TEAM 1

Team Name
C-OUT

Team members
- Burgos Riascos Adrián Alejandro
- Castillo Beltran Kevin Daniel
- Castillo Hidalgo Ezequiel Mateo
- Carvajal Patiño Luis Enrique

Title of the Project
E-commerce

NRC:
7179

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Problem

For the covid 19 pandemic, the sales of different establishments have been declining because customers cannot approach the different stores in person to purchase products or services.
We need an online sales web application for the bakery "La Reina" that allows the user to post his products and allow the clients to buy items from the bakery, without the need for them to approach the local.

To understand what the application needs it is important to understand how a basic E-commerce works, starting from the organization of the articles to the buying and selling system.

Overview

Nowadays, with this problem of the pandemic and worldwide infections, what most people try is not to be in constant contact with other people for personal care and for fear of getting infected, for this reason it is that with our group we think that effective solution to this problem is to create an e-commerce that consists of online commerce where users can sell or buy services or products that are in it.

Background

E-commerce allows you to distribute, sell, buy and supply information on products or services through the development of a web application. In the last 20 years, with the development of the Internet, the concept of selling or buying products or services over the Internet has been gaining strength, using electronic means to pay for said services.
As previously mentioned in these times of pandemic, many commercial establishments have seen their production decline alarmingly, and electronic commerce (E-commerce) allows locals to reach their customers by simply accessing their devices and being able to provide them with information related to the products they offer and that they can purchase.

With our application we will try to connect the customer with the commercial establishments, and thus help people with economic problems due to the pandemic problem. The customer could buy, search and ask for something in particular, this last feature will make a request to the owner's establishment.

1. Introduction

An e-commerce application has become an essential tool for those users who prefer to make their purchases without the need to physically go to the premises, it has also been a very important tool in the course of the current pandemic and that is why it has been raised the development of an e-commerce application with the aim of helping a small store that wants to increase its sales by applying the knowledge and techniques learned during the subject of advanced web development.

1.1. Purpose

- Help small businesses to increase their sales and generate extra profits for those who need it
- Facilitate online shopping for users who prefer to do it from home.

1.2. Scope

- Creation of a database to store all the important information for the application.
- A login system will be created for users who wish to make purchases or sales.
- Creation of a system to publish new products or services.
- It is intended to implement a user capable of controlling and monitoring the entire application.

1.3. Personal Involved

Name	Burgos Riascos Adrián Alejandro
Role	Developer, tester
Professional Category	Software engineering student
Responsability	Design, programing and test the web application.

Contact	aaburgos1@espe.edu.ec

Name	Castillo Beltran Kevin Daniel
Role	Developer, tester
Professional Category	Software engineering student
Responsability	Design, programing and test the web application.
Contact	kdcastillo1@espe.edu.ec

Name	Castillo Hidalgo Ezequiel Mateo
Role	Developer, tester
Professional Category	Software engineering student
Responsability	Design, programing and test the web application.
Contact	emcastillo2@espe.edu.ec

Name	Carvajal Patiño Luis Enrique
Role	Developer, tester
Professional Category	Software engineering student
Responsability	Design, programing and test the web application.
Contact	lecarvajal2@espe.edu.ec

Name	Jhon Octavio Pachacama Carillo
Role	Customer
Professional Category	Owner of the bakery for which the application is

	developed
Responsability	
Contact	Juanpachacama@hotmail.com

1.4. Definitions, Acronyms and abbreviations

API: It is an abbreviation for Application Programming Interfaces, and is a set of definitions and protocols used to develop and integrate application software, allowing communication between two software applications through a set of rules.

Backend: It is used to refer to the logical area of any web page. We refer to the internal architecture of the site that ensures that all elements perform the correct function. It is not visible to the user and does not include any type of graphic element.

DataBase: Set of data belonging to the same context and systematically stored for later use.

Frontend: It is the part that the user sees and in which they are included, unlike in Back-End, the design line and the graphic elements of the page.

Requirements: The requirement details a need in a general way, part of the macro and focuses above all on what is going to be done.

1.5. References

Referencia	Título	Fecha	Ruta	Autor
Especificación de Requisitos según el estándar de IEEE 830	IEEE Std. 830-1998	22 de octubre de 2008	https://www.fdi.ucm.es/ profesor/gmendez/docs/ is0809/ieee830.pdf	www.ucm.es

1.6. Abstract

2. Description

2.1. Product Perspective

This web application will be developed with technologies that allow us to offer a good experience for the user, with efficient responses, and availability for any user who wishes to make a purchase.

