PROJECT PROPOSAL

ONLINE SHOPPING STORE SYSTEM

Submitted by: A.P.T.H DE SILVA

SEU/IS/15/MIT/095

Department of Management and Information Technology

Faculty of Management and Commerce

South Eastern University of Sri Lanka

Oluvil

2019

Contents

1. Background /Introduction

An online Shopping Store permits a customer to submit online orders for items and / or service from a store that serves both walk in customers and online customers. The online Store system presents an online display of all the items they want to sell. This web based application helps customers to choose their daily needs and add products to their shopping cart. Customers provide their complete details of address and contact and they get their chosen products in their home. This system is implemented with the help of Html, CSS, Js, Java query is front end PHP is back end.

At present, where records are maintained by hand, without using a computer system. Instead, transactions are written in journals, from which the information is manually rolled up into a set of financial statement.

It can be used efficiently for physically separated shops in different locations. This software will provide in a simple and easy to operate user interface, which can be managed by any user without having prior in-depth knowledge of the computer system. One can use this software to get a sales report. Administrators can pull data, from any location from the server. This software is a complete package for small organizations which will allow them to keep track of their sales and inventory, and provide a computerized billing system which enable the payment process.

There are various applications with more complex implementation and features available in the market, but they are generally very expensive. Therefore, creating an application with the basic requirement of low cost is essential for small organizations. This application will allow stores to manage customer details, keep inventory of all products and purchase information, in a very simple way, using a state-of the-art software application. It will automatically generate invoices and update inventory.
If any time, there is needed to store and retrieve the information about the supplier then I created its solution the helps you to store supplier I and its basic information.

- Business Name : “U Mart” Supermarket
- Business Address : No.256/2, Galle Road, Aluthgama.
- Branch : No.21/2, Mathugama Road, DargaTown.
- Contact No : 0777525233
- Established in : 2018
- No. Of Employees : 10

1.1 Problem Statement

The existing system is opted automation because the existing is too tedious to handle the purchase. In the existing system, they permit a customer to submit online orders for items and/or services from a store that serves both walk in customers and online customers. The online Store System presents an online display of all the items they wants to sell. This web based application helps customers to use choose their daily needs and add products to their shopping cart. The administrator and supporting team work hard to perform all these functions of the system manually. It makes the system to produce very slow performance and wastage of money and time. Also it is difficult to maintain the large volume of data. The manual purchasing is very difficult.

Disadvantages

- Wastage of money.
- As all the data are entered to papers it would be very difficult for further analysis.
- Overall efficiency is less.
- The chance of data loss.
- Time wastage.
- Difficult to search the existing details.

1.2 Objectives

The proposed system is aimed at removing the draw backs of existing system. The records keeping process is done automatically by using this system. In this proposed system as soon as the administrator enters the details he will get the required information. Large volumes of data can stored in the system. To develop a system where there is less time consuming and increased accuracy.

The following are the main objectives of the system.

- To provide faster and efficient method of data management.
- All editing are done in the master data base to help in generating the reports at any time.
- Error not will occur.
- Overall efficiency be increased.
- Search function is very faster performance.
- No chance for data loss.
- To provide information about product in a different category.

1.3 Project scope

This study covers the design and implementation of an online shopping store system. This software basically provides the shopping store system. The aim of project keeping is that this software will have adequate life.

“Umart” is a shopping store. Now they are using manual system. But day to their business growing up quickly. In this reason “Umart” management want to implement new online store system to improve their business. New propose system customer can visit “Umart” web site and order their products and also “Umart” delivery ordered products in customer’s home.

The scope of this system can be categorized by the computerization of the following task.

Save time : The peoples have navigational freedom and easy roam round options in online shopping system. They can purchase instantly whatever they want without any travel.

Get a better selection: People can select better product through the online store shopping system because they can view all kind of the description about the product.

Better value/offer: Online supermarket shopping system must deliver the product right at the Peoples doorsteps and nowhere else.

Flexible return policy: Replacement of the product should be possible in this system.

1.4 Motivation of the Project

Since twenty first century Information Technology (IT) is widespread, all businesses use IT to do their business. Therefore “Umart” management want to implement a new online store system to do their business with customers directly.

The Internet has revolutionized the way we shop. Because of the numerous advantages and benefits more and more people these days prefer buying things online over the conventional methods of going into stores.

