University of British Columbia
COSC 304: Introduction into Databases

Kelowna Alpine

Project Design and Document

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1 Introduction:

1.1 Mission Statement:

Don't you wish that skiing could be fun again! Our goal is to provide our Ski enthusiasts with the best possible equipment for all their skiing needs. Kelowna Alpine was designed to reignite our users with love of skiing so we can finally make skiing great again.

1.2 Executive Summary:

Kelowna Alpine is an online website designed to cover all the necessities for skiing. The purpose of this project is to establish an online business that could provide any ski enthusiast with the ability to pursue their dreams. Our team worked to create a website that allows for the easy transaction of both the purchase of the products as well as the addition of other merchandise.

Our website tries to distinguish itself through our easy to use website without confusing visuals and with fast response time. Furthermore, our goal is to provide our customers with the satisfaction of both browsing on the website as well as having a wide variety of products to select from. Additionally, as ease of use is our priority for our customers, we included login and product storage options to maximize our customers satisfaction. As for our products, we have more than 80 skis and snowboards that our customers can choose from with their descriptions to help narrow down choices.

As for our administrators, Kelowna Alpine worked effortlessly to provide tools for them to update, delete, change order status, add or remove products, and much more. Moreover, tools such as graphs and sales reports are provided on the website to give them a better understanding of the transaction taking place on Kelowna alpine.

2 System Features:

Final Overall System Features	Category	Points	
Documentation			
Executive Summary	Core	2	
System Features	Core	2	
Walkthrough	Core	6	
Hosting (10 total points)			
Running on cloud server	Advanced	10	
Main/Home Page (up to 14 total points)			
Search for a product by name	Core	1	
Browse products by category	Core	1	
Page header with menu	Basic	1	
Improved UI (user-friendly, images, etc.)	Basic	2	
Shopping Cart (up to 8 total points)			
Add to shopping cart	Core	1	
View shopping cart	Core	1	
Update quantity (with data validation)	Basic	1	
Remove item from shopping cart	Basic	1	
Cart stored in database between sessions	Basic	3	
Checkout (up to 9 total points)			
Checkout with customer id	Core	1	
Product Detail Page (up to 2 total points)			
Product detail page and item description	Core	1	
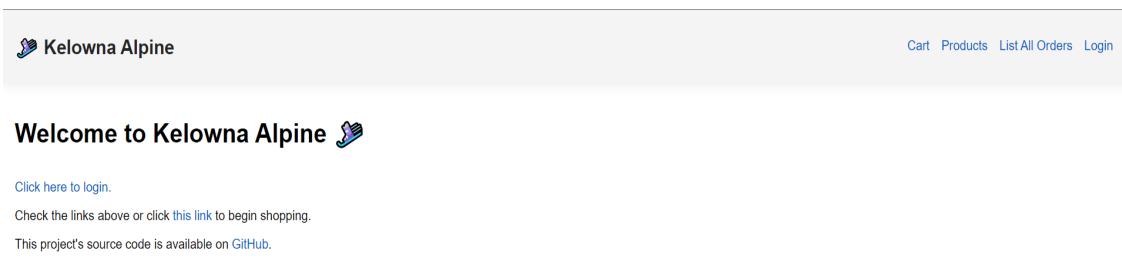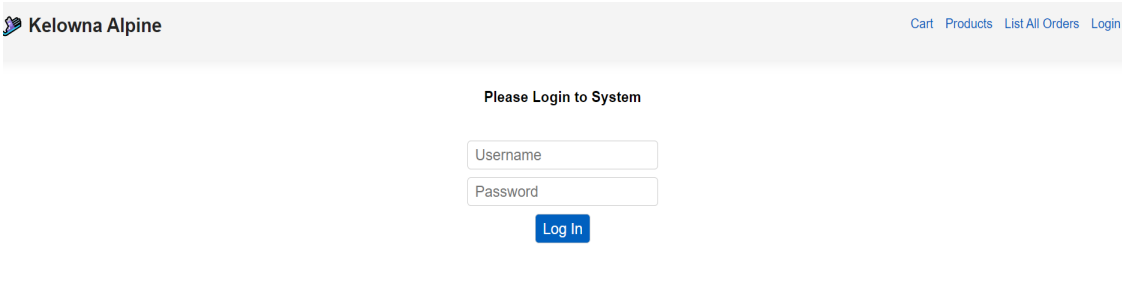
Product detail has an image from database	Core	1	
User Accounts/Login (up to 12 total points)			
Login/logout	Core	1	
Administrator Portal (up to 19 total points)			
Secured by login	Core	1	
List all customers	Core	1	
List report showing total sales/orders	Core	1	
Report with a graph	Advanced	3	
Add new product	Basic	2	
Update/delete product	Basic	2	
Change order status/ship order	Basic	1	
Upload a photo to file system for product	Advanced	2	
OR: Upload a photo to database for product Advanced	Advanced	4	
Database restore with SQL script	Basic	2	
Add/update warehouse, customer	Basic	2	
Database System/General			
User interface and navigation/usability		Up to 5	
Total		62	

