Online Medieval Weapon and Armour Store	Version: <1.0>
Analysis and Design Document	Date: 04.04.2018
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Online Medieval Weapon and Armour Store Analysis and Design Document Nicolae-Florian Onica 30432

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# **Revision History**

Date	Version	Description	Author
<4.04.2018	1.0	Domain Model, Architectural Design, Component and Deployment diagrams	Nicolae-Florian Onica

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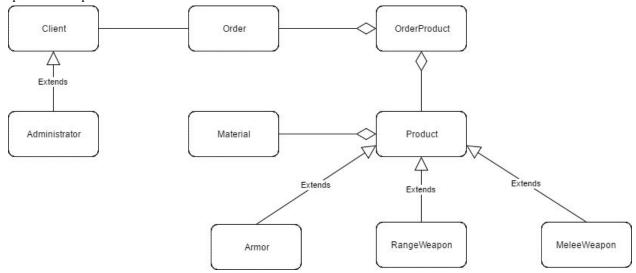
### I. Project Specification

This project is an online medieval weapon and armor store that has listings of various weapons along with their features. The project allows users to buy weapons, armor or parts of them online. They can check stats, read reviews and build their own custom weapon.

#### II. Elaboration – Iteration 1.1

#### 1. Domain Model

The domain model has 2 actors, the client and the administrator. The user places the order containing the products which he wants or create a customized item which will be added to the order. The administrator performs CRUD operations on products and checks user reviews.

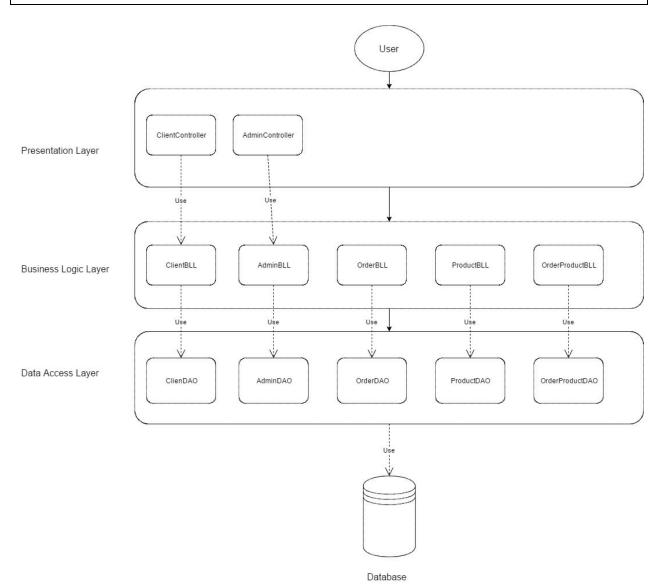


#### 2. Architectural Design

#### 3. Conceptual Architecture

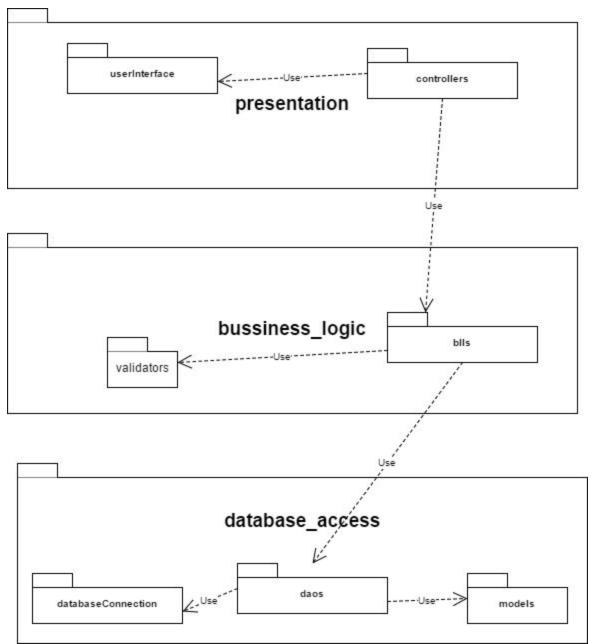
The architectural pattern used for this application is the layered architecture pattern. The components within this pattern are organized into horizontal layers, each layer performing a specific role within the application (e.g., presentation logic or business logic). In this case three layers will be used: presentation, business and database layer.

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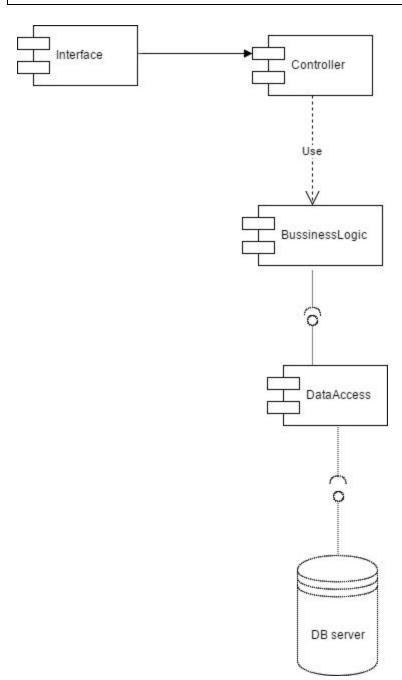
### 4. Package Design



