Project Requirements and Design Specification

Snow-Ply

Snow-Ply.com

Team 5

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1. Vision Statement

For people who are looking for a web application to track a business's inventory – products, orders, suppliers, etc. for snow related equipment, our website, Snow-Ply, gives you the opportunity to rent or buy skis, snowboards, and other snow related equipment. Snow-Ply creates sales/purchase orders, sets auto reorder points, makes sure the flow of orders is smooth in and out, and more (Inventory management, n.d.). Unlike what other services offer, our company is fast and reliable in bringing our products to customers.

2. Introduction

2.1 Description of the business, with the types of products/services

Our business focuses on the distribution of products of ski and snowboard related activities, that gets to the customer quickly, efficiently, and provides a great service. The products we mainly distribute are skis, snowboards, gloves, coats, goggles, snow pants, ski and snowboard boats, and ski poles. We also offer rental services for people who do not want to purchase some of our more expensive products. Besides products, we strive to offer quick answers to any questions that a customer may have relating to our products and services.

2.2 Description of our project (an inventory tracking system)

Specifically, for this project and our company we strive to build an effective inventory system to be able to achieve our previously listed statements. Our goal for the inventory tracking system is for it to be able track the stock count of items (whether something was purchased or returned) and thus update the current stock count. Also, will have different fields of accusation, such as what a customer can view, an employee, an administrator, etc. This will enable employees to have the options of backstocking or purging products and administrators will have access to the entire system so they can check the current activities of it.

2.3 Agile manifesto

"We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- Individuals and interactions over processes and tools;
- Working software over comprehensive documentation;
- Customer collaboration over contract negotiation;
- Responding to change over following a plan.

While there is value in the items on the right, we value the items on the left more" (Sommerville, 2020, pgs. 22).

2.4 What Agile principles will your team be using?

One agile principle that our team will be primarily focusing on is individuals and interactions over processes and tools, because as an online service we need to be most focused on the customer and the customer experience, and this principle is built around focusing on them and what they need. We will also focus on having working software rather than comprehensive documentation, as the documentation is not what the customer sees, and has very little effect on the end goal; however, the working software is the most important part and should be our primary focus.

2.5 Each member's initial skill level with HTML, PHP, SQL

Gina Roma - Currently, I have had one semester of experience with HTML but have no experience with either PHP or SQL.

Christopher J. Rogers - I have used both HTML and SQL in the past, but have not used PHP.

Jacob S. Shapiro - I have experience with HTML, CSS, and some SQL. No experience with PHP though.