3 Project Walkthrough:

You can access our website through the following link: Home | Kelowna Alpine 🥾

1.	**Home Page (All users)**	This is the homepage for those who have not yet logged in. The home page has the login information, Product Listing, and cart for the shopping items that were selected. As per the design, the viewer is greeted with the logo, a welcome message, and a title bar at the top of the website.

2.	**Login Page**	The login page is simple with a requirement for a username and password. Once the user enters their login information, the website then validates whether or not the login information is valid. If the login information is valid then they are taken to a new home page.

3.	**Home Page (Logged in)**	We have a different home page for our logged users to speed up the shopping process. While you are greeted with the same title bar, the homepages change by showing the username that's logged in, option for viewing customer profile and order summary.

🤿 Kelowna Alpine   Cart Products List All Orders Login

Welcome to Kelowna Alpine 🤿   Logged in as **arnold**

Since you're logged in...

| Upload a product image |
| View your customer profile |
| View orders summary |
| 1 | Ship order number |

4.	# Profile info	The user is redirected to the Profile information page when clicking on "view customer profile ". The page includes the ID of the user, First and last name, contact info, and address. When creating a new account the profile information changes based on the information given. ***NOTE***: The User ID changes based on the ordering of the users entered

🤿 Kelowna Alpine   Cart Products List All Orders Login

Profile Info

ID	1
First Name	Arnold
Last Name	Anderson
Email	a.anderson@gmail.com
Phone	204-111-2222
Address	103 AnyWhere Street
City	Winnipeg
State	MB
Postal Code	R3X 45T
Country	Canada
User ID	arnold

5.	# Product Listing	After clicking the Products page at the top of the website it redirects you to the product listing page. Here there are the product descriptions, IDs, pricing, category, and the option to add to cart. Furthermore, there is both a sort option for the category of products, either skis or snowboards. While also including a search for items based on the name to only show items with that name as indicated in the second image.

Listing all products:

Search for item   All categories   **Search**

82 products found.

+	ID	Name	Price	Description	Category
Add to cart	1	Volkl Kendo 88 Skis 2023	$437.00	Just like sending a Rottweiler to obedience school and your dog coming back with a veneer of civility until he really needs to use his teeth, the storied Volkl Kendo 88 Skis get an update that makes them a tad more forgiving at slower speeds without losing any of their grit when the chips are down. That means better slow and mid speed performance, less hookiness at the tip, and still with the tenacious edge grip you expect when you lay the ski over. Volkl gets it done with the addition of Tailored Technology - the Titanal laminate has been sculpted - and Tailored Carbon Tips, and you're the beneficiary.	Skis
Add to cart	2	Volkl Revolt 81 Skis 2023	$661.00	Just getting into park riding, but still need a quality ski to get around the whole mountain? Check out the Volkl Revolt 81 Skis and call it good. A full twin rocker with a slightly directional shape for 'all-mountain' capability, the Revolt 81 gets it done whether you're cruising the groomed with your buds or getting slappy on features.	Skis
Add to cart	3	Rossignol Rallybird 90 Pro Skis + Xpress 10W GW Bindings - Women's 2023	$518.00	A Rallybird for the fledgling set that delivers adult-level performance to those just getting their wings under them, the Rossignol Rallybird 90 Pro Skis + Xpress 10W GW Bindings take all-mountain excellence to a new level. With an extended Poplar core, the 90 Pro keeps edge control to a max under all conditions so you can let it fly with full confidence.	Skis
Add to cart	4	Elan Ripstick 94 Black Edition Skis - Womens 2023	$478.00	The Elan Ripstick 94 Black Edition Skis are like an emotionally mature partner: powerful, controlled, and great at challenging your skiing without ever wavering in their support. Constructed with a full wood core reinforced with carbon QuadRods, these skis are so powerful, groomers will gasp in awe when they see you ripping down the hill. Their asymmetrical flex design provides targeted control and edge precision, delighting your thigh muscles and cutting perfectly into groomed snow and variable terrain. For the boot benders looking for something that'll make them reach for a stiffer power strap, the Elan Ripstick 94 Black Edition Skis are the whole package. Get them a ring asap!	Skis