Further, there are motivated to make this online store system for the following reasons.

- Global access, 24 hours a day, 7 days a week.
- Improve client service through greater flexibility.
- Cost savings.
- Faster delivery of products.
- Increase professionalism.
- Less paper waste.
- Opportunities to manage their business from anywhere in the world.

2. Background Analysis

In today's market, retailers and wholesale outlets should quickly adapt to the ever changing technology to minimize overhead, lower cost of operation, and help to stay competitive. Everybody needs software, which can facilitate store operations and make their day to day lives much easier.

Online Shopping Store System is a website designed to take advantage of today's technology and directly connect their customers easily.

The Software Development Life Cycle (SDLC) was chosen as the system development method. The SDLC process involves in several distinct stages, including planning, analysis, design, building, testing, deployment and maintenance.

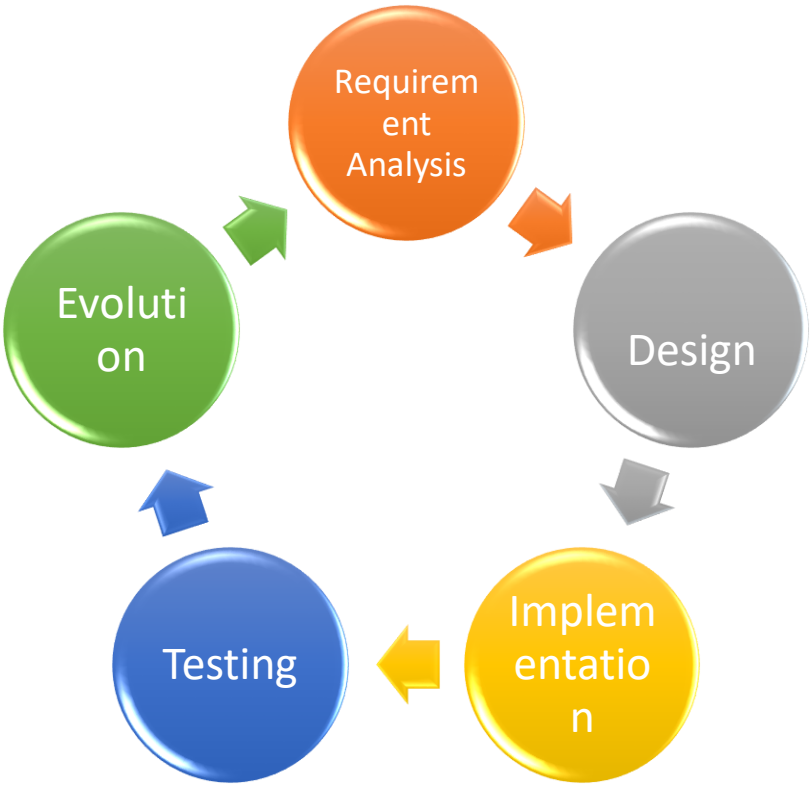
In the background analysis of proposed system it includes the details of review relevant theory, background analysis for the proposed system, advantages and disadvantages of existing system. It also comprises the functions of the proposed system through the background analysis and provides the solution to overcome the problems in the manual system. The proposed system also provides a better solution for the "Umart online shopping store system" .

3. Project Methodology

An effective System Development Life Cycle (SDLC) should result in a high quality system that meets customer expectations, reaches completion within time and cost evaluation and works effectively and efficiently in the current and planned Information Technology infrastructure.

System Development life Cycle is a conceptual model which includes policies and procedures for developing or altering system throughout their cycles.

Therefore, it may be require to choose the right SDLC model according of the specific concerns and requirement of then project to ensure its success .SDLC used during the phases in the life cycle software application.



3.1 Requirement Analysis

Requirement analysis also called requirements engineering is the process of determining user expectations for a new or modified product. Requirements analysis involves frequent communication with system users to determine specific feature expectations resolution of conflict or ambiguity in requirements as demanded by the various users or group of users avoidance of features creep and documentation of all aspects of the project development process from start to finish. Energy should be directed towards ensuring that the final system or product confirms to client needs rather than attempting to mold user expectation to fit the requirements.

Requirements analysis is a team effort that demands a combination of hardware, software and human factors engineering expertise as well as skills dealing with people.

