Supermarket application

Group two

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1   Introduction

Our project stands for Buy Online, Pick Up in Store. The practice of offering our project has grown as shoppers become too busy to browse items in-store and are more comfortable buying online. Our project allows sellers to blend the online and in-store experience to engage with customers while offering a more convenient way to shop. How Does Work?

Shoppers want choice and flexibility in how they want their orders fulfilled, and they want to be able to complete their purchases or make returns quickly and efficiently. Our project is key to delivering convenience by enabling customers to conveniently select which items they want to purchase immediately, and which items are worth waiting for. Here's how the process works :

1- Customers buy online, through the website or mobile app.

it's important for sellers to create convenience by enabling customers to complete purchases online or in-app, simultaneously selecting the time and store location to pick-up the purchased products. With real-time local inventory visibility at hand, the consumer can choose when and where to pick up their products.

2- The store fulfils the online order

There are two scenarios when ordering through SUPER MARKET SYSTEM:

If the item is in stock at the customer's chosen local store, a store associate can use an app to easily locate, pick and pack the order to hold for the customer. When ready, the associate can send an email or notification to the customer letting them know it's ready for pickup. This saves shoppers precious time searching the aisles while removing the barriers of order fulfilment for store associates.

On the other hand, if the store does not have the item in-stock, the associate must order from a nearby store or warehouse facility. Once it arrives, the customer is notified and it will be available for pick-up at his or her convenience.

3-The customer picks up the order.

Customers can go inside the store to a designated online pickup area where a store associate will hand over the items. Some stores are taking it one step further by facilitating curb-side pickup – where a customer can drive up to the store location and receive their order without ever leaving the car.

Either way, consumers should be easily guided through the steps for picking up their purchased products, including receiving a text message, push notification or email with a receipt or QR code for the order as well as quick and easy instructions about where their product will be waiting in the store.

2   Problem Statement

Problem 1:

time problem. A customer may take a long time to search for the things they want.

Solution:

The application It will save time and effort by preparing and preparing the things that the customer wants.

Problem 2:

Not all payment method are available.

Solution:

The application will provide all payment methods can customer using such as mada,visa,paypal.

Problem 3:

Crowded supermarkets and long queues at the cashier.

Solution:

Online order processing and payment

Problem 4:

Not having time for buying groceries

Solution:

The application has delivery service

Problem 5:
Lock of supermarket in remote areas
Solution:
Provide delivery service

3 Project Goal & Objectives

1- this application will you make select which supermarket you want.
2- this application will facilitate the purches process and provide all payment methods.
3- this application will make it easier for the customer to purchase.
4- this application will save customers time.
5- The endless choice of customers to see the best product available.

4 Methodology

We choose waterfall SDLC model because :
- The requirements are precisely documented
- Product definition is stable
- The technologies stack is predefined which makes it not dynamic
- No ambiguous requirements