Search results for "liberty":

liberty   All categories   **Search**

2 products found.

+	ID	Name	Price	Description	Category
Add to cart	6	Liberty Origin 112 Skis 2023	$751.00	If you've been paying attention, the go-to width for elite level freeride skiers has gone narrower in the past few years, with 112mm being just about right for most people who actually know how to ski powder and want some edgehold and precision underfoot for the steep and tecnical. The Liberty Origin 112 Skis slot into this category like a champ, with a versatile freeride rocker-camber-rocker profile, plenty of surface area underfoot, and a bomber construction based on the new VMT 1.0 core. The Origin 112 gets it done when other skis don't quite measure up, and deserve a close look if you're in the market.	Skis
Add to cart	31	Liberty Genesis 106 BC Skis - Women's 2023	$448.00	This is the backcountry ski you've been waiting for. The Liberty Genesis 106 BC Skis take their freeride roots and update them with lighter materials to create a carvy, floaty ski that excels on the skin track too. The aspen and carbon core and partial metal edge shave crucial grams without compromising that classic Genesis feel, and the reduced tail rocker is more compatible with climbing skins. This ski is ready for big, gnarly lines and won't punish you on your way to the summit.	Skis

6.	Product	Once the customer finds the product they want they can click to find the picture of the product and description of the product. Furthermore, this also gives the user information on the availability of the product, as you can see there is only one item left in the warehouse in this example. Moreover, the customer can change the quantity they want and add it to the cart.

 Kelowna Alpine   Cart   Products   List All Orders   Login

Volkl Kendo 88 Skis 2023 *in Skis*

$437.00

Just like sending a Rottweiler to obedience school and your dog coming back with a veneer of civility until he really needs to use his teeth, the storied Volkl Kendo 88 Skis get an update that makes them a tad more forgiving at slower speeds without losing any of their grit when the chips are down. That means better slow and mid speed performance, less hookiness at the tip, and still with the tenacious edge grip you expect when you lay the ski over. Volkl gets it done with the addition of Tailored Technology - the Titanal laminate has been sculpted - and Tailored Carbon Tips, and you're the beneficiary.

[Add to Cart]   [1 ▼]   *in warehouse 1*

7.	Cart	If the user clicks the 'Cart' link in the header with no products being chosen, the shopping cart is empty. Once the 'Continue Shopping' link is clicked, the user is taken to the listing all products page. After browsing the products, and a product is added to the cart by the 'Add to cart' link, the user is taken to their shopping cart. This page contains all the products they've chosen in addition with their product ID, product name, quantity, price, subtotal, and order total. The quantity can also be changed here, and the user can continue shopping or check out. The user's shopping carts page contains all the products they've chosen in addition with their product ID, product name, quantity, price, subtotal, and order total. The quantity of the product can also be changed here, and the user can continue shopping or check out. As indicated by the second image.

 Kelowna Alpine   Cart   Products   List All Orders   Load Initial Data   Clear All Data   Restock Warehouses   Login

Your Shopping Cart

Product Id	Product Name	Quantity	Price	Subtotal
1	Volkl Kendo 88 Skis 2023	1 ⬍	$437.00	$437.00
			Order Total:	$437.00

Check Out

Continue Shopping

Your shopping cart is empty!

Continue Shopping

8.	Checkout	The checkout page contains customer ID, order ID, order date, and if the order is successful. There's also a product table that includes the same information as the shopping cart table – excluding the subtotal and the option to change the product's quantity. There's also the option to return to the home page.

