E-Commerce Store

Project By:
Zachary Myre, Joe Cruz,
Terry Patterson, Walt Porter,
and Angel Rosas

Project Charter

PROJECT NAME: E-Commerce Store

Date: 03/05/22

PROJECT PURPOSE: To provide a fully functional E-Commerce website for a company. What makes our website stand out is the fact that we will accept Crypto as a form of payment as well as provide a retail chatbot that could help assist consumers in finding their desired product.

Anticipated Completion: Fall 2022

KEY PARTICIPANTS:

PARTICIPANT	EXPERTISE/INTEREST
Zach Myre (*Project Manager*)	Software Developer for a company. Primarily interested in Backend development processes. Specializes in Web Development.
Joe Cruz	Proficient in C++/Python. Familiar with HTML/CSS/Javascript. Many projects completed utilizing other programs such as Blender.
Terry Patterson	Confident in working with C++/Python. Currently learning HTML/Javascript. Interested in Frontend development processes.
Walt Porter	Works with Python/C++. Broadening skills in HTML/CSS/Javascript. Programs games utilizing tutorials and text in order to expand resume.
Angel Rosas	Currently employed as a Computer Technician. Familiar with C++, HTML, Python. Becoming more knowledgeable in SQL. Works on hardware side of Computers.

E-Commerce Store

System Vision Document

Problem Description

Selling goods over the internet has become a valuable way of pushing product given the state of the world in the last few years. Having the ability for users to buy product from the comfort of their own home is a great way to expand a business and produce more sales. Expanding a business across the internet not only makes it easier to purchase product but it also adds better marketing tactics. With more people working from home and less people going out, the internet is a key place to push for more customers. Another valuable way to produce more sales is by adding alternative payment methods. By adding an additional form of payment with cryptocurrency it opens the market even more. Many people do not like inputting their credit card information on a website because it could possibly lead to them being hacked. With the use of cryptocurrency to perform a purchase, it decreases the likelihood of their money being stolen. It also gives a better way of tracking your purchases because the receipt will always be on the blockchain.

System Capabilities

The new system should be capable of:

- Ability for user to create and login to their own personal account.
- Easy navigation for user to find the product they desire.
    - A search bar to search for items.
    - A chatbot to assist them.
- Simple checkout process to make the experience better for the customer.
    - Support for cryptocurrency.
- Shopping cart capabilities.
    - Ability to add or remove items.
    - Ability to increase or decrease quantities.
- Store recent purchases/orders for user that they can access at any time.
- Ability for customer to leave a review on the product.
- Assist with inventory control by storing the amount of each product and updating those values as the items are sold.

Business Benefits

The deployment of this e-commerce store should provide the following benefits:

- Increase sales and customer traffic by selling and marketing products over the internet.
- Make inventory control easier to track and manage with automatic inventory adjustments as product is sold.
- Provide an easy and stress-free experience for the user to search and buy the product they are looking for.
- Decrease limitations with forms of payment by adding support for cryptocurrency which could expand the business on an international level.
- Provide feedback for the business with customer reviews and data to track what is selling or not selling.

Project Schedule Gantt Chart

GANTT CHART

PROJECT TITLE	E-Commerce Store	DATE	3/25/22
PROJECT MANAGER	Zach Myre		
PROJECT TEAM	Joe Cruz, Terry Patterson, Walt Porter, Angel Rosas.		

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE
1	**Project Planning and Analysis**					
1.1	Project Charter - Rough Draft	Terry P	3/2/22	3/5/22	3	100%
1.2	System Vision Document - Rough Draft	Zach M	3/7/22	3/12/22	5	100%
1.3	Project Schedule - Rough Draft	Joe C	3/21/22	3/26/22	5	100%
1.4	UML Models - Rouch Draft	Group	3/26/22	4/16/22	20	100%
1.6	Project Planning Powerslide	Zach M	4/24/22	5/8/22	14	100%
2	**Project Definition and Planning**					
2.1	Design Review		8/29/22	9/5/22	6	0%
2.2	Budget		9/5/22	9/8/22	3	0%
2.3	Communication Plan		9/10/22	9/14/22	4	0%
2.4	Risk Management		9/16/22	9/20/22	4	0%
3	**Project Building and Initiation**					
3.1	Build the Database		9/21/22	9/26/22	5	0%
3.2	Program code		9/28/22	10/25/22	27	0%
3.2.1	Build Test Data		10/25/22	10/29/22	4	0%
3.2.1	Deploy Version 1		10/29/22	11/2/22	3	0%
3.3	Team Introspection		11/2/22	11/6/22	4	0%
3.3.1	Chart Updates		11/6/22	11/9/22	3	0%
4	**Project Performance / Monitoring**					
4.1	Project Objectives		11/10/22	11/11/22	1	0%
4.2	User Manual		11/11/22	11/18/22	7	0%
4.3	Final Updates		11/20/22	11/27/22	7	0%
4.4	Project Presentation	Group	12/5/22	12/9/22	4	0%