5 Project Requirement

5.1 Software Requirement

1- operating system.
2- GBS system.
3- database.
4- user interface

5.2 Hardware Requirement

1- smart phone
2- laptop
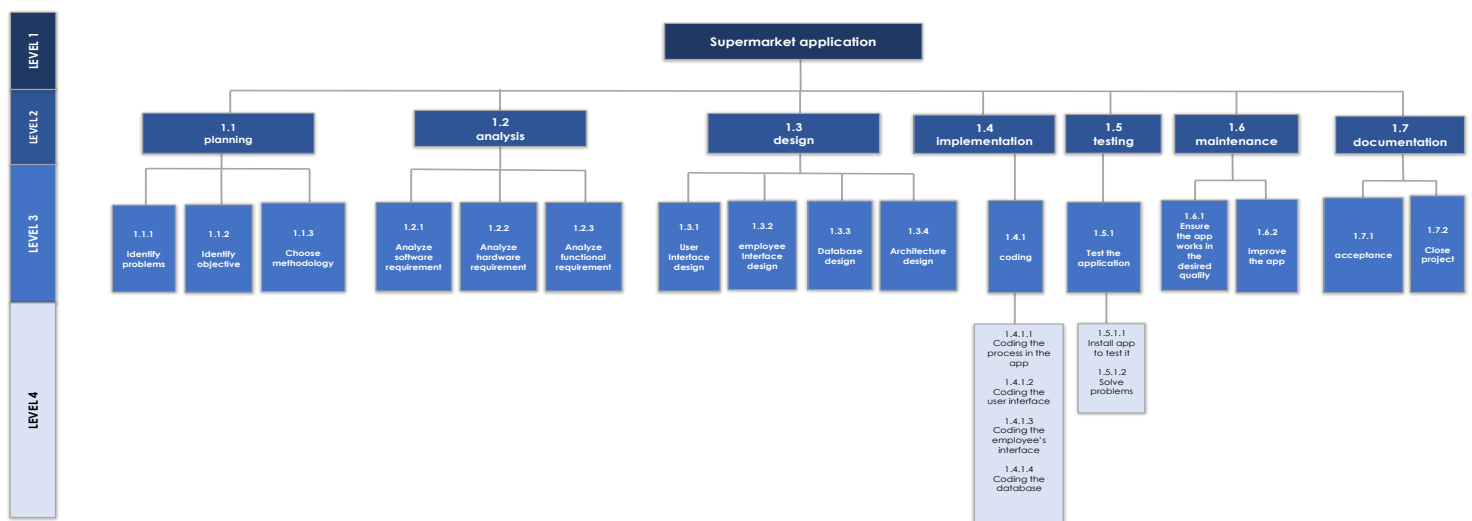3- server
4- disk space

5.3 Functional Requirement

1- the application allow for users for choose supermarket.

2- the application allow for users to choose the payment methods.

3- the application will display all components.

4- the application will allow the customer to register.

5- the application will calculate the total price and request a confirmation.

6- the application will allow the customer to reorder from his previous purchases.

7- the application will allow the customer to choose the delivery date and time.

8- if the customer choose delivery service, the application will allow the customer to track his order.

9- the application will notify the customer when his order is ready for pick up.

10- the customer can choose his order from the application, and the supermarket preparing his order, then he come to get his order.