Order Successful

Customer ID: 1

Order ID: 11

Order Date: 2022-12-10 07:10:35

ID	Product	Quantity	Price
1	Volkl Kendo 88 Skis 2023	1	$437.00
		Order Total:	$437.00

Thank you for your order! Return home.

9.	Order List	For our Admin staff we have an order list page. This page includes the customer name, their order, quantity, date of order, and total price. This page is to maintain track of the order history and traffic on the website.

Kelowna Alpine   Cart   Products   List All Orders   Login

Orders

ID	Order Date	Customer Name	Price	Qty	Total Price
1	**Oct 15th 2019**	**Arnold Anderson**			**$4,435.00**
	Volkl Kendo 88 Skis 2023	Just like sending a Rottweiler to obedience school and your dog coming back with a veneer of civility until he really needs to use his teeth, the storied Volkl Kendo 88 Skis get an update that makes them a tad more forgiving at slower speeds without losing any of their grit when the chips are down. That means better slow and mid speed performance, less hookiness at the tip, and still with the tenacious edge grip you expect when you lay the ski over. Volkl gets it done with the addition of Tailored Technology - the Titanal laminate has been sculpted - and Tailored Carbon Tips, and you're the beneficiary.	$437.00	1	$437.00
	Black Diamond Helio Carbon 115 Skis 2022	Go ahead and book that guided trip to Hokkaido, and don't forget about your skis. Deep and light snow with nightly refills calls for a touring ski you don't often have a need for in other climates, and the Black Diamond Helio Carbon 115 Skis are one of the best options out there for a stick over 110mm wide that isn't an anchor on the skintrack. The guys at the factory in Mittersill probably laugh at anything over 105mm with a skin-clip slot in the tail, but be assured it's a thing, not just in Japan but anywhere in the western half of North America that gets the goods.	$958.00	2	$1,916.00
	Faction Agent 3 Skis 2023	The most versatile mid-winter touring design in the Faction collection, the Faction Agent 3 Skis combine a mid-fat 106mm waist, light Karuba wood core, and full Carbon Weave layup in a package that's light but tough. Dependable and confidence-inspiring on anything from icy steeps to knee-deep freshies, the Agent 3 features a flatter tail with skin notch for your touring pleasure.	$3,040.00	1	$3,040.00
2	**Oct 16th 2019**	**Bobby Brown**			**$2,395.00**
	Rossignol Rallybird 90 Pro Skis + Xpress 10W GW Bindings - Women's 2023	A Rallybird for the fledgling set that delivers adult-level performance to those just getting their wings under them, the Rossignol Rallybird 90 Pro Skis + Xpress 10W GW Bindings take all-mountain excellence to a new level. With an extended Poplar core, the 90 Pro keeps edge control to a max under all conditions so you can let it fly with full confidence.	$2,072.00	4	$8,288.00
	Black Diamond Helio Carbon 115 Skis 2022	Go ahead and book that guided trip to Hokkaido, and don't forget about your skis. Deep and light snow with nightly refills calls for a touring ski you don't often have a need for in other climates, and the Black Diamond Helio Carbon 115 Skis are one of the best options out there for a stick over 110mm wide that isn't an anchor on the skintrack. The guys at the factory in Mittersill probably laugh at anything over 105mm with a skin-clip slot in the tail, but be assured it's a thing, not just in Japan but anywhere in the western half of North America that gets the goods.	$2,395.00	5	$11,975.00

10.	Ship Order Number	In order to reach this page the user has to click the Ship order button on the home page. This page is for keeping track of the inventory, what products were ordered, from which warehouse, product number, and previous inventory. This page automatically updates once new orders come through. The main reason for the creation of this page is to allow easy tracking of the product inventory

Kelowna Alpine   Cart   Products   List All Orders   Login

Shipping Order 1...

1. Ordered `1` of `Product #1` from `Warehouse #1`
   Previous inventory: `12`, New inventory: `11`
2. Ordered `2` of `Product #5` from `Warehouse #1`
   Previous inventory: `70`, New inventory: `68`
3. Ordered `1` of `Product #10` from `Warehouse #1`
   Previous inventory: `30`, New inventory: `29`

Order processed successfully

11.	Product Image	

12.	Order Summary	To access this page click the "View Order Summary" in the homepage. This page shows the order Date and Total sales amount of that date. This is an Admin page that allows further tracking of the sales made per day.

