

Running a restaurant is challenging business in today’s world. The biggest concern for business owners of the restaurant is to face one of the major issues like managing orders over the phone or in-person. Delay in delivering orders, mis-match order deliveries, this may lead to bring big loss in the business and customer dissatisfaction. The expectation of the customers is to have good quality of food, good taste and good customer service which is not always the case. There has been a lack of technology and solutions in place to manage and handle the above concerns.

This project looks at implementing an real time website for the restaurant business using MVC (Model View Controller) technology, latest version of Visual Studio as front-end tool, MS SQL as back-end tool, JavaScript/AJAX functions shall be used to support the application, CSS Bootstrap shall be used for frontend designing to fulfil the business needs and which shall help in efficient handling of the BAU activities.

Deliverables – What documents and other artefacts you will produce for the project?

* Final Report – Dissertation
* Full running website application for a restaurant – Note: The website will be belonging to the real client; therefore, domain or hosting control panel access of the website will not be provided to the university.

Academic Objectives – What you want to learn from the experience?

* By implementing real time website, I will have the opportunity to interact with the real time client and collect the requirements from the client to develop website.
* Willing to learn about the MVC (model View Controller) Technology.
* To learn about the C# coding in developing the website.
* Gain more deep knowledge in the database with using MS SQL.
* Like to design the webpages using the bootstrap.
* To make the most interactive and smart use of the website.
* Want to be a best web developer.

Research Questions

* What frameworks are used to implement a successful website?
* How can a website be implemented by using the ASP.NET MVC (Model View Controller) technology?
* How communication and good understanding between you and client can make you build a good website?
* Why is the web-designs important for the website?
* How a data warehouse or a database can be designed for the project in MS SQL?
* What are the methods and system to improve security of website?
* How can you link website quality with customer loyalty?
* How to test each feature after development of the project?
* How can you setup deployment environment of the project?
* What is the existing payment API’s and how they can support the website?
* How can a system architecture be implemented to help the development website application?

Background Research Objectives

* To review find out what the different development framework that develop website application.
* To develop a web application for the purposes of supporting a food business.
* Find out the different application programming interfaces that will allow you to accept payment.
* To learn how to use MVC (Model View Controller) technology to build a website.

Product Objectives

* Fully working website for a restaurant business.
* The front-end coding will be done in latest version of the Visual Studio as front-end tool.
* All the information and the data will be stored in the database which be used as MS SQL back-end tool for the website.
* Use of Java scripts/AJAX function will be done to make the flow of the application very smoothly.
* CSS bootstrap will be used to design the web pages/website or also the templates can be used from the internet to design the website.
* Asynchronous java script calls may be used to perform data manipulation transactions.

Resource Required and Constraints

Resources

* Laptop with windows 7 or 10 / Macintosh OS which has minimum of 4GB RAM.
* Latest version of Visual Studio 2019 / 2017.
* Latest version of MS SQL.

Constraints

* The budget of the website.
* Impact in the design of the website as per the client’s requirements.
* To meet the deadline of the clients.
* The design flexibility of the webpage.

Risk Assessments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk identification** | **Probability** | **Impact** | **Assessment (i.e. combine probability and impact)** | **Risk monitoring, mitigation and management** |
| Loss or lagging of Internet Connection | High | High | High | Using a mobile data as backup as hotspot connectivity and Better internet service provider, upgrade to high speed Mbps |
| Hacking of the website | Medium | High | Medium | Purchase SSL certificates for the organizations which allows secure connections from a web server to a browser |
| Crashing of applications | Medium | High | Medium/High | Using the latest and updated version of the applications. |
| User Cookies/Client-side cookies | Low | Low | Low | Using updated version of the browser and high configured laptop/PC |
| Payment gateway (3rd party integration) | Medium | High | Medium/High | Can provide different payment options to the customer |
| Logical errors | Medium | Medium | Medium | Exception handling / Unit test project |
| Data migration / Population | Medium | High | Medium/High | Gathering requirements from the client precisely with an agreed signed document and avoiding scope creep |
| In case of Laptop Crash/Laptop Stolen or Disk Crash | High | High | High | Store the project on cloud. Ex: GitHub |