This system is an online shopping store system for "Umart Super market". Their existing system is a manual system. But is difficult to customers and they maintain, conduct and other processes. In these days all works are doing by online because people use online systems for their day to day activities. Their manual supermarket all works are doing manually. Their purchasing process, selling process and delivering processes are doing manually.

Therefore they decided to implement a new online system for their Umart supermarket. It is easy and comfortable to customers and themselves. By the newly system they decide to give customers to online ordering facility. Ordering is the basic requirement in this business. Customers should pay for goods by cash but it is not secure. Sometimes customers doing frauds. Because their new system , this frauds are missing. So this all needs and wants they decided to implement a new online shopping store system for Umart Supermarket.

3.2 Feasibility of the project

The objectives of feasibility study is to determine where or not the proposed system is feasible. The feasibility is determined in terms of four aspects. These are:

Technical Feasibility

In this one has to test whether the system can be developed using existing technology or not. It is evident that necessary hardware and software available for development and implementation of proposed system. We acquired the technical knowledge of working in languages and then only we have started designing our project.

Behavioral Feasibility

The customers are using different types of peripherals devices. This system is capable of providing user friendly interface for all devices (Like laptops, mobile phone).

Economical Feasibility

As a part of this the cost and benefits associate with the proposed system are compared and the project is economically feasible only if tangible and intangible benefits outweigh the cost. The cost for proposed online shopping store system is outweighing the cost and efforts involved in maintaining the registers, books, files and generation of various reports. The system also reduces the administrative and technical staff to do various jobs that single software can do. So this system is economically feasible.

Legal Feasibility

Legal feasibility determines whether the proposed system conflict with legal requirements. E.g the Data Protection Act. It will be done by some legal advisors.

3.3 Design, Testing and Development

- **Design**

Customers are attracted online shopping not only because of high levels of convenience but also because of broader selections, competitive pricing and greater access to information. Business organizations seek to offer online shopping not only because it is much lower cost compared to traditional shopping system and also because it offers access to a worldwide market , increases customer value and build a sustainable capability.

System analysis and design has consisted identifying requirement and summarizing. Thus, it will prepare the structure and interface design. So, and provide make modeling the existing system using a context data flow diagram. The concept makes modeling the new system using the context and draw modeling an Entity relationship (ER) diagram. The proposed solution will be architected with UML diagrams and with this foundation, the proposed system must be generated to deploy in the client organization.

- **Testing**

The process of an integrated hardware and software system to verify that the system meets its specified requirements. To test the system as a whole requirements and expectations should be clear and the tester needs to understand real time usage of application too. It is an obvious fact that every system needs to be test before it goes for the initial working environment. Each unit is developed and test for its functionality. This is called as unit testing. Then, these units are integrated into complete system and test to check if all units coordinate between each other. This is called integrated testing and system testing will be done. Finally, the system will be handover to the customer to user testing. Each component or unit of the system will be tested to remove the errors and incompatibilities of the generated system. Unit and integration testing will be taken first and then the installation testing done.

Unit Testing

In computer programming unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures are tested to determine whether they are fit for use.

Integration Testing

Integration testing is the phase in software testing in which individual software modules are combined and tested as a group. Integration testing is conducted to evaluate the compliance of a system or component with specified functional requirements. It occurs after unit testing and before validation testing.

- **Development**

The concept of development has based on the design; the system can design using SQL server, PHP, Java Script and other programming language in its developing an environment.

4. Hardware Software Tools for the Development and deployment

Hardware Technology Consideration

- Processor : core i5
- Processor speed : 2.40 GHz
- Memory : 8 GB RAM
- Hard Drive : 1 TB
- Printer
- Keyboard and Mouse

Software Technology Consideration

- Operating System : Windows 10
- Front End : CSS(bootstrap)
  Java Script, Java query
- Back End : PHP