Daily Sales

Order Date	Daily Sales Amount
2019-10-15	$13,781.00
2019-10-16	$2,395.00
2019-10-17	$8,678.00
2022-12-10	$38,942.00

13.	Admin Portal	The administrator portal includes a sales report, customer list, and a pie graph. This page also has a section to add a new product. Other administrator options are also included. At the bottom of the page, there is the option to load products into the database, clear database, and stock products.

🐬 **Kelowna Alpine**   Cart   Products   List All Orders   Load Initial Data   Clear All Data   Restock Warehouses   Login

Administrator Portal

14.	Admin Portal: Sales Report	The sales report is a table that demonstrates the total sales/orders by date, number of orders, and total revenue.

Sales Report

Total sales/orders

Date	Number of Orders	Total Revenue
2019/10/15 at 10:25:55	2	$10,278.00
2019/10/16 at 18:00:00	1	$2,395.00
2019/10/15 at 03:30:22	1	$3,503.00
2019/10/17 at 05:45:11	1	$8,678.00
2022/12/10 at 04:24:20	1	$35,446.00
2022/12/10 at 04:58:54	1	$437.00
2022/12/10 at 05:00:36	1	$1,748.00
2022/12/10 at 05:01:00	1	$437.00
2022/12/10 at 06:51:48	1	$437.00
2022/12/10 at 07:10:35	1	$437.00

15.	Admin Portal: Customer List	The customer list contains information about each customer such as ID number, name, address, phone number, email, and username ID – the username ID is the same username

|		that is used to login.

Customer List

Customer list table or whatever

ID	Name	Address	Phone	Email	User ID
1	Arnold Anderson	103 AnyWhere Street Winnipeg, MB R3X 45T Canada	204-111-2222	a.anderson@gmail.com	arnold
2	Bobby Brown	222 Bush Avenue Boston, MA 22222 United States	572-342-8911	bobby.brown@hotmail.ca	bobby
3	Candace Cole	333 Central Crescent Chicago, IL 33333 United States	333-444-5555	cole@charity.org	candace
4	Darren Doe	444 Dover Lane Kelowna, BC V1V 2X9 Canada	250-807-2222	oe@doe.com	darren
5	Elizabeth Elliott	555 Everwood Street Iowa City, IA 52241 United States	555-666-7777	engel@uiowa.edu	beth

16.	Admin Portal: Pie Graph	The pie graph illustrates the sales by product category, and gives a report visualization.

Sales by Product Category

Skis   100%
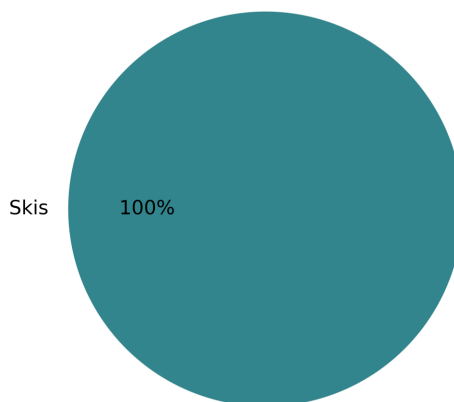
17.	Admin Portal: Add New	The section to add a new product is done so by name, description, price, category, and an image can be uploaded. The name and price are mandatory fields, but the description, category, and image upload are optional.

Product	

Add New Product

Name	
Description	
Price	
Category	Skis

PNG/JPEG	Upload a product image...

Upload

18.	Other Administrator Options	Other administrator options are also included: upload a product image, view your customer profile, view orders summary, ship order number. If an administrator clicks the 'Upload a product image' link, they are taken to a page that is shown below. At the bottom of the page, there is the option to load products into the database, clear database, and stock products.

Load Products Into Database

`/data/data.sql`

Load Database

Clear Database

`/data/clear.sql`

Clear Database

Stock Products

`Randomize stock and prepare warehouses`

Stock Warehouses

Upload Image

1. Volkl Kendo 88 Skis 2023	Product ID
PNG/JPEG	Select a file to upload...

Upload