Appendices

1. Schedule of Activities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr.No | Task Description | Start Date | Finish Date | Duration |
| 1 | Installing Updated Software’s & updated windows | 02/06/2020 | 03/06/2020 | 1 |
| 2 | 1st meeting with supervisor | 03/06/2020 | 04/06/2020 | 1 |
| 3 | Completing Terms of Reference & Ethic form | 04/06/2020 | 09/06/2020 | 5 |
| 4 | 2nd meeting with supervisor | 09/06/2020 | 10/06/2020 | 1 |
| 5 | 1st meeting with the client | 09/06/2020 | 10/06/2020 | 1 |
| 6 | Gathering requirements from client for the project | 10/06/2020 | 11/06/2020 | 1 |
| 7 | Writing the introduction part | 11/06/2020 | 13/06/2020 | 2 |
| 8 | Acquiring References | 13/06/2020 | 14/06/2020 | 1 |
| 9 | 3rd meeting with supervisor | 13/06/2020 | 14/06/2020 | 1 |
| 10 | Writing background and Literature review of project | 14/06/2020 | 16/06/2020 | 2 |
| 11 | Writing on research methodologies | 16/06/2020 | 18/06/2020 | 2 |
| 12 | Creating templates of website | 18/06/2020 | 20/06/2020 | 2 |
| 13 | 2nd meeting with client | 20/06/2020 | 21/06/2020 | 1 |
| 14 | Working on client feedback | 21/06/2020 | 22/06/2020 | 1 |
| 15 | Converting html template into MVC bootstrap | 22/06/2020 | 30/06/2020 | 8 |
| 16 | Testing of MVC converted templates | 30/06/2020 | 02/07/2020 | 2 |
| 17 | 4th meeting with supervisor | 02/07/2020 | 03/07/2020 | 1 |
| 18 | 3rd meeting with client | 03/07/2020 | 04/07/2020 | 1 |
| 19 | Gathering contents for static web pages from client | 04/07/2020 | 06/07/2020 | 2 |
| 20 | Adding contents to the static web pages | 06/07/2020 | 09/07/2020 | 3 |
| 21 | Designing of static web pages | 09/07/2020 | 14/07/2020 | 5 |
| 22 | Testing of web pages | 14/07/2020 | 16/07/2020 | 2 |
| 23 | 5th meeting with supervisor | 16/07/2020 | 17/07/2020 | 1 |
| 24 | 4th meeting with client | 17/07/2020 | 18/07/2020 | 1 |
| 25 | Working on client feedback | 18/07/2020 | 19/07/2020 | 1 |
| 26 | Planning and designing of dynamic web pages | 19/07/2020 | 21/07/2020 | 2 |
| 27 | Developing a data warehouse on MS SQL | 21/07/2020 | 25/07/2020 | 4 |
| 28 | C# Programming for dynamic web pages | 25/07/2020 | 31/07/2020 | 6 |
| 29 | Data repository method calls to perform DML transactions | 31/07/2020 | 05/08/2020 | 5 |
| 30 | 6th meeting with supervisor | 05/08/2020 | 06/08/2020 | 1 |
| 31 | 5th meeting with client | 06/08/2020 | 07/08/2020 | 1 |
| 32 | Working on client feedback | 07/08/2020 | 09/08/2020 | 2 |
| 33 | Testing all the web pages | 09/08/2020 | 14/08/2020 | 5 |
| 34 | Writing on project implementation | 14/08/2020 | 19/08/2020 | 5 |
| 35 | Describing testing’s and findings | 19/08/2020 | 25/08/2020 | 6 |
| 36 | Writing conclusion | 25/08/2020 | 27/08/2020 | 2 |
| 37 | 7th meeting with supervisor | 27/08/2020 | 28/08/2020 | 1 |
| 38 | 6th meeting with client | 29/08/2020 | 30/08/2020 | 1 |
| 39 | Reviewing the project | 30/08/2020 | 02/09/2020 | 3 |
| 40 | Submit the project | 03/09/2020 | 04/09/2020 | 1 |

A close up of a map

Description automatically generated