The main perspective of this application is to guarantee a safe sale and purchase for the seller and buyer.

2.2. Product Functionality

The application will consist of a login system that wil allow the sale or purchase depending on the user's role, the generation of sales reports and the management of products or services that are for sale and the existence of them are also expected. .

2.3. User Characteristics

Type	User
Training	none
Abilities	Basic skills to use electronic devices and surf the internet.
Activities	Use the web application to buy products of their interest.

Type	Customer
Training	none
Abilities	Basic skills to use electronic devices and surf the internet.
Activities	Check the requirements, review the web application and approve it or not.

2.4. Restrictions

The application is oriented to a web application, so the technologies and languages applied are based on web development, but not on mobile development or a desktop application.

2.5. Assumptions

2.6. Foreaseble evolution of the system

In future development, the system may have the possibility of logging in through the users' google account, in order to speed up the registration process for customers.

3. Specific Requirements

3.1. Common interfaces requirements

3.1.1. User interfaces

In this section the mockups of the future interface that the web application will have will be attached.

3.1.2. Hardware interfaces

Keyboard: The user must have a keyboard to enter information and communicate with the web application.

Mouse: The user must have a mouse to be able to navigate in the application and to carry out activity with the events

3.1.3. Communication interfaces

Internet: The user and the computer must have a stable internet signal to be able to access the web application.

3.2. Functional requirements

3.2.1. Functional requirement 1

ID	RF01
NAME	Login
CHARACTERISTIC	● Session initiation system
DESCRIPTION	The application will have a login system.
PRIORITY	High

3.2.2. Functional requirement 2

ID	RF02
NAME	Navigation
CHARACTERISTIC	● Visualization and navigation in the application. ● No login restriction
DESCRIPTION	In the application the user will be able to watch and buy products, but if the user doesn't have an account the feature buy will be disabled.
PRIORITY	High

3.2.3. Functional requirement 3

ID	RF03
NAME	Roles
CHARACTERISTIC	● Each user has a role within the app. ● Control and management of actions according to the role
DESCRIPTION	The application will have three roles: administrator, employee and shopper.
PRIORITY	High

3.2.4. Functional requirement 4

ID	RF04
NAME	CRUD for administrator
CHARACTERISTIC	● Control and management of the inventory of products and services.
DESCRIPTION	The application will be able to add or delete new items to the administrator.
PRIORITY	High

3.2.5. Functional requirement 5

ID	RF05
NAME	Report for products
CHARACTERISTIC	● It is a list of the activity carried out by the local. ● Support for the administrator.
DESCRIPTION	The application should generate a daily report for the products for the products that have been sold.
PRIORITY	Medium

3.2.6. Functional requirement 6

ID	RF06
NAME	Tax system
CHARACTERISTIC	● It makes the job easier for the buyer. ● Helps to generate the daily report.
DESCRIPTION	The application will have a tax system for the products that have been bought.
PRIORITY	Medium

3.2.7. Functional requirement 7

ID	RF07
NAME	User accounts
CHARACTERISTIC	● Monitor users.
DESCRIPTION	The administrator can manage the user accounts and the daily report of the store.
PRIORITY	High

3.2.8. Functional requirement 8

ID	RF08
NAME	Purchase
CHARACTERISTIC	● The products and the total to be paid are registered. ● The inventory and availability of the purchased is updated.
DESCRIPTION	The shopper can use the application and buy any products only if he has an account.
PRIORITY	High

3.2.9. Functional requirement 9

ID	RF09
NAME	Sale
CHARACTERISTIC	● The inventory of products or services is updated. ● The availability, existence, price and details of the added are recorded.
DESCRIPTION	The employee can add or delete new items at the bakery and manage the inventory.
PRIORITY	High

3.3. Non-functional requirements
3.3.1. Security
3.3.1.1.　The application will encrypt all user's passwords.

3.3.1.2.　The application will make a daily backup of the inventory.

3.3.2. Portability
3.3.2.1.　The application must be available for any device with internet access.

3.3.2.2.　The application will be responsive.

3.3.3. Usability
3.3.3.1.　The application will be intuitive.

3.3.3.2.　The application must give an efficient response when the user performs an action.

3.3.3.3.　The solution must have clear graphical administration and operation interfaces.