Phase timeline headers:

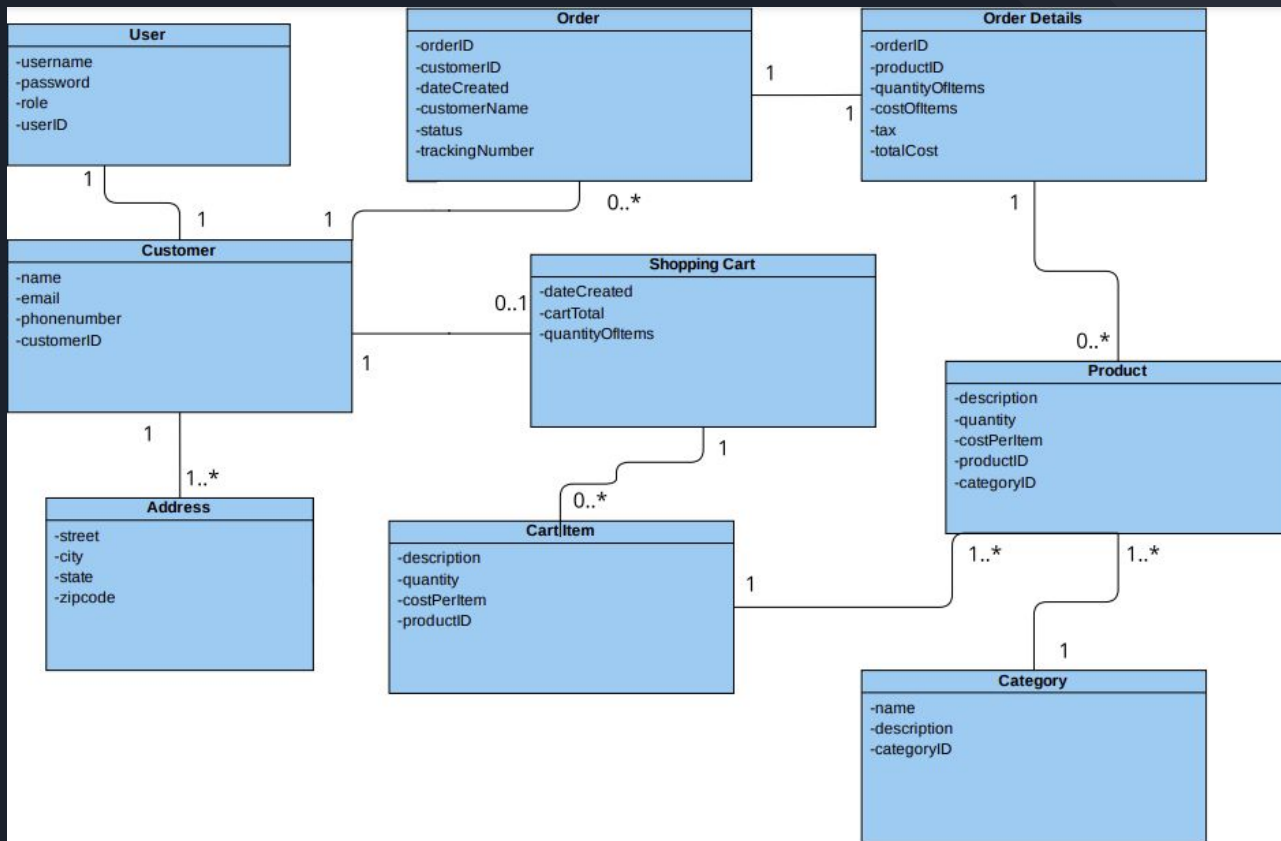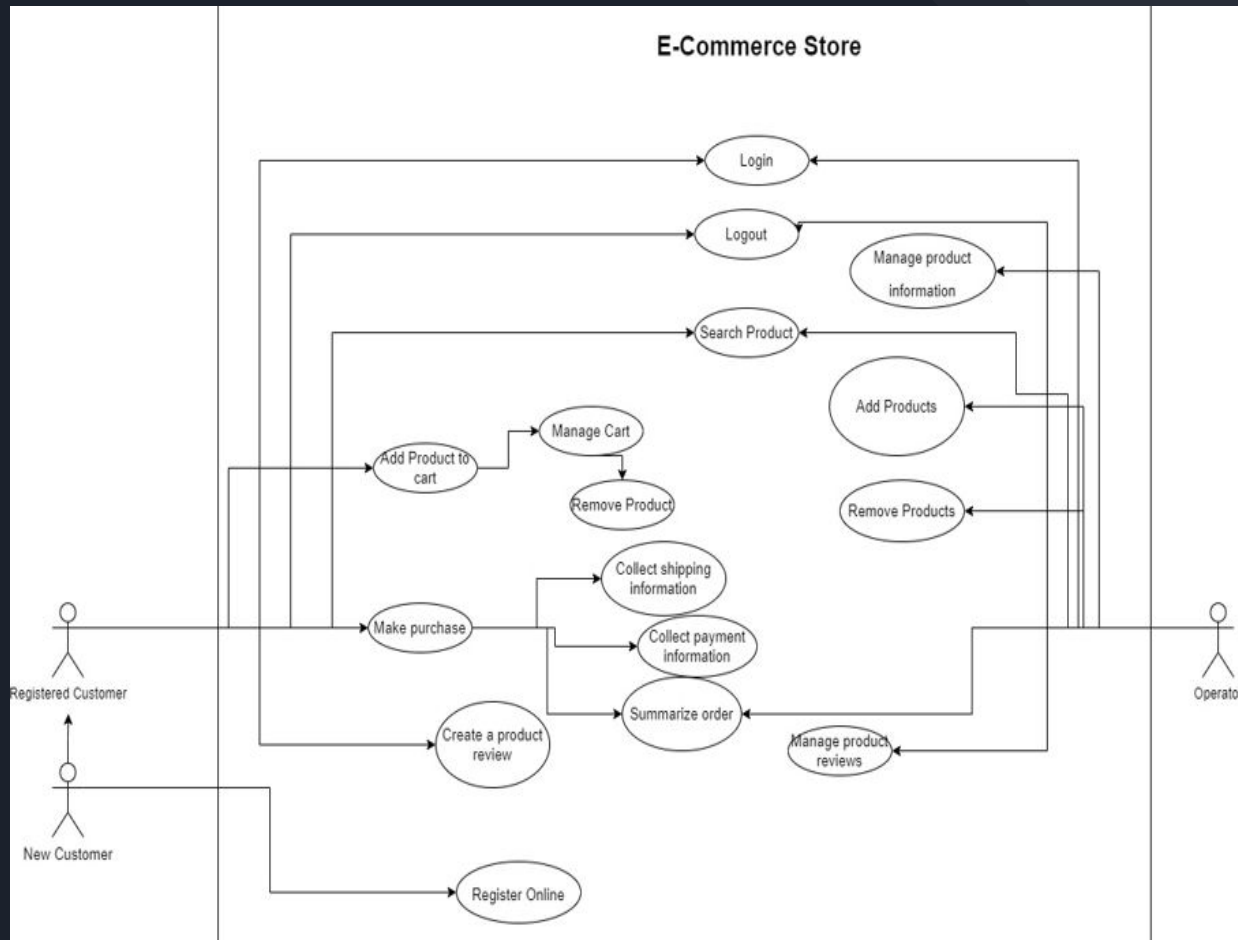| PHASE ONE			PHASE TWO			PHASE THREE			PHASE FOUR		
3/2/22	3/21/22	4/11/22	8/29/22	9/6/22	9/13/22	9/21/22	10/2/22	10/23/22	11/10/22	11/18/22	11/27/22
3/12/22	4/10/22	5/8/22	9/5/22	9/12/22	9/20/22	10/1/22	10/22/22	11/9/22	11/17/22	11/26/22	12/9/22