Graphics Design Tools Technology Consideration

- Adobe Photoshop CS6

5. Propose Budgetary Requirement

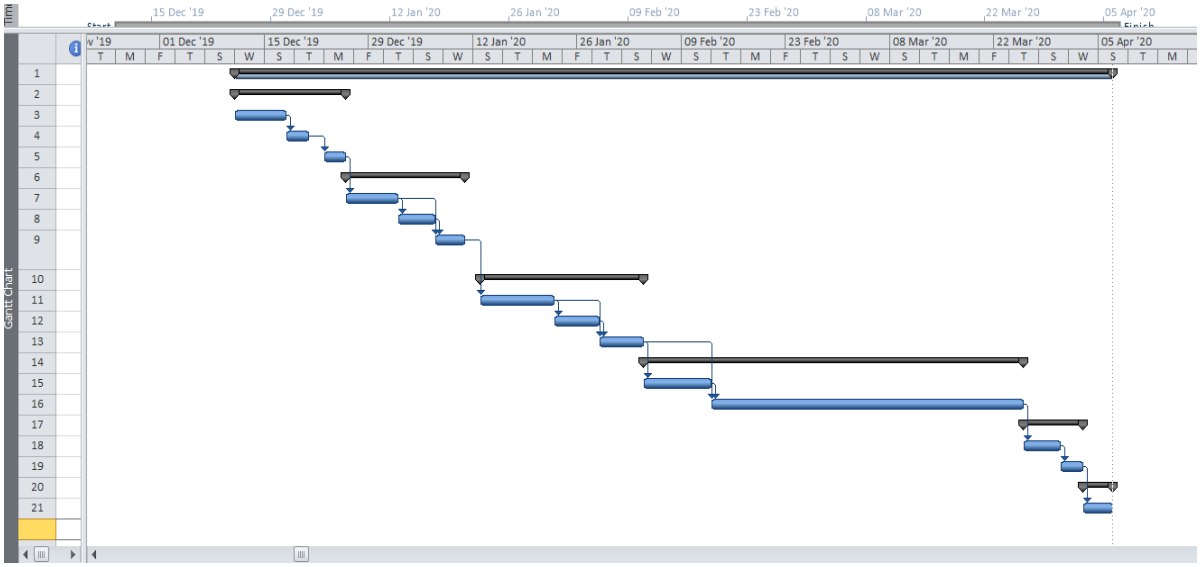
Description	Amount
Software Development Cost	45,000
Network Cost	5000
Printing and Binding of Report	1500
Other Miscellaneous Expensive	1000
Amount	52,500

