

Project Requirements and Design Specifications

ArcticFox Project Plan

Arctic Fox is a snowboarding retailer, rental company and has a large snowboarding gear selection.

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Team 4 - ArcticFoxSnowboarding.com

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I. Vision Statement

Our mission is to offer the most quality experience in snow-related sports goods and services. We intend to do this by having an easy-to-navigate website interface that lets our users buy and rent snow equipment. If a problem ever arises, we will offer speedy customer service to help our customers get back in the game. We also keep our users safe by keeping their data encrypted, so no one else can access it but you. We hope that we can make the future for these sports a brighter yet colder one by doing this.

II. Introduction

ArcticFox is a retail company specializing in snowboarding equipment and clothing, which includes but is not limited to different brands of snowboards, jackets, pants, snow boots, and goggles. In addition, we offer a rental service for those that want to go out for a day or two of fun. Customers can either rent/purchase their desired product inside one of our locations or through our recently added website, and they can schedule when they would like to come to pick up their snow gear there. If a customer ever has a problem with our products/ services, they can feel free to contact our customer service line listed on our website. In addition, the website serves as the focal point for our employees. Employees at ArcticFox have their own account that gives them access to an Employee tab on the ArcticFox website that lets them clock in/out at work.

Our project will be an inventory tracking system that will be able to communicate with a website that displays inventory and the location of our sites. Customers will access the website to purchase goods and rent equipment. As with all good projects, we will be following the Agile Manifesto when going through the process of doing our project:

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

*That is, while there is value in the items on
the right, we value the items on the left more.*

With that being said, we will be using the following Agile principles when working:

- Continuous Integration: We will be using continuous integration to check in with the client to ensure we are not overlooking possible features that could be added.
- Incremental Programming: Incremental programming keeps the team focused and prevents us from being overwhelmed. In turn, we put out a better product.
- Collective Ownership: Collective ownership helps the team work together and keeps us on target. If we were all to work on different items, we could unintentionally have different outcomes than expected.
- Pair Programming: We will use pair programming to help our coding practices and learn new programming tactics from each other.

Going into this project, while all members of the project team (Antonio Lopez, Luke Pecovic, and Ian Marsh) have had experience coding in other languages, they will have had no prior experience coding in HTML, PHP, or SQL.

III. Requirements

To start off, we will better explain who will be impacted by our project: our Users and our Stakeholders.

Users:

- Customers: Arguably, the most significant portion of our userbase is the customers using our website to purchase and rent products, and they are our prime demographic.
- Employees: Our employees will be using the website both as a part of their job and to manage their hours.
- Managers: Like our employees, our managers will be using the website to facilitate some of their job requirements and manage their wages.

Stakeholders:

- Investors: If this project results in the company doing well, our investors will be very pleased and incentivized to fund future endeavors.
- Local Snow Hill Sites: If our business is successful enough, the surge of people renting and purchasing equipment will help increase the number of customers that local snow hill sites receive.
- Suppliers: Suppliers are incentivized to see that this website works out for the best since they will be more incentivized to work with us in the future if it is a success.