3. Requirements

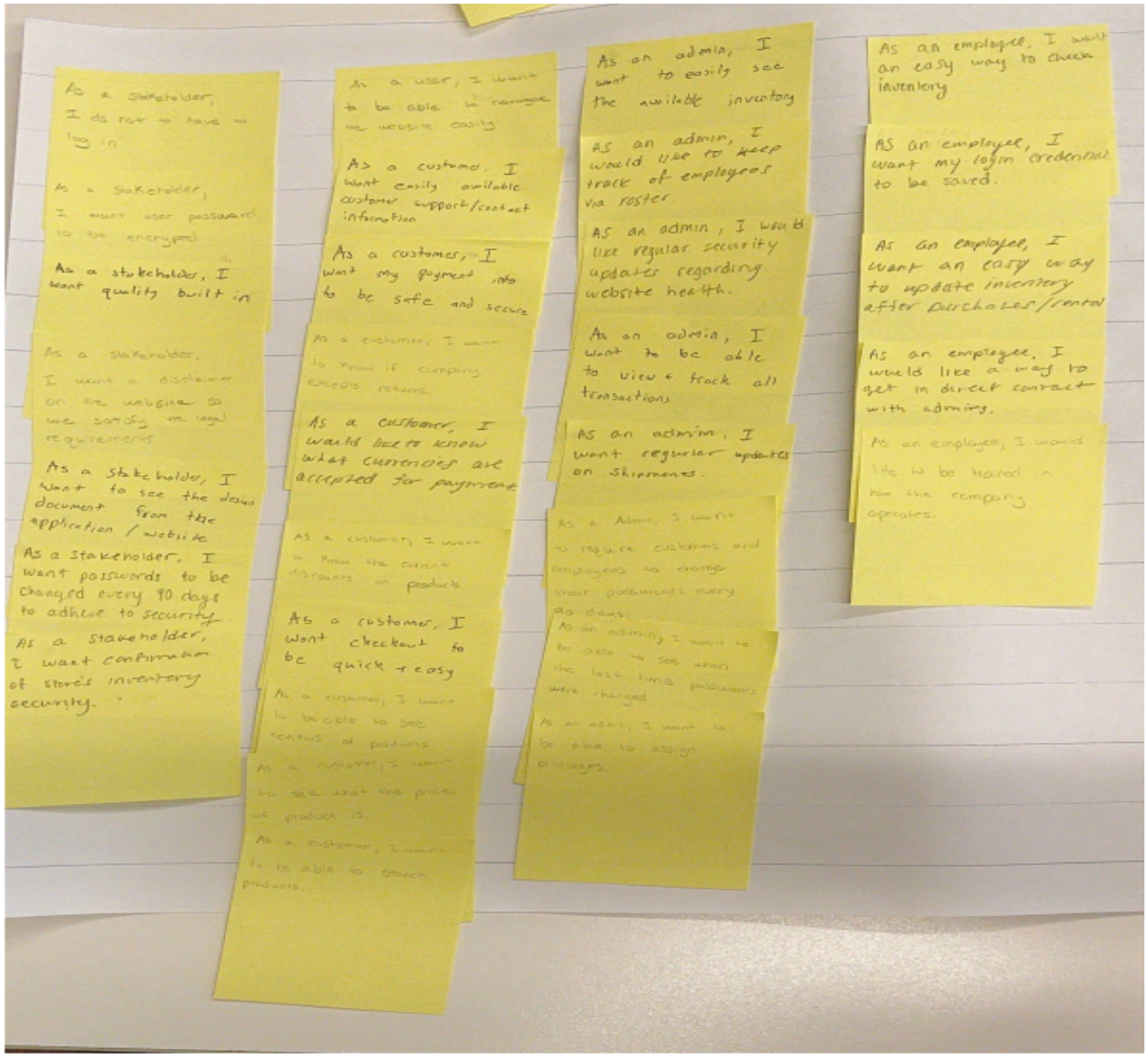
3.1 Stakeholders

- Snow-Ply owner
  - Owner of the actual company
- Customers
  - The people coming to the website are looking to purchase equipment.
- Possible investors
  - Anyone looking to invest in the company for further business expansions
- Suppliers of equipment
  - The other companies supply the equipment for us to sell.

3.2 Users

- Customers
  - People coming to the website to by the actual products on the page
- Admin
  - Managing any database information and making sure IT aspect is all good
- Employee
  - Managing products and items in inventory. Make sure everything is up to date.

3.3 User Stories (photo of post-its)



3.4 User story matrix

ID	As a/an	I want to...	so that...
1	Stakeholder	stay logged into my account	I can access information faster
2	Stakeholder	have my password encrypted	it is more secure
3	Stakeholder	have quality built in	
4	Stakeholder	have a disclaimer on the website	we satisfy legal requirements
5	Stakeholder	see the design document for the website	
6	Stakeholder	passwords changed every 90 days	increase security
7	Stakeholder	get confirmation of the inventory's security	increase security
8	User	navigate the website easily	I can find what I need quickly
9	User	know if the website accepts returns	I can better understand the site's rules
10	User	know which currencies are accepted	I can pay in the right currency
11	User	know the current discounts on products	I can get deals and buy more
12	User	see reviews of products	I can decide what to buy
13	User	see what the price of a product is	I can decide what to buy
14	User	search products	I can easily navigate the site
15	Admin	keep track of employees via a roster	
16	Admin	get regular security updates regarding the website's health	
17	Admin	require employees to change passwords every 90 days	
18	Admin	see the last time passwords were changed	
19	Admin	be able to design privileges	
20	Admin	see when employees log in/log out	

21	Employee	I want an easier way to check inventory	I can keep track of items in stock
22	Employee	I want my login credentials to be saved	for efficiency getting onto the site
23	Employee	An easy way to update inventory after sale or new shipment	other employees know about inventory
24	Employee	a way to get in direct contact with admins	in case any technical difficulties arise
25	Employee	be able to login into website	I can accuse system
26	Employee	be able to logout of website	I can exit system
27	Employee	be able to create products	I can update system
28	Employee	be able to update products	I can update system
29	Employee	be able to delete products	I can update system
30	Employee	be able to create suppliers	I can update system
31	Employee	be able to update suppliers	I can update system
32	Employee	be able to delete suppliers	I can update system