6 Project Scope

6.1 Scope Statement

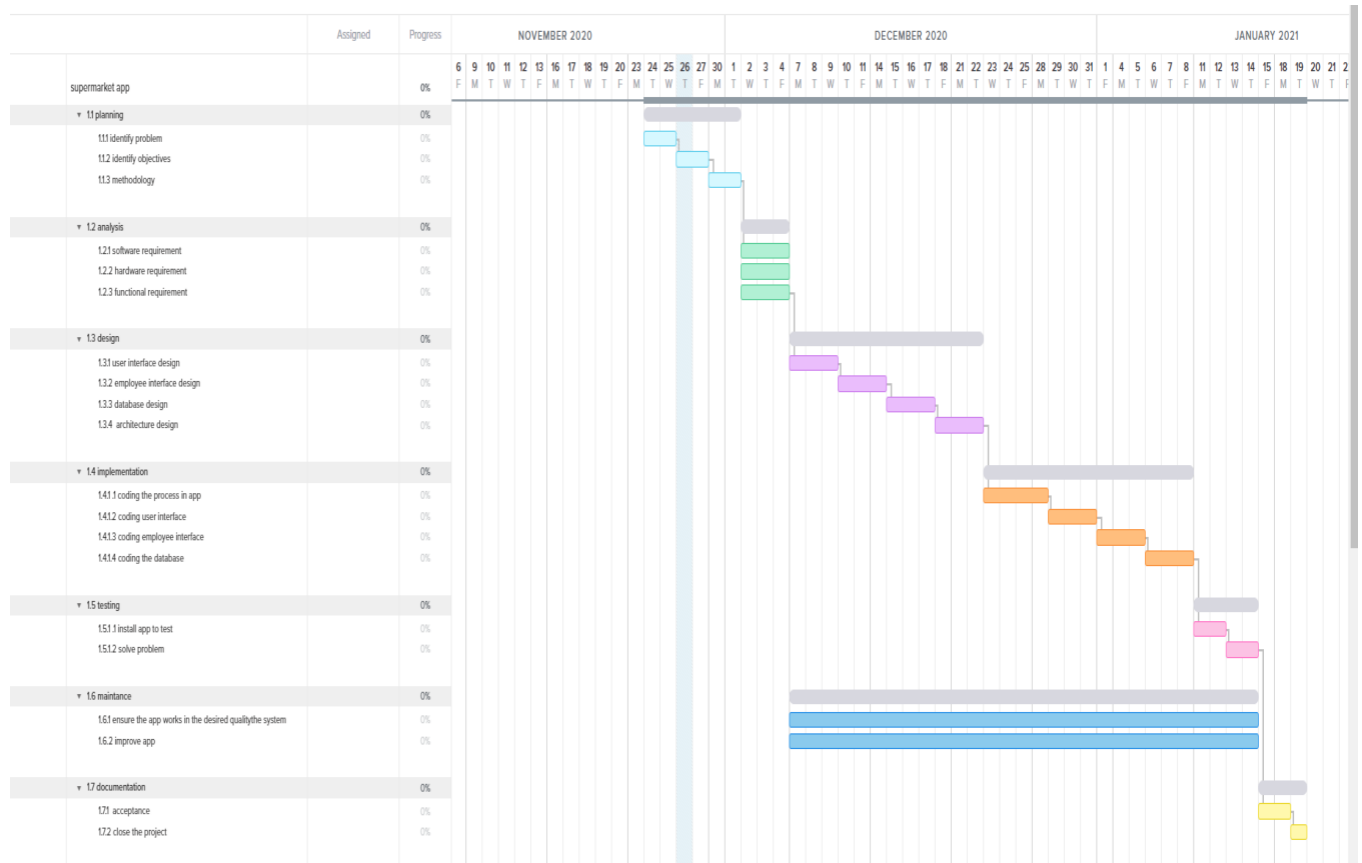| |
|---|
| Project name : supermarket application |
| Sponsor: VM market
Project manager: masher |
| Project start date: November 1
End date: November 26 |
| Project description : the supermarket app is an application that help the customer to choose the products he wants and then go to supermarket to collect them |
| Project deliverables:
System analysis and design
System program |
| Problem statements:
The costumer may take long time to search and not all payment method are available Also the long queues and some costumer dos not have time to buy and there is no places to buy in remote area |
| Estimated project duration: 26 days |

6.2 Work Breakdown Structure

6.3 WBS Dictionary

PROJECT TITLE	supermarket application

TASK ID	TASK NAME	TASK DESCRIPTION
1.1	**planning**	**in the planning phase the main goal is to understand why we should build the application and how the project team will go about building it**
1.1.1	identify problems	identify the problems that the application will solve
1.1.2	identify objective	identify the goals and what is needed to succeed in the project
1.1.3	choose methodology	choose the best methodology for the project keeping in mind the project reqirement , team skills level and team experiance
1.2	**analysis**	**In the analysis phase the team will examinate of the details of anything complex**
1.2.1	analysis software requirment	Analyze the Specification of the logical requirement that operate on the hardware such as database
1.2.2	analysis hardware requirment	Analyze the Specification of the physical requirement or devices that are required to store and execute the software such as a server
1.2.3	analysis functional requirment	Analyze the requirement that provide services for the users and describe what services the user can get from the system
1.3	**design**	**In the design phase, one or more designs are developed, with which the project specification can apparently be achieved In form of a prototype or diagram.**
1.3.1	user interface design	Design how the users can interact with the application in this task we will focus on user experience and usability
1.3.2	Employee interface design	Design how the Employees can interact with the application and serve the users
1.3.3	database design	Design how the data are going to be stored, and it has to be secured we need to determine who has access to each type of data
1.3.4	Architecture design	Design the overall structure of the system and the principal components and their relationships and how they are distributed
1.4	**implemenation**	**The project takes shape during the implementation phase. This phase involves the construction of the actual project result**
1.4.1	coding	The programmers choose a suitable programming language/s to develop the application then begin programming
1.4.1.1	coding the processes in app	Develop the services and function that the application need to preform
1.4.1.2	coding the user interface	Develop an interface that the users can use to interact with the application, the user interface is how the application will appear to the users
1.4.1.3	coding the employees interface	Develop an interface that links the employees to the users to serve, the employees' interface is how the application will appear to the employees
1.4.1.4	coding the database	Develop the database structure and link it with the application to store and retrieve the data
1.5	**testing**	**In this phase our goal is to make sure the application is working and it can be used**
1.5.1	test the application	Make sure that the application works the desired way
1.5.1.1	install app to test it	Install an experimental version of the app and ensure that every component, and the overall app performance works as expected
1.5.1.2	solve problems	Solve any problems appear at the testing phase
1.6	**maintainance**	**The maintenance phase involves making changes to hardware, and software to support its operational effectiveness. It includes making changes to improve a system's performance, correct problems, enhance security, or address user requirements**