6. Project Schedule

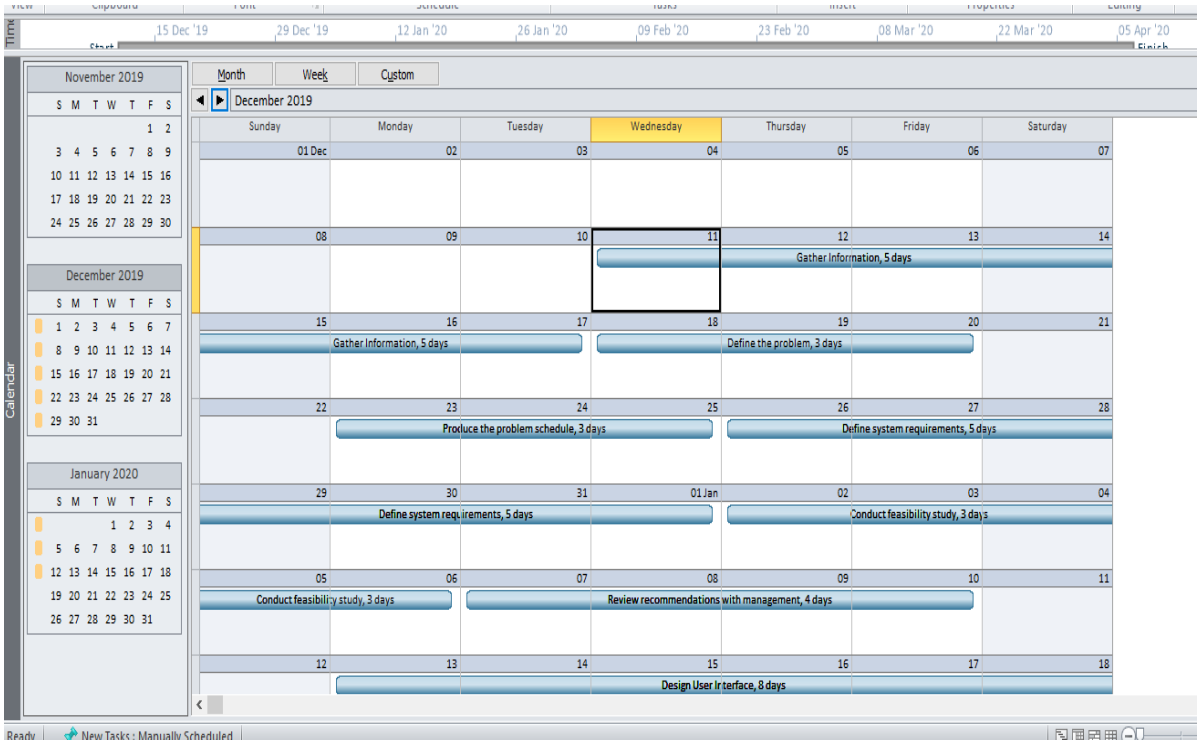
Work break Down Structure

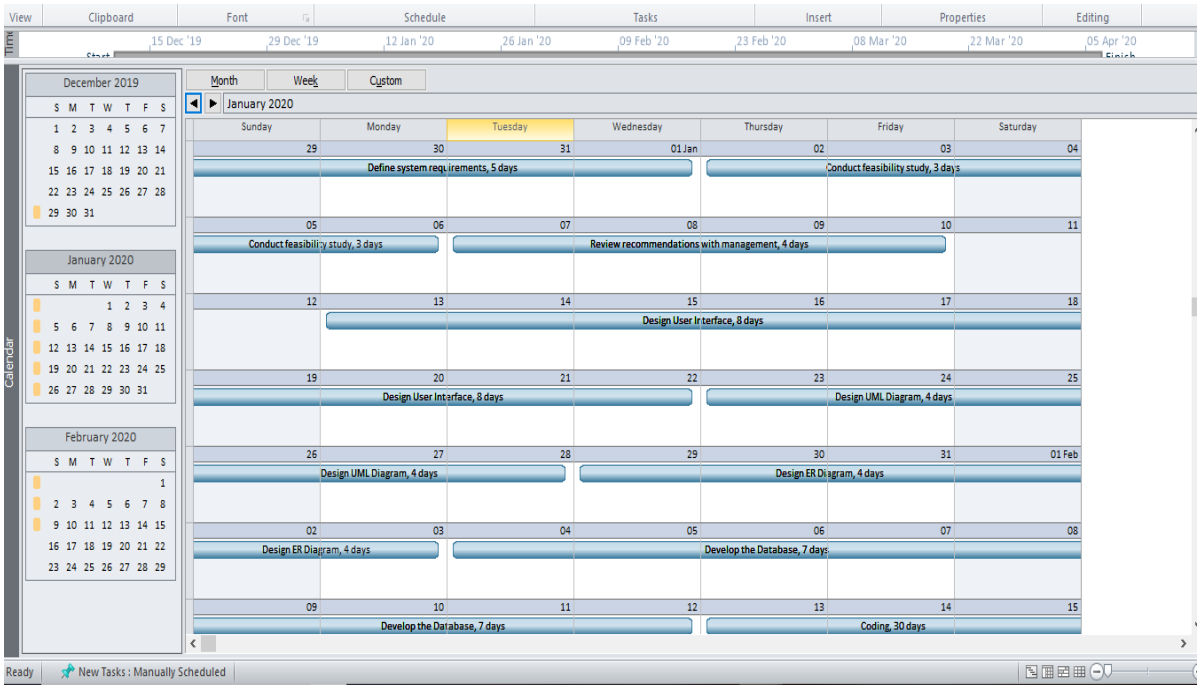
	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Re
1		**1 Online Shopping Store System**	**84 days**	**Wed 11-12-19**	**Mon 06-04-20**		
2		**1.1 Project Planning**	**11 days**	**Wed 11-12-19**	**Wed 25-12-19**		
3		1.1.1 Gather Information	5 days	Wed 11-12-19	Tue 17-12-19		
4		1.1.2 Define the problem	3 days	Wed 18-12-19	Fri 20-12-19	3	
5		1.1.3 Produce the problem schedule	3 days	Mon 23-12-19	Wed 25-12-19	4	
6		**1.2 Requirement Analysis**	**12 days**	**Thu 26-12-19**	**Fri 10-01-20**		
7		1.2.1 Define system requirements	5 days	Thu 26-12-19	Wed 01-01-20	5	
8		1.2.2 Conduct feasibility study	3 days	Thu 02-01-20	Mon 06-01-20	7	
9		1.2.3 Review recommendations with management	4 days	Tue 07-01-20	Fri 10-01-20	7,8	