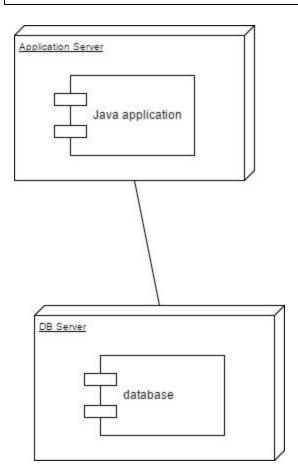
# 5. Component and Deployment Diagrams

Component diagram

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# III. Elaboration – Iteration 1.2

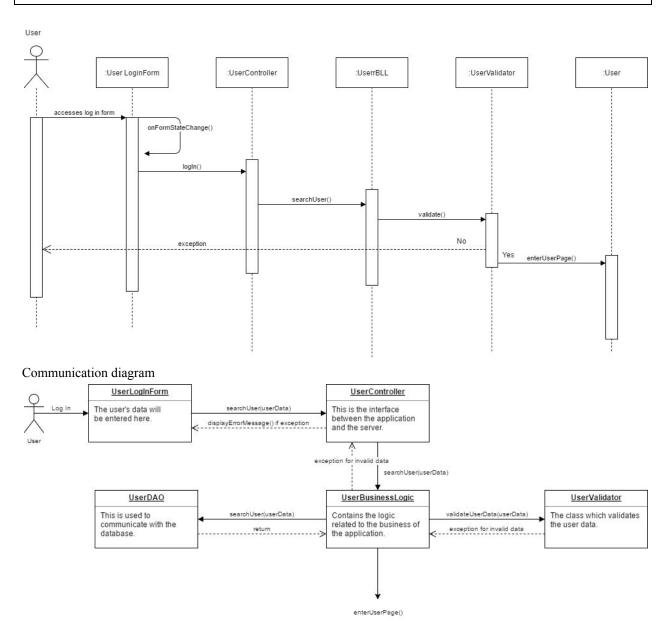
# 1. Design Model

# 1.1 Dynamic Behavior

Login

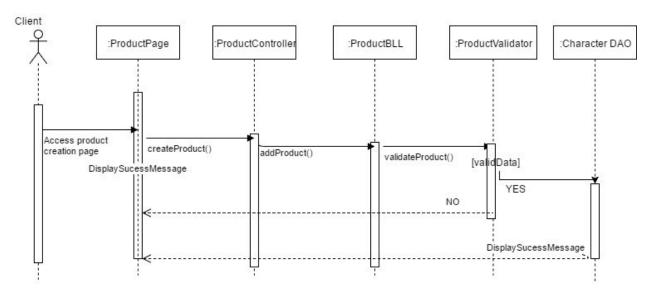
Sequence diagram

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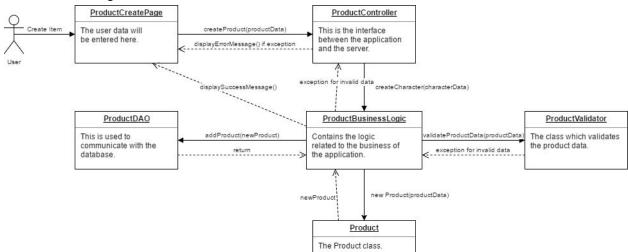


Create item Sequence diagram

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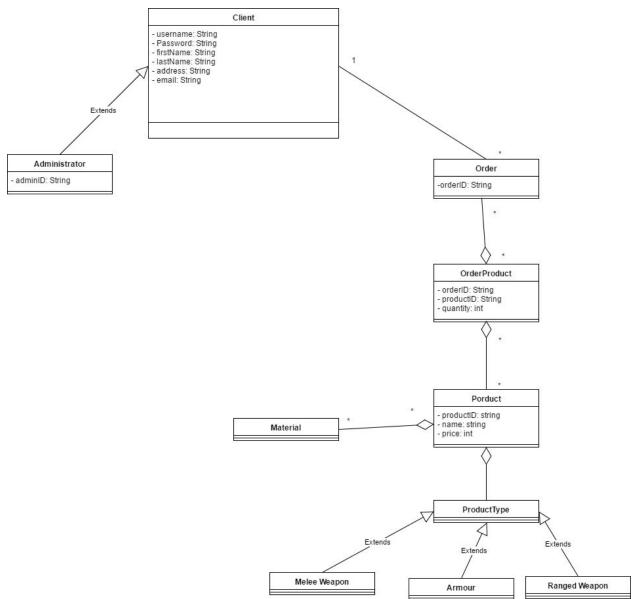


#### Communication diagram



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#### 1.2 Class Design



#### 2. Data Model

# 3. Unit Testing

The testing strategy used is unit testing which implies separating the code into unit and testing each unit to see if they meet the required functionality.

Test case scenarios:

- CRUD operations on products
- User login/logout

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• Creating an order

#### IV. Elaboration – Iteration 2

#### 1. Architectural Design Refinement

[Refine the architectural design: conceptual architecture, package design (consider package design principles), component and deployment diagrams. Motivate the changes that have been made.]

# 2. Design Model Refinement

[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]

#### V. Construction and Transition

# 1. System Testing

[Describe how you applied integration testing and present the associated test case scenarios.]

#### 2. Future improvements

[Present future improvements for the system]

#### VI. Bibliography