1.6.1	ensure the app works in the desired quality	Ensure that the application do not need any improvement and is preforming at the best way
1.6.2	improve the app	Fix and improve any part of the application that need to be improved
1.7	**documentation**	**At the last phase all procedures, activities, and modification in the project will be documented by the manager**
1.7.1	acceptanece	The manager reviews the project and acceptance the work
1.7.2	close project	Finalize all activities and deliver the project to the appropriate people

7 RACI Chart

	Project manager	Analyst	Designer	Programmer	Project team
Planning	A, R	C	I	I	C
Analyzing requirements	A	R	C	C	C
Design creation	A, C	I	R	C	C
Implementation	A	I	I	R	C
Testing	A	I	C	R	I
Maintenance	A	C	I	C	R
Documentation	A, R	C	I	I	C

8 Gantt Chart

	Assigned	Progress	NOVEMBER 2020	DECEMBER 2020	JANUARY 2021
supermarket app		0%			
▼ 1.1 planning		0%			
1.1.1 identify problem		0%			
1.1.2 identify objectives		0%			
1.1.3 methodology		0%			
▼ 1.2 analysis		0%			
1.2.1 software requirement		0%			
1.2.2 hardware requirement		0%			
1.2.3 functional requirement		0%			
▼ 1.3 design		0%			
1.3.1 user interface design		0%			
1.3.2 employee interface design		0%			
1.3.3 database design		0%			
1.3.4 architecture design		0%			
▼ 1.4 implementation		0%			
1.4.1.1 coding the process in app		0%			
1.4.1.2 coding user interface		0%			
1.4.1.3 coding employee interface		0%			
1.4.1.4 coding the database		0%			
▼ 1.5 testing		0%			
1.5.1.1 install app to test		0%			
1.5.1.2 solve problem		0%			
▼ 1.6 maintaince		0%			
1.6.1 ensure the app works in the desired quality the system		0%			
1.6.2 improve app		0%			
▼ 1.7 documentation		0%			
1.7.1 acceptance		0%			
1.7.2 close the project		0%			

We use (teamgantt)to draw our gantt chart.
The project start from 24 november to 19 january.
The planning phase:
It take 6 days, 2 days for identify problem,2days for identify objective ,2days for choose best methodology.
The analysis phase:
it take 3 days for all requiriments.
The design phase:
It take 12 days , 3days for user inter face design,3days for employee interface design,3 days for database design and 3 days for architecture design.
The implementation phase:
it take 13 days , 4 days for coding the process in app ,3 days for coding the interface ,3days for coding employee interface and 3 days for coding the database.
The testing phase:
It take 4 days , 2 days for install app to test and 2 days for for solve problem .
The maintance phase:
It take 15 days. we start maintenance from the design phase tell the end of testing phase
The documentation phase:
It take 3 days, 2 days for acceptance and 1 day for close the project.

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