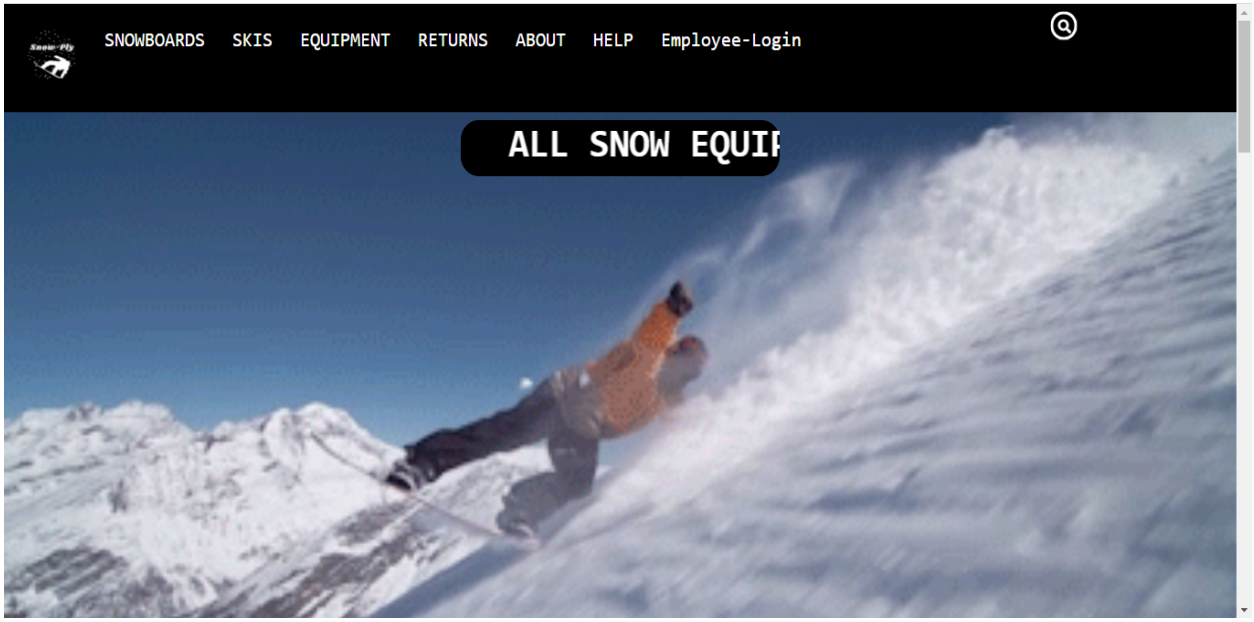
4. Design

4.1 Features List

Feature #	Feature	Priority	User list #
1	Create account	High	U25, U3
2	Login to system	High	U25, U3
3	Logout to system	High	U26, U3
4	Rest forgotten password	Medium	U3
5	Add new employee	High	U3
6	Delete employee	Medium	U3
7	Add New Product	High	U27, U3
8	Update Product Info	High	U28,U23, U3
9	Delete Product Info	High	U29, U3
10	Add New Suppliers	High	U30, U3
11	Update Suppliers Info	High	U31, U3
12	Delete Suppliers Info	High	U32, U3
13	View Contacts page	High	U24, U3
14	Save Credentials	High	U22, U1, U3
15	Check Inventory Status Info	High	U21, U3
16	View Employees login/logout of system	High	U20, U3
17	Issue privileges	High	U19, U3
18	View password change status	High	U18, U3

19	Alert after 90 days that you need to change your password.	High	U17, U6, U2, U3
20	Security Update Info	High	U16, U7, U3
21	View Employee status	Medium	U15, U3
22	Search system	High	U14, U8, U3
23	View Products Price Page	High	U13, U8, U3
24	DISPLAY CHANGE LOG	Medium	U12, U9, U3
25	Display Discounts	Medium	U11, U3
26	Accepted Currencies	Medium	U10, U3
27	DISPLAY DESIGN DOCUMENTS.	Medium	U3
28	View Disclaimer Page	Medium	U4, U5, U3

4.2 Prototype of Homepage



4.3 Table Definitions

Table Name: T5_users

Field	**Attribute (type)**	**Constraints**	**Description**
User_name	varchar(8)	NOT NULL UNIQUE PRIMARY KEY	A unique user name to identify the user and to identify the “user” table
RecActive	ENUM(“A”, “D”, “S”)	DEFAULT “A”	Whether a user record was “Active”, “Deleted”, or put on “Suspended”
User_type	ENUM(“Emp”, “Admin”)	No Con.	Distinguishes the different types of users
F_name	varchar(20)	No Con.	First name of user
L_name	varchar(20)	NOT NULL	Last name of user
Phone_num	varchar(14)	No Con.	Phone number of user
Email	varchar(100)	No Con.	Email address of user
Password	varchar(8)	NOT NULL	Field to hold the users passwords
Password_hash	VARCHAR(256)	NO CON..	Password with a unique hash to check whether the password was changed or not

