TASK 2: AGILE AND SCRUM

Introduction:

Currently, e-commerce is becoming a technological solution for the various problems that arise within companies in relation to their sales processes or business management. Having a virtual business tool favors and gives you a series of advantages such as: having access from any geographical area, being accessible 24 hours a day, having a favorable increase of customers and start to be competitive in the market, having information and control of customers accessing the system, in addition to reducing costs and minimizing service times and product deliveries.

The agile methodology that we have used for the development of the project is Scrum, one of the agile methodologies that is currently being widely used and consequently is becoming one of the best, bringing benefits to companies, in addition to the fact that Scrum is capable of managing difficult projects

Scrum process scheme was made, which under its work techniques will execute the research development through the daily scrum, retrospective, sprint review and taking into account the creation of the product backlog, sprint backlog and finally have a release.

Phase 1: Start:

a) Requirements: The requirements are part of the requirements established by the product owner who is in charge of collecting as much information as possible about how the system is intended to work and how it is visualized.

Requirements

N۰	Item
1	The system must be able to display the company's product catalog
2	The system should allow you to manage the shopping cart, add products, delete products and cancel shopping cart
3	The system must allow the customer to purchase the products added to the shopping cart
4	The System must allow to register the information of the clients as natural person or company
5	The system shall allow adding new products, modifying and deleting existing products

6	The system must allow to display a sales report. The data to be displayed
	are: date, sale number, customer name, product code, product name,
	product quantity, unit price, total

b) Backlog Product: The backlog is the ordered list of all the requirements previously established by the customer. In Table II, we observe the functional user stories and also the estimation and priority that helps to evaluate each user story

Table II Product Backlog

N°	Item	Priority	Estimate
H1	As a user, I want to see the catalog of the products in the system	High	2
H2	As a user, I need to manage the purchase of the products added to the shopping cart	High	1
H3	As a user, I want to register to the system as a natural person or company	High	2
H4	As a user, I wish to enter the system through a login	High	2
H5	As an administrator, I want to enter the administrator module through a login	Medium	1
H6	As an administrator, I want to add new products, modify and delete existing products	Medium	3
H7	As an area manager, I would like to see the sales reports for the day	Under	1

Phase 2: Planning:

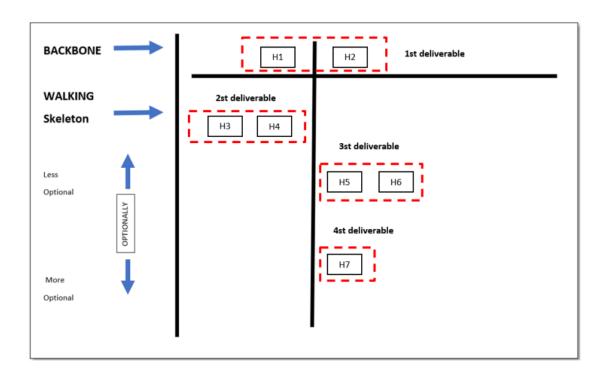
a) Sprint Planning: The necessary activities were carried out to develop a new version of the product (Increment) of functional type, according to the specifications for the Sprint

It was determined what will be the Sprint (Deliverables), by means of a tactical planning of work it was decided that it will be 4 sprint, for this work the sprint counted with two stories of users fully identified previously, as it is shown in Table III

Table III Sprint Planning

N°	User History	N∘ Item
Sprint 1	H1 As a user, I want to see	1
	the catalog of the products	
	in the system	
	H2 As a user, As a user, I	
	want to see the product	
	catalog in the system	
Sprint 2	H3 As a user, I want to	2
	register to the system as a	
	natural person or company	
	H4 As a user, I want to	
	enter the system through a	
	login	
Sprint 3	H5 As an administrator, I	3
	want to enter the	
	administrator module	
	through a login	
	H6 As an administrator, I	
	want to add new products,	
	modify and delete existing	
	products	
Sprint 4	H7 As an area manager, I	4
	would like to see the sales	
	reports for the day.	

b) Product Roadmap: In this section the Product Roadmap is established, which is a high-level plan that allows us to see how our product will evolve by launching the deliverables that were established, it is like our roadmap, which allows us to describe how to achieve the objectives or vision of the product to be delivered.



Phase 3: Implementation:

a) Sprint Planning Meeting: In this section the development of the tasks was organized based on a sprint chronogram where the dates of each deliverable were determined. It will help the work team to maintain an order when developing the product. The schedule with the items established in the sprint planning is shown below

Table IV Sprint Timeline

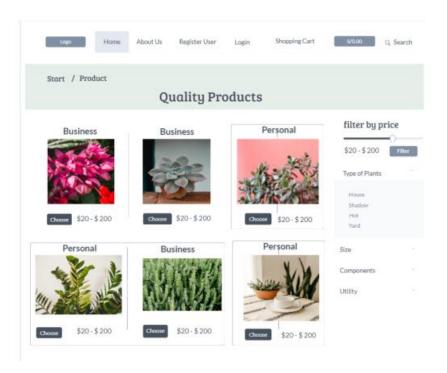
Task Name	Duration	Start	End
Commercial Management			
Website project			
Sprint 1			
Shopping Cart			
Catalog Interface			
• Sprint 2			
Login Registration			
System Access			
Sprint 3			
Administrator Login			
Administrator Module			