User Stories

Customers should
not have to
log in

The site needs a
O:Schur for legal

~~Employees~~
Employees
Passwords should
be encrypted

Stakeholder → wants design
documents for review

Stakeholder → password change
1/90 days, improve security

Stakeholder → Built-in quality

Employee → wants to clock
in/out

Employee → Wants to make change
to inventory, clears confusion

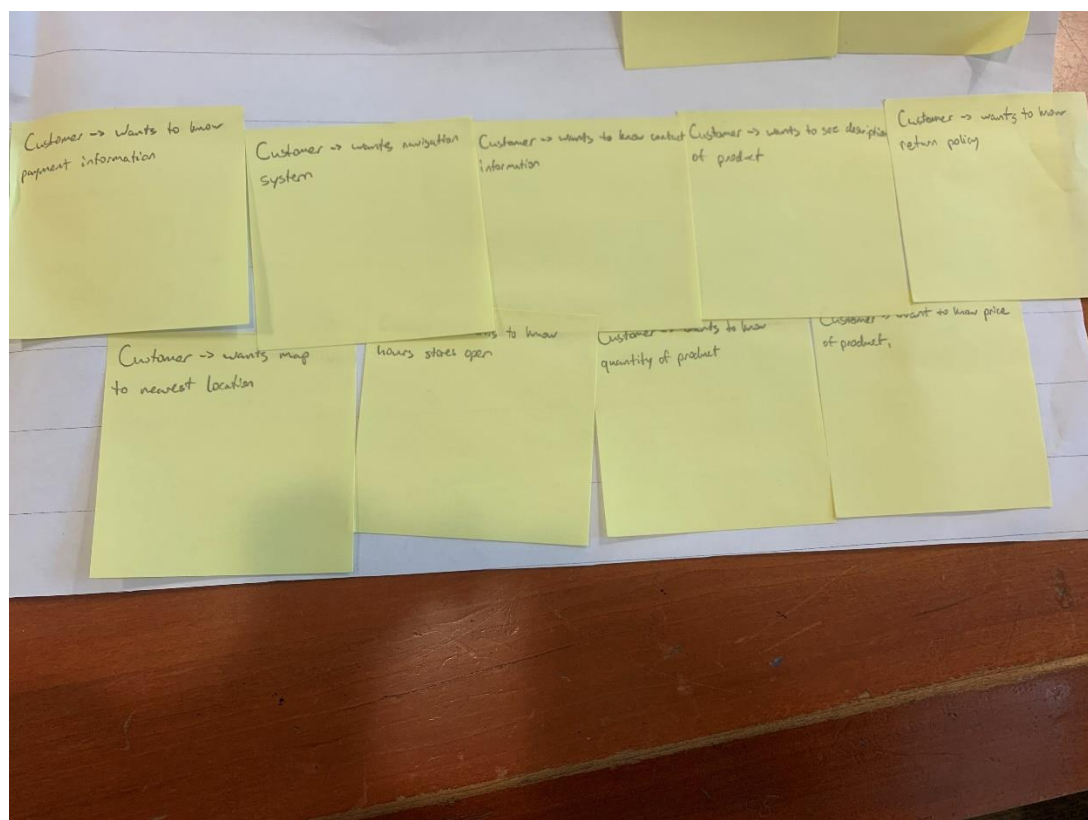
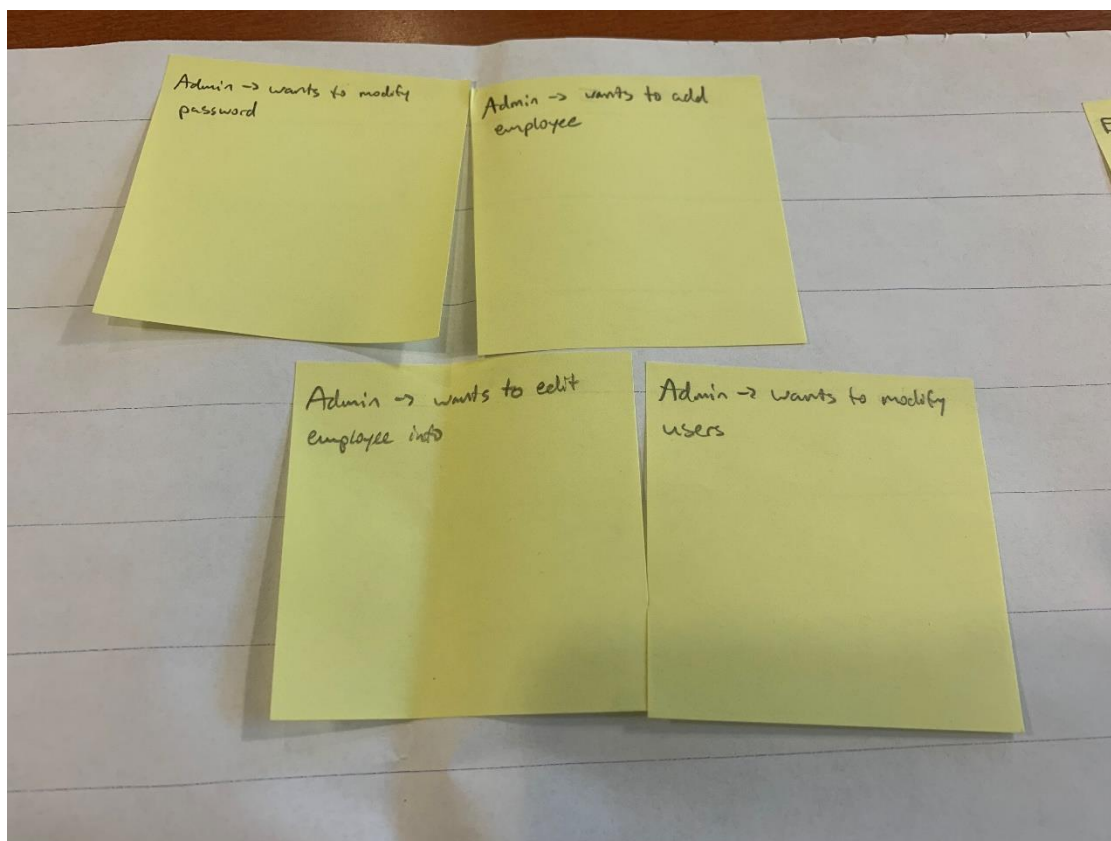
Employee → wants to see
paycheck

