**COSC 304: Introduction to Databases**

**December 2023**

**Design Documentation For**

**AJ SPORTS**

**Group 23**

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**GitHub Repository Link**

[joloses/COSC304\_Project: Online Shopping Website Using SQL (github.com)](https://github.com/joloses/COSC304_Project)

**Mission Statement**

For sports lovers and physical activity doers alike, AJ SPORTS aims to provide a broad variety of items and accessories at a convenient and accessible place. For any occasion, event, or activity, you are bound to find the item that is just right for you!

**Executive Summary**

Here at AJ SPORTS, we take great pride in sharing our passion for sports and making the items needed to make each activity fun as accessible as possible. We want to eliminate the time wasted of physically going, browsing, and going back to your home only for certain sporting goods and items. Our website will allow you to perform all of these steps at the comfort of your own home!

AJ SPORTS is a website where a user can log in their account (account creation pending), search and browse a variety of products, view each product description with images, select the products they want to buy, view their cart, and place their order to have their selected sporting products sent straight to their home! This simple and easy process ensures that convenience is maximize so that you can be lazy now as long as you’re productive when it matters more in the game!

**Development Project Features List**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Final Overall System Features** | **Category** | **Possible Points** | **Points** | **Comments / Code Files** |
| **Documentation (15 total points)** | | | | |
| Executive Summary (up to 1 page) | Core | 2 | 2 |  |
| System Features (2 pages) | Core | 2 | 2 |  |
| List of Web and AI sources used | Core | 3 | 3 | Shown at the bottom |
| Walkthrough with screenshots (up to 15 pages) | Core | 8 | 8 |  |
|  | | | | |
| **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 | 1 |  |
| Browse products by category | Core | 1 | 1 |  |
| List products (by search/browse) | Core | 1 | 1 |  |
| List products with image | Core | 1 | 1 |  |
| Page header with menu | Basic | 1 | 1 |  |
| Page header shows current logged in user | Basic | 1 | 1 |  |
| Dynamic products on page based on sales | Basic | 2 |  |  |
| Improved UI (user-friendly, images, etc.) | Basic | 2 | 1 |  |
| Product recommendation based on user | Advanced | 4 | 1 | “Random” instead of user-based but there is a recommendation |
|  | | | | |
| **Shopping Cart (up to 8 total points)** | | | | |
| Add to shopping cart | Core | 1 | 1 |  |
| View shopping cart | Core | 1 | 1 |  |
| Update quantity (with data validation) | Basic | 1 | 1 |  |
| Remove item from shopping cart | Basic | 1 | 1 |  |
| Improved formatting/UI (e.g. in header bar) | Basic | 1 | 1 |  |
| Cart stored in database between sessions | Basic | 3 |  |  |
|  | | | | |
| **Checkout (up to 9 total points)** | | | | |
| Checkout with customer id | Core | 1 | 1 |  |
| Checkout with payment/shipment info | Basic | 2 | 2 |  |
| Checkout with data validation | Basic | 2 | 2 |  |
| Multiple shipments per order supported | Advanced | 2 |  | Note: Requires DB change. |
| Calculate taxes/shipping (by items/state) | Advanced | 2 |  | Note: Requires DB change. |
|  | | | | |
| **Product Detail Page (up to 2 total points)** | | | | |
| Product detail page and item description | Core | 1 | 1 |  |
| Product detail has an image from database | Core | 1 | 1 |  |
|  | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **User Accounts/Login (up to 12 total points)** | | | | |
| Create user account page | Basic | 2 | 2 |  |
| Create account with data validation | Basic | 2 | 2 |  |
| Edit user account info (address, password) | Basic | 2 |  |  |
| Login/logout | Core | 1 | 1 |  |
| Register user/Forgot password email | Advanced | 4 | 2? | no forgot password |
| Page listing all orders for user | Core | 1 |  |  |
|  | | | | |
| **Product Reviews (up to 5 total points)** | | | | |
| Ability to enter a review on a product | Basic | 2 | 2 |  |
| Display product review on product detail page | Basic | 1 | 1 |  |
| Restrict to one review per user on item purchased | Advanced | 2 |  |  |
|  | | | | |
| **Warehouses/Inventory (up to 5 total points)** | | | | |
| Display item inventory by store/warehouse | Basic | 2 |  |  |
| Edit item inventory by store/warehouse | Advanced | 3 |  |  |
|  | | | | |
| **Administrator Portal (up to 19 total points)** |  |  |  |  |
| Secured by login | Core | 1 | 1 |  |
| List all customers | Core | 1 | 1 |  |
| List report showing total sales/orders | Core | 1 | 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 | 4 |  |  |
| Database restore with SQL script | Basic | 2 |  |  |
| Add/update warehouse, customer | Basic | 2 |  |  |
|  |  |  |  |  |
| **Database System/General** |  |  |  |  |
| Implement some validation using triggers | Advanced | 2 |  |  |
| Use AJAX for some pages | Advanced | 4 |  |  |
| User interface and navigation/usability |  | Up to 5 |  |  |
| *Others (your suggestions)* |  | Up to 5 | 3? | Confirmation page on checkout  New product DDL/images  Page header present in most pages for convenience |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **Total: (out of 50 with maximum of 10 bonus marks. i.e. 60 points out of 50 is max.)** |  |  |  |  |

**References/Resources:**

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/text>

[**https://stackoverflow.com/questions/43648170/validating-credit-card-expiry-date-against-todays-date-in-javascript**](https://stackoverflow.com/questions/43648170/validating-credit-card-expiry-date-against-todays-date-in-javascript)

[**https://stackoverflow.com/questions/15205188/how-to-update-shopping-cart-total-properly-in-javascript**](https://stackoverflow.com/questions/15205188/how-to-update-shopping-cart-total-properly-in-javascript)

<https://www.w3schools.com/howto/howto_css_signup_form.asp>

<https://www.codingnepalweb.com/star-rating-html-css-javascript-2/>

Logo courtesy of: <https://looka.com/>

**Website Walkthrough**

|  |  |
| --- | --- |
| Home page for unsigned users, they can log in, sign up, or shop as a guest. They can also view all orders to see what others are getting! |  |
| Sign up page to register a new user into the database with all the necessary info. |  |
| Alternatively, a user can log in with their credentials, validated through the database. |  |
| New home page once a user is logged in. They now have access to more features such as Administrator tools and their own info. |  |
| Admin page showing a summary of amounts earned in each day. Also lists all registered users in the database. (note, header got cut from screenshot) |  |
| Customer info page showing the entered information of the logged in user. |  |
| Order summary page showing all customer orders by customer ID. |  |
| Product list page showing all products, price, and an option to add directly to cart. Users can click on product name for more info. They can also filter their search via the search bar. |  |
| Clicking on the product name brings the user to its product page. Here, they can see the name, ID, description, price and an image! They have the option to add it to their cart or go back to the product page. The user can also leave a review (next) |  |
| Upon leaving a review, the review will show listed on the same page as the product! |  |
| Once the user selects their desired items, they can review their shopping cart and update/remove quantities as needed. |  |
| When checking out, the user will be prompted to enter their payment info. There are constraints for entering a 16 digit credit card number and a check to make sure it isn’t expired. |  |
| The user will be given a chance to review their input after entering their payment method to ensure minimal mistakes. |  |
| After confirming, they are taken to a page that shows their order summary and their reference number. Here, they can resume back to the products, go home, or log out of their session. |  |