



A website created by:

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## Website Administration

The Gamestop website that was created has a section to administer the site with tasks such as adding or removing employees or products. To access this page, you can click on the Admin Login button that is on the navbar. This page will contain a login form and 2 buttons. Due to time restraints and complexity with Identity, I was unable to successfully implement it. In order to make the section accessible for demonstration purposes, I created a “Force Log In” button that authenticates it with a simple click.

Upon logging in, you will be greeted with the Website Administration section. I created a navigation panel on the left side with tables and some CSS styling. The reason I made it from scratch rather than using the built in tools to asp and bootstrap is that this is one of the

first sections that I made. At the time, I was not as familiar with the tools, and I could not rewrite the code before the deadline.

## Website Administration: Management

There are 3 sections that are implemented to manage the website. These are Employee Management, Customer Management, and Inventory Management. For the most part they all pretty much work the same on the Presentation Tier. They contain a GridView, creating a table with a list of Employees, Customers, or Products. They also have 2 buttons, labeled Add and Remove respectively at the bottom of the GridView.

Upon clicking add in the Customer or Employee Management pages, you will be greeted by a form that allows you to enter their names and addresses. The employee form contain an extra field that allows you to input their Job Titles as well. Upon clicking the Submit button, you will be directed to a confirmation page, which will allow you to verify the Information you have input before it gets submitted to the database.

Clicking Add in the Inventory Management page will bring up a form that allows you to enter information about a product for the store,

including the name, a description of it, the cost, and an image of the cover. Clicking the Submit here submits it straight into the database. The reason why this page does not have a confirmation page is due to time constraints for the due date as well, but I would still use the same concept of passing along the variables in a Session, and possibly using the image handler or a variation of it's code to display the image before submitting it to the database.

Clicking the Remove button on any of the management pages will direct you to a page that will allow you to remove the entry by it's ID in the first column of the table. (Note that entries 1 - 3 in the Inventory list have been hard coded into the website due to issues retrieving info from the database and cannot be deleted through the website.) Once you enter the ID and press the Remove button, you will be presented with a confirmation page that allows you to make sure the item you selected is the one you wish to remove.

Upon adding or removing the entry, you will be redirected to the respective page that lists the items in the database with a status message underneath it. This is inserted into a hidden label and will let you know if you added or removed your entry successfully. Upon refreshing the page, the label will disappear again, to avoid confusion for the administrators.

To exit the Administration section, you simply have to click the log out link at the top right of the page. Clicking this page will direct you to a page letting you know you have been logged out, then will redirect you to the home page 3 seconds later.

## Home Page

Upon returning to the home page, you will see the 3 products that I hardcoded into the website. The reason that Forza Motorsport 7 has a grey X instead of the game cover is to demonstrate what would be displayed if you uploaded a product without a cover image. Since it's in a separate table, it always has a product ID of 1, so the Image Handler detects when there is no image and sends the productID as -1 to the business tier. Here it is passed through an if statement that loads the query to allow it to load the image from the ProductNoPics table.

Each of the 3 products have a Details button that will pull up a page that will allow you to see more information like the full description. On either the home screen or the Details pages, there is an add to cart button that will add it to the cart and save it into a session variable. If I had more time to complete this, I would have been able to create one page that loads all of the info it needs from the database. This would have worked by passing the ID through the button and using a variable to load the respective information.

## Cart: Adding and removing items

Upon clicking Add to Cart, the code loads the cart Session variable and marks that game object's variable inCart to true. Since I was having trouble with the database, I hardcoded the 3 homepage products as a method called CartInit in the Product Tier. This is where the product array was created, initialized and populated. After adding the product to the cart, you will get redirected to the cart page. Here it will display a table showing the contents of the cart, NY state tax, the subtotal without tax, and the total with the tax and subtotal added together. Due to time constraints, the only way to remove a product currently is to click the button that says empty cart. This will clear the cart Session variable and cause it to re-initialize.

While creating the cart and related pages, I learned how to implement panels. Using these, I can hide the table and respective buttons if the cart is empty and display another message saying that the cart is empty.

## Cart: Checking Out

Once you have the desired items in the cart, clicking the Checkout button will pass along the cart session and redirect you to the checkout page. I utilized a few panels here as well and depending on what button is clicked, one will be hidden and the other will be marked visible.

On the checkout page, you will be greeted with the main panel containing a jumbotron styled header with a few buttons to navigate the page. These buttons are Guest Checkout, Login and Checkout, and Cancel.

Clicking the cancel button on any panel on this page or the confirmation page will execute a javascript prompt asking if you are sure you want to cancel the order. Clicking cancel again will close the dialog box. Clicking the ok will run the btnCancel method that nulls out the cc session containing payment info and redirect you back to the cart.

Since I was unable to get Identity to work, the Login and Checkout button is currently disabled and does nothing. Upon clicking the Guest Checkout button, the currently visible panel will be marked invisible and the guestCheckout panel gets marked as visible. Here you will be able to fill out a Customer registration form along with submitting payment

information. The contents of the cart along with the prices, taxes and totals are displayed on the right side of the page.

Clicking continue without filling out the forms will result in the page refreshing with an error message at the bottom left. Once all the forms are filled out and continue is clicked, you will be redirected to a confirmation page that allows you to look over the entered information once more before the purchase is made. For security purposes, the card number displayed only contains the last 4 digits of the card number. This was achieved using the substring method that cuts off all numbers but the last 4.

Clicking the go back button here clears the payment and customer info session variables and redirects back to the checkout page. Clicking Cancel Order does the same thing, but redirects back to the cart instead.

Clicking the purchase button submits the order into the database, along with the customer shipping and payment info into their respective tables. Once that finished, it clears all of the session variables related to the purchase. After this is completed successfully, you will be greeted with a page thanking you for your order. However if something goes wrong, you will be redirected back to the cart page instead.

## Issues and Workarounds

Throughout the code, I attempted alternate ways to make the website work. When I found a better way or one that worked, for the most part the old code was commented out near the new line(s) that replaced it.

While creating the shopping cart, I initially wanted to use cookies to save the cart or even try to use them to authenticate. However even though I was able to implement the required code without any errors, for some reason I was unable to read or write to/from the cookie. So instead of using that, I implemented the cart purely using session variables.

One of the big reasons that the products were hardcoded rather than read from the database was that for some reason, when the products were retrieved from (or input into) the database, the description field showed the same thing as the name field. As this would cause a lot of problems with the site if left this way, I added the products into the business tier instead.

Since these product were now in the business tier, I also had some trouble displaying these items in a gridview. So as a workaround, I created a few tables in HTML and used blank labels as placeholders to hold the product information like names and prices.



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