~~Admin~~ → wants training video
for employees

~~Admin~~ → modify employee
hours

Employee → wants to be ~~able~~
~~on stock~~ able to search

Employee → wants to add
supplier



User Story Matrix

Id	As a/an	I want to...	so that...
1	Admin	Wants to have access to web code	I can make changes/updates if necessary
2	Admin	I want to login	I can see special 'admin' options
3	Admin	I want to add or remove an employee	I can changes/update if necessary
4	Admin	Wants to modify users	I can change passwords and personal info
5	Customer	Wants to know payment information	So, they can know how to pay
6	Customer	Wants navigation system	They know where the store is
7	Customer	Wants to see description of the product	I know what I am buying
8	Customer	I want to see changelog	I keep abreast of programming and website changes
9	Customer	I want to see a return policy	I feel safe making a purchase
10	Customer	I want to see a rental policy	I can make informed decisions
11	Customer	I want to know store hours	I know when I can go to the store
12	Customer	I want to see the nearest store location	I know which store to go to
13	Customer	I want to know the customer service line	Can call them if I have a problem
14	Customer	I want to know the quantity of the product	I do not buy something that does not exist

15	Customer	I want to know the price of the product	I can make accurate financial decisions
16	Customer	I want to know the privacy statement	I can know what data is being collected about me
17	Stakeholder	I want to see programming info (project document)	We can have other teams support & maintain
18	Stakeholder	I don't want customers to have to login	It is easier for them
19	Stakeholder	I want user passwords encrypted	We don't get hacked
20	Stakeholder	I want a disclaimer on the website	We satisfy our legal requirements
21	Stakeholder	Wants to see sales history	To reflect on how well the company is doing
22	Stakeholder	See design documents	I can review and approve the application
23	Stakeholder	Passwords to be changed every 90 days	We adhere to security requirements
24	Stakeholder	A changelog to be maintained and displayed	All users are kept abreast of updates
25	Stakeholder	I want to see a legal disclaimer	I protect our company by defining our rights and obligations
26	Stakeholder	I do not want data sold to third parties	Our customers' information is protected
27	Stakeholder	Web applications should work for everyone	Everyone can get to our webpage
28	Customer	Want a home page	I can get basic info
29	Employee	Wants to make changes to inventory	I can clear up any confusion
30	Employee	Update supplier info	I can make sure it is correct
31	Employee	Add a supplier	We can get inventory in on time
32	Employee	Remember User	Save time login in

33	Employee	Have a login page	I can enter my info
34	Employee	Have an Employee Page	I can find all my unique features
35	Stakeholder	Have all passwords hashed	All passwords are not stored in plain text
36	Employee	Get an email when I should change my password	I don't let it expire
37	Stakeholder	Have a sales page	I can find all the info I need
38	Employee	Have a Item page	I can see stock of items
39	Stakeholder	Have a Stakeholder page	I can see the info I needed