10		**1.3 Software Design**	**16 days**	**Mon 13-01-20**	**Mon 03-02-20**		
11		1.3.1 Design User Interface	8 days	Mon 13-01-20	Wed 22-01-20	9	
12		1.3.2 Design UML Diagram	4 days	Thu 23-01-20	Tue 28-01-20	11	
13		1.3.3 Design ER Diagram	4 days	Wed 29-01-20	Mon 03-02-20	11,12	
14		**1.4 Development of the system**	**37 days**	**Tue 04-02-20**	**Wed 25-03-20**		
15		1.4.1 Develop the Database	7 days	Tue 04-02-20	Wed 12-02-20	13	
16		1.4.2 Coding	30 days	Thu 13-02-20	Wed 25-03-20	13,15	
17		**1.5 Testing**	**6 days**	**Thu 26-03-20**	**Thu 02-04-20**		
18		1.5.1 Alpha Testing	3 days	Thu 26-03-20	Mon 30-03-20	16	
19		1.5.2 Beta Testing	3 days	Tue 31-03-20	Thu 02-04-20	18	
20		**1.6 Implementation**	**2 days**	**Fri 03-04-20**	**Mon 06-04-20**		
21		1.6.1 Install the system	2 days	Fri 03-04-20	Mon 06-04-20	19	