Object Oriented UML Models

The following slides will include:

- Domain Class Diagram
- Use Case Diagram
- Activity Diagram
- System Sequence Diagram
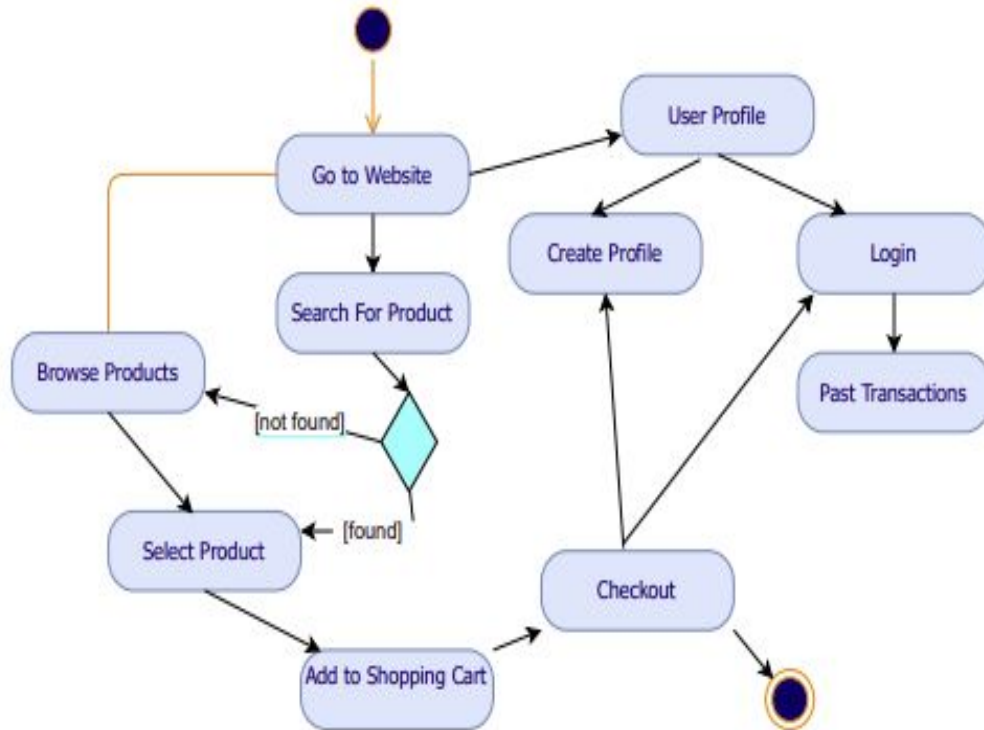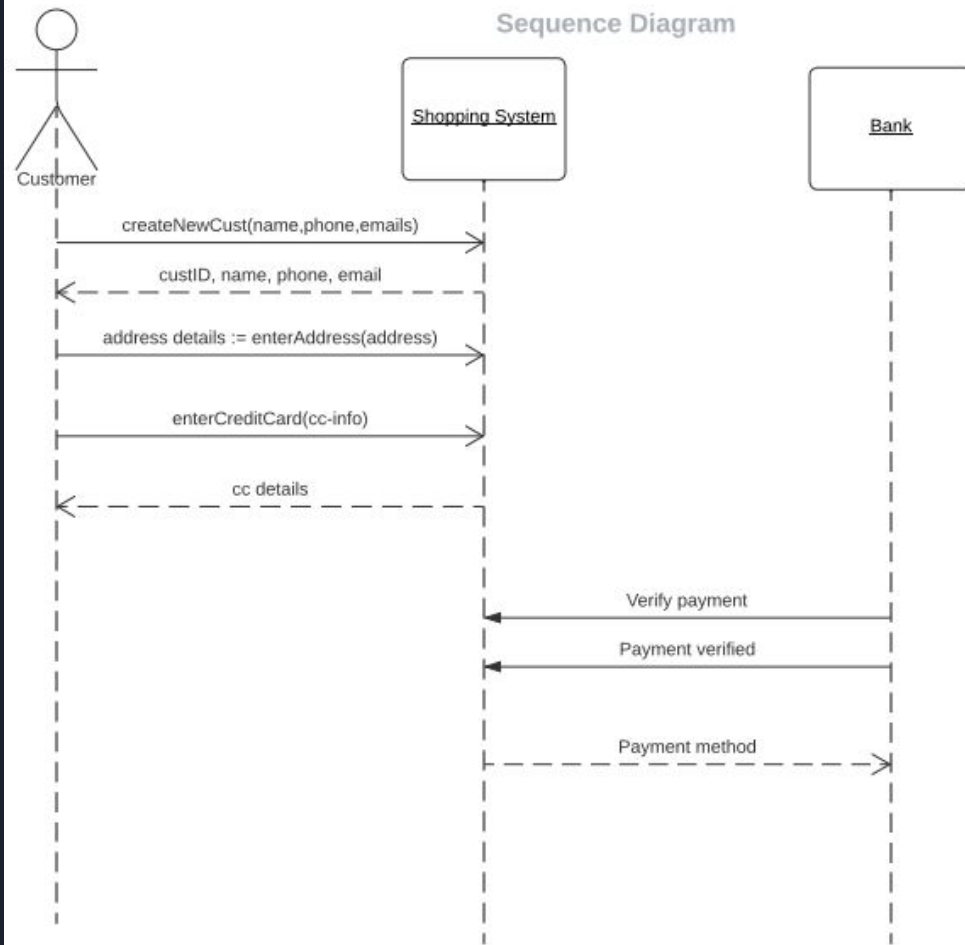- State Machine Diagram

Domain Class Diagram

Use Case Diagram

Activity Diagram

Sequence Diagram

System Sequence Diagram