IV. Design

Feature Matrix

Feature #	Feature Desc	User List #	Priority
1	Create Homepage	28, 11, 18	h
2	Search for products	7	m
3	Read the changelog	8	m
4	Show payment options	5	m
5	Create Items Page	38	h
6	Add images	7	l
7	Display merchandise price	15	m
8	Show if In stock to buy/rent	14	m
9	Create Login/ Logout page	33	h
10	Create new account page	3	m
11	Remember username/password	32	m
12	Admin pages	2	h
13	Modify users' password/ info	4	m
14	Add or remove employees	3	m
15	Change and view programming info	1, 17	h
16	Create employee page	34	h
17	Make inventory editable	29	m
18	Add a supplier	31	m
19	Hash all passwords	35	h
20	Make password Encryption	19	h
21	Enforce 90-day password change	23	h
22	Send Email when password needs change	36	m
23	Create sales page	37	h
24	Update supplier info	30	m
25	Create Privacy Policy page	25, 26, 16	l
26	Create Contact Us Page	13, 9,10	l
27	Display nearest store	6, 12	l
28	Contact the store and/or customer service	13	l

29	Provide universal accessibility	27	m
30	Create a Disclaimer Page	20	l
32	Stakeholder Page	39	m
33	Show sales history	21	l
34	See design documents	22	l
35	Changelog to be maintained and displayed	24	l

The Home Page

ArcticFox

- Snowboards for Sale
- Snowboards for Rent
- Snowboard Equipment
- Find a Location
- Employee Login
- Search..

Who are we?


ArcticFox is a retail company specializing in snowboarding equipment and clothing, which includes but is not limited to different brands of snowboards, jackets, pants, snow boots, and goggles.

What services do we offer?

ArcticFox offer a rental service for those that want to go out for a day or two of fun. Customers can either rent/purchase their desired product inside one of our locations or through the website, and they can schedule when they would like to come to pick up their snow gear there. If a customer ever has a problem with our products/ services, they can contact our customer service line.

What can the Web Site do for you?

On ArcticFox.com, you will be able to rent or buy all your snowboarding needs. The site is a one-stop shop to help complement our already successful in-store business. The site will also help our employees make your experience better by offering real-time quantity numbers and much more.



Need Help? Send us an Email! ArcticFox Support

[Disclaimer Link](#)

[Privacy Statement Link](#)

[Rental/ Return Policy Link](#)

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Table Definitions

ArcticFox			
Field	Attr	Mod	Desc
T1_USERS			
UserID	INT	PRIMARY, UNIQUE, AUTO_INCREMENT, NOT NULL	
Username	VARCHAR(16)	NOT_NULL	
Password Hash	CHAR(32)	DEFAULT('NONE')	
Password	CHAR(16)	NOT_NULL	Needs to be at least 8 char long
LastPassChange	TIMESTAMP	NOT_NULL	
AcctType	ENUM('Shareholder', 'Employee', 'Admin')	NOT_NULL	
Active	ENUM('A','D','H')	NOT_NULL DEFAULT ('A')	Deleted user still has data kept, inactive user if they don't change password after 90 days
DOB	DATE	NOT_NULL DEFAULT ('N/A')	
Address	TEXT	DEFAULT ('N/A')	
Phone#	CHAR(10)	DEFAULT ('N/A')	
T2_ITEMS			
ItemID	INT	PRIMARY, UNIQUE, AUTO_INCREMENT, NOT_NULL	
ItemName	VARCHAR(32)	UNIQUE, NOT_NULL	
ItemPrice	DECIMAL	NOT_NULL	
ModelNum	INT	UNIQUE, NOT_NULL	
QuantityAvailable	INT	DEFAULT (0)	
ItemWeight	DECIMAL	NOT_NULL	In pounds
ItemDimensions	VARCHAR(20)	NOT_NULL	Inches, length x width x height
Description	TEXT	DEFAULT ('N/A')	
ItemCategory	ENUM('Clothing', 'Equipment')	NOT_NULL	
T3_SUPPLIERS			

SupplierID	INT	PRIMARY, UNIQUE, AUTO_INCREMENT, NOT_NULL	
SupplierName	VARCHAR(30)	NOT_NULL	
SupplierEmail	VARCHAR(30)	NOT_NULL	
SupplierPhoneNumber	VARCHAR(30)	DEFAULT ('N/A')	
Address	TEXT	DEFAULT ('N/A')	
T4_SHIPMENT			
ShipmentID	INT	PRIMARY, UNIQUE, AUTO_INCREMENT, NOT_NULL	
ItemID	INT		From Item table
SupplierID	INT		From Supplier table
Amount	INT		

Functional Diagram