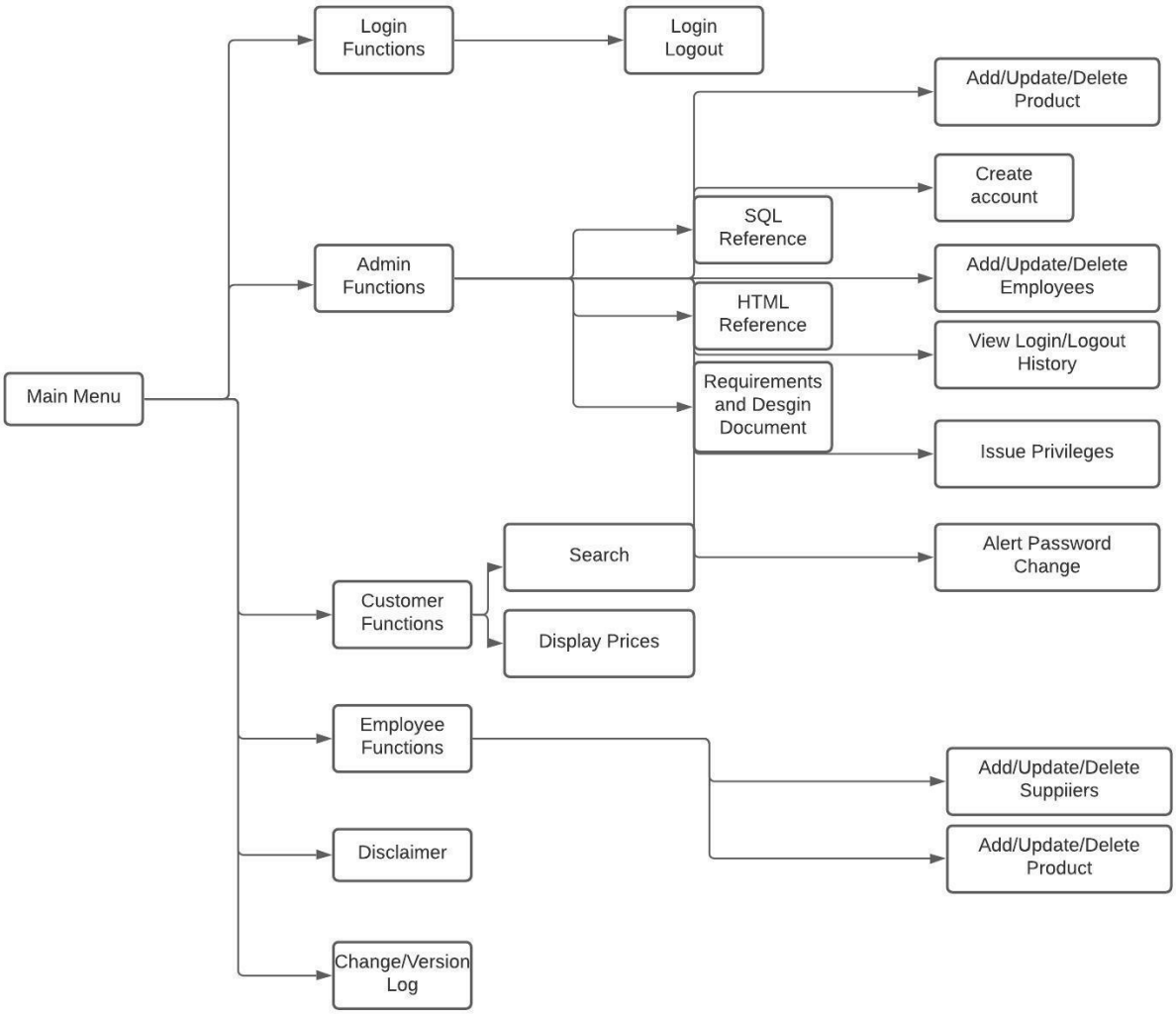
Table Name: T5_products

Field	Attribute (type)	Constraints	Description
RecActive	ENUM“A”, “D”	NO Con.	Whether the product is active or deleted
Quantity	INT	Not negative	Quantity of items currently in possession
Model Number	INT	NOT NULL AUTO_INCREMENT PRIMARY KEY	Unique identifying number assigned to each product
Product	TEXT	NO Con.	Name of product
Price	DOUBLE	NO Con.	Price of product
Supplier	TEXT	NO Con.	Supplier which provided product

Table Name: T5_suppliers

Field	Attribute (type)	Constraints	Description
Record Number	INT	NOT NULL AUTO_INCREMENT PRIMARY KEY	Unique identifying number assigned to each supplier
Supplier	TEXT	NO Con.	Supplier which provided product
RecActive	ENUM“A”, “D”, “H”	No con.	Whether the supplier is active, deleted, or on hold
Address	TEXT	No con.	Address of the supplier
Zip Code	INT(5)	No con.	Zip code of the supplier
Phone #	INT(11)	No con.	Phone number of the supplier
Email	TEXT	No con.	Email address of the supplier

4.4 Functional Diagram



Reference

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