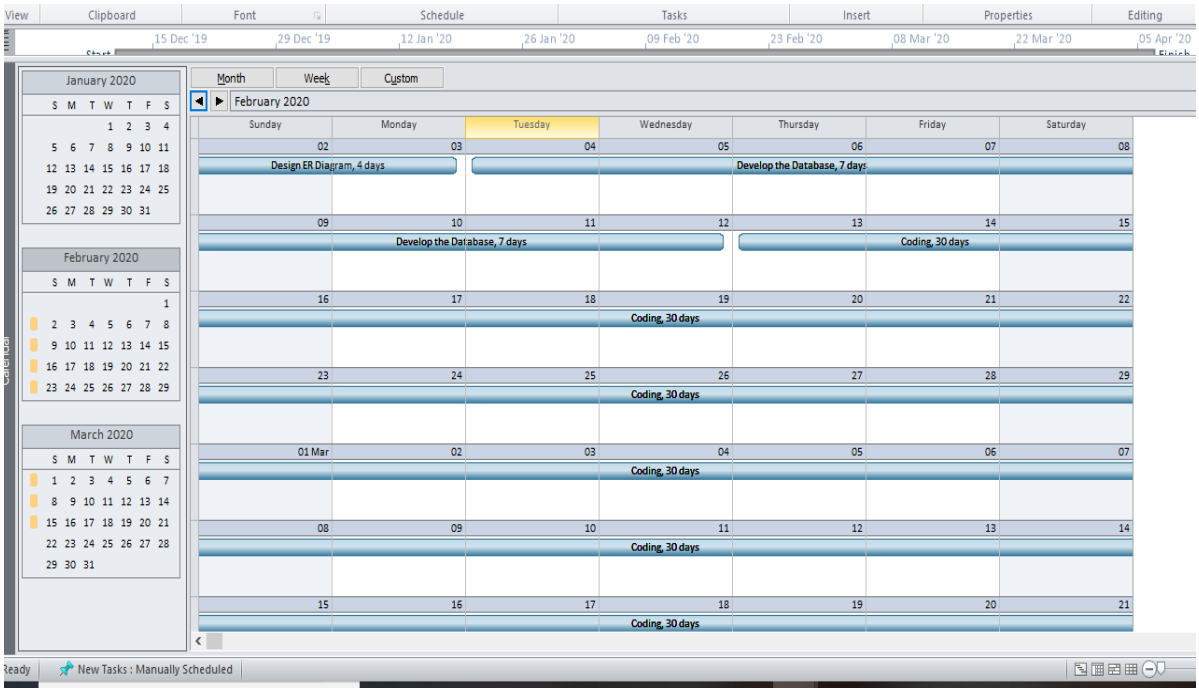
Gannt Chart

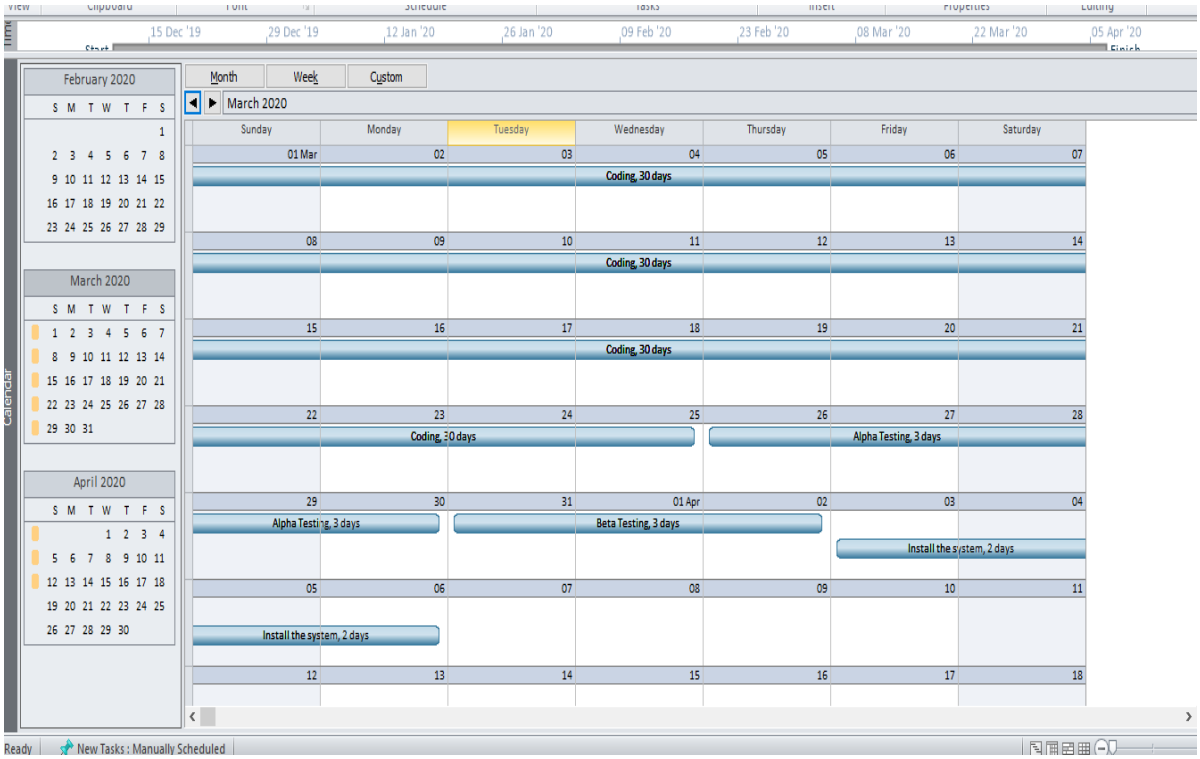


Work Calendar






View
Clipboard
Font
Schedule
Tasks
Insert
Properties
Editing
15 Dec '19
29 Dec '19
12 Jan '20
26 Jan '20
09 Feb '20
23 Feb '20
08 Mar '20
22 Mar '20
05 Apr '20
January 2020
February 2020
March 2020
Month
Week
Custom
February 2020
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Design ER Diagram, 4 days
Develop the Database, 7 days
Develop the Database, 7 days
Coding, 30 days
Coding, 30 days
Coding, 30 days
Coding, 30 days
Coding, 30 days
Coding, 30 days
Ready
New Tasks : Manually Scheduled


15 Dec '19
29 Dec '19
12 Jan '20
26 Jan '20
09 Feb '20
23 Feb '20
08 Mar '20
22 Mar '20
05 Apr '20
February 2020
March 2020
April 2020
Month
Week
Custom
March 2020
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Coding, 30 days
Coding, 30 days
Coding, 30 days
Coding, 30 days
Alpha Testing, 3 days
Alpha Testing, 3 days
Beta Testing, 3 days
Install the system, 2 days
Install the system, 2 days
Calendar
Ready
New Tasks : Manually Scheduled

7. Chapter Organization of the project report

Chapter 01: Introduction

Chapter 02: Background and Analysis

Chapter 03: Feasibility Study and Requirement Analysis

Chapter 04: System Analysis and Logical Design

Chapter 05: Physical Design and System Development

Chapter 06: Testing and System Debugging

Chapter 07: Implementation

Chapter 08: Improvements and Conclusion

8. Reference

- Software Engineering (10th Edition)

  By: Ian Somerville.

- Object Oriented Analyzing and design

  By: Simon Bennet

- Internet