**Wholesale Digital Media Store**

Final Project Design Document

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Document Change Control

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| Date | Authors | Summary of Changes |

May 23, 2014 Ian Mori -addition to primary function

May 26, 2014 Ian Mori -restructured project proposal

June 2, 2014 Ian Mori -added design mock-ups

June 6, 2014 Ian Mori -added classes and descriptions

Document Sign-Off

The following people have reviewed and approved the entire content of this proposal document.

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| Position | Name | Signature | Date |
| Teacher: | BJ MacLean |  |  |
| Student: | Ian Mori | Ian Mori | May 23, 2014 |

**1.1 Project Team members**

Ian Mori

**1.2 Project Description**

This project will have the capabilities and functions of a digital media store, similar to Steam or Amazon but will be a simple wholesale supplier design. There will be database connectivity to store customer and inventory data. Customers will be able to create an account, login, modify an account, and make purchases on their accounts. There will be no real purchasing functionality such as with PayPal, this might come later on as the project evolves.

There will also be a booking system for customer set up call-backs and/or online support sessions. A logging/reporting system will also be used to gather information and data from the system.

This project could be used to set up other businesses in a similar fashion. Being able to store customer info, track purchases, and update and track current inventory are all necessary for nearly any business to run.

This project could actually be used to start up a real business. I have sold video games online and one thing lacking for my business to be successful is a strong web application with database capabilities.

At the moment there are some pieces built that can be implemented (the online chat program) but that will be looked at after the project has most of the main components finished. There is a basic web layout and design done already, but this will be converted to proper JSP and Java classes.

**1.3 Primary Functions**

1. Account creation/modification

Users will be able to create an account id and password, and modify their account password.

2. Login and validation/authentication

Users will be able to login with their account, which will be validated client-side to login.

3. Order creation/submission

Users will be able to make mock orders and purchases. They will also be able to view the orders on their account.

4. Database connectivity (concurrency/multi-threading) for data storage/manipulation

Inventory, customer, and order data will be kept stored in a database. SQL will be used to query the database to gather the information.

5. Booking system for support call-backs/chat

Users will be able to reserve a support session with staff from a calendar. Secondary functions would include automated call-backs/online chat.

6. Logging/reporting system

The system will generate logs/reports for errors and data considerations.

**1.4 Secondary Functions**

1. Payment service

2. SSL

3. Online chat support

4. Playable games

5. Automated call-backs/support chat

**2.1 Class Design**

There will be several classes to create the functionality needed for the system. These include:

*LoginAction.java*

This class will direct and validate the user when logging in.

*LoginForm.java*

This class will contain the variables from the login form.

*LogoffAction.java*

This class will allow a user to logoff.

*MenuAction.java*

This class will gather the user choice when selecting an option from the menu.

*MenuForm.java*

This class will contain the variable and getter/setter for the menu option.

*CreateNewUserAction.java*

This class will contain the functionality for adding a new user.

*User.java*

This class will contain the user variables and database functionality. The SQL statements will be contained here and may be broken into separate smaller classes if this becomes too large.

*UserForm.java*

This class will contain the user variables from the user form.

*ViewAccountAction.java*

This class will contain the functionality for viewing an account’s details.

*ViewOrderAction.java*

This class will contain the functionality for viewing orders on a user’s account.

*ViewSupportSessionAction.java*

This class will contain the functionality for viewing support tickets/sessions.

*CreateNewOrderAction.java*

This class will contain the functionality for creating and submitting a new order.

*OrderForm.java*

This class will contain the user variables from the order form.

*Order.java*

This class will contain the order variables and will post a successful order to the database.

*CreateNewSupportSessionAction.java*

This class will contain the functionality for creating a new support session.

*SupportForm.java*

This class will contain the user variables from the support session form.

*SupportSession.java*

This will contain the variables for the support sessions and will post a successfully booked support session to the database.

*ConnectionUtils.java*

This class will define the functionality for connecting to the database.

*DbUtils.java*

This class will contain the functionality for closing a connection to a database.

**2.2 Interface Design**

2.2.1 Home Page

The home page will have links and products that the user can view. There will be a link to login which will take the user to a login screen so they can login to their account and then view more details about their account. They will also be able to place an order once they are logged in.

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| Welcome to the CIS Wholesale Digital Media Store  Home Page    Login |

Notes: There will also be images that the user can click on to view more information about the item.

2.2.2 Login

This will be the login menu where users will be able to login with their existing account or create a new account. This will also have validation included to make sure the proper user is logged in. There will also be a submit button which will allow the user to access their account once validation has passed. A cancel button will allow a user to cancel their login and return to the home page.

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| CIS Wholesale Digital Media Store  Login Menu  Username:  Password:  Create New Account  Submit  Cancel |

2.2.3 Create New Account

This will be the page for creating a new user account. The user will fill in a form with their details which will be validated and then stored in the database. The user can cancel and return to the home screen or create a new account and then be forwarded to their account home page.

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| CIS Wholesale Digital Media Store  Create New Account  Username:  Password:  Re-type Password:  Address:  Email:  Submit  Cancel |

2.2.4 User Account Page

Once a user is logged in or have created their account successfully, they will be able to view their account and make modifications. Here they can return home, create a new order, view orders they have made, books support sessions, and logout.

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| Welcome!  Account Menu  Home  Create New Order  View Orders  View Account Details  Book Support Session  View Support Tickets/Sessions  Logout |

Notes: The left menu will include links that the user can click on.

2.2.5 Create New Order

The user will be able to create a new order and add the total to their account balance. This will have validation and will make sure at least one item is ordered. The user can however, return home or cancel if they would like to.

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| Create New Order  Home  Item  Price  Quantity  Total  Submit Order  Cancel  Logout |

Notes: The user will be able to create an order. This will show the available items (just a limited amount for now) and the user will be able to choose which items they want to order. There will be a dropdown list to choose a quantity and there will be a link/photo to accompany the item.

2.2.6 Account Details

This will allow a user to view the details they used to set up their account. Once the account is created the user will able to change their password and modify any other details but their username.

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| Viewing Account Details  Home  Username  Password  Change password  Name  Address  Telephone  Logout |

Notes: A user will be able to modify and change their account details and can logout from here as well.

2.2.7 Order Details

The user will be able to view their orders made on their account. The orders will be listed on the left side as links/dropdown list and when clicked on the content details will be displayed on screen.

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| Order Details  Home  Orders  Order #001  Logout |

Notes: The user can click on the order and the details will be shown.

2.2.8 Book Support Session

The user will be able book a support session for call-back or live chat support. The user will have a list of dates and times to choose from so they can schedule a support session at their convenience.

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| Book Support Session  Home  Logout |

Notes: There will be a calendar here for the user to choose dates from for support sessions.

2.2.9 Support Session/Tickets

The user will be able to view their support sessions and can cancel or modify their scheduled support call-backs/live-chats.

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| Support Session/Tickets  Home  Support Sessions/Tickets  Support Ticket #001  Logout |

Notes: The user can click on the support session and the details (time, day, issue) will be shown.