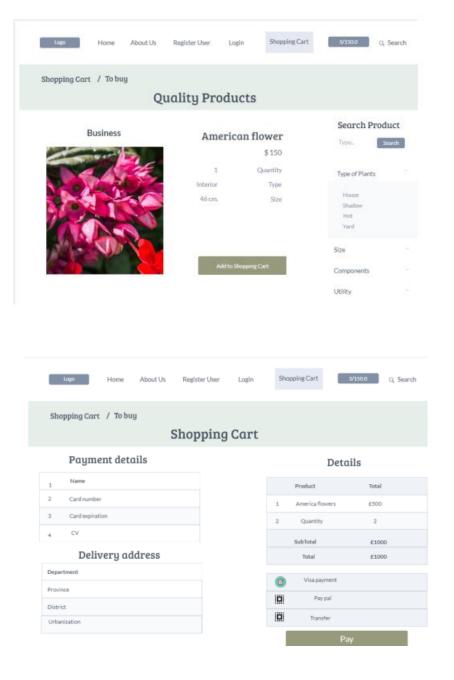
Phase 4: Review and Retrospective:

a) Daily Scrum: All the people involved in the project will meet daily to review the sprint and determine if there is any inconvenience that can be improved or solved. The people involved in the meetings rotated daily every day, with the sole purpose of ensuring that the objective was met and developed normally and without problems. We analyzed what was done wrong, what was done right and what difficulties were encountered that did not allow the project to continue as planned

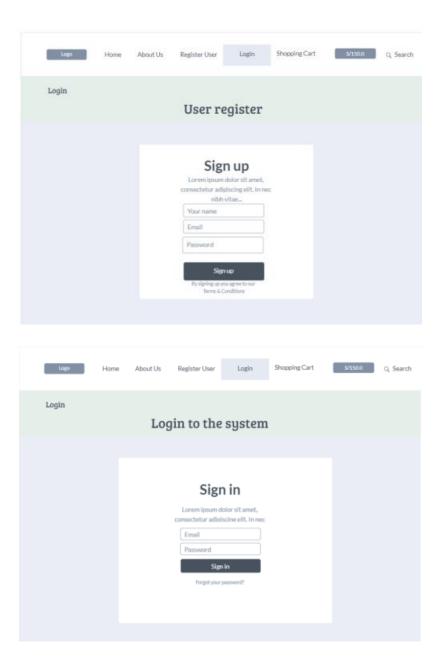
Phase 5: Launch:

a) Sprint 1: It is based on the first deliverable of the system, where the company's product catalog is displayed, and apart from that, the shopping cart is displayed, which will serve to complete the system's purchase flow. These two are important functionalities for the management of the eCommerce, that is why it was determined to be the first deliverable because it provides value and functionality to the system. The user will be able to visualize the product catalog, then the product will have a main window, where the main characteristics will be shown and also the item can be added to the cart. Then, we have the shopping cart interface where it will detail how the purchase will be made and what will be the type of payment to be made

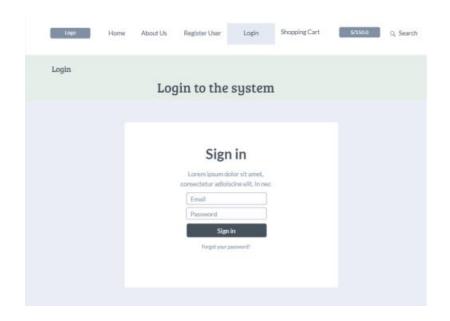


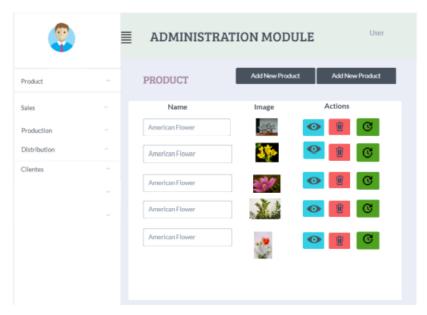


b) Sprint 2: This is the second deliverable of the system, it consists of two interfaces that will be used for the user to log in to the system after he/she has registered, therefore, an interface for the creation of new users was also created. The user registration prototype was also added, where new clients who are interested in having some interaction with the web system can be registered



c) Sprint 3: It is the third deliverable of the system, it is about the interfaces to the access of the administrator module, so that the administrator can enter the module, before he must log in, previously registered in the system and have the user data registered in the database, then, he must fill in the fields shown in the interface of email and password, then he will be directed to the administrator module. Where he can manage the products according to the criteria of the company, in sum, he will have administrator permissions to different actions such as deleting, viewing and updating the product.





d) Sprint 4: It is the fourth deliverable of the system, the interface was made to show all the reports of the sales that are made daily, where the area manager can view the items that were part of the purchase of customers, also showing the name and image of the product that was purchased. The area manager can also perform different actions on the product.

