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**Faculty of Information Technology**

SYSTEM ANALYSIS & DESIGN FINAL REPORT

**Faculty: Information Technology**

**Module Code:**

**Module Name: System Analysis & Design Year: Fall 2021**

**Topic: Online Shopping System (Shopee)**

**Group: 23**

**Group members: Lý Hoài Thu - 1901040213**

**Nguyễn Xuân Bách - 1901040029**

**Đỗ Hoàng Duy - 1901040045**

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# ABSTRACT

*For the past decade, technology has drastically changed our lives. The world becomes digitalize; people are spending more time being online to fulfill their personal needs. Therefore, online services are now one of the fertile land to exploit, especially in shopping field. Millions of online shopping transactions are made every day. The idea of developing an Online Shopping System is to offer customers not only an "online supermarket" with wide range of choice across the country but also a place where they can earn money by selling their products. The goal of our project is to follow the Rational Unified Process (RUP) to capture the business context of the system, collect and specify requirement for the system, analysis the requirements to provide an architectural design solution for the Online Shopping System. The Online Shopping System is designed to fulfil both functional and non-functional requirements. The results of our works consist of system documentations for three workflows: business modeling, requirements definition and analysis & design; Unified Modeling Language (UML) model artifacts (using Visual Paradigm and Draw.io).*

# Use Case

# 1.1 Nguyễn Xuân Bách (1901040029)

### 1.1.1. Use Case Specification

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Use Case** | **Day Start** | **Day Finish** |
| 1 | Seller Order Management | 01/12/2021 | 07/12/2021 |
| 2 | Seller Product Management | 01/12/2021 | 07/12/2021 |
| 3 | Seller Shipping Management | 01/12/2021 | 07/12/2021 |

### Use Case Realization

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Use Case** | **Class Diagram** | | **Sequence Diagram** | |
| **Day Start** | **Day Finish** | **Day Start** | **Day Finish** |
| 1 | Seller Order Management | 07/12/2021 | 07/12/2021 | 07/12/2021 | 07/12/2021 |
| 2 | Seller Product Management | 07/12/2021 | 07/12/2021 | 07/12/2021 | 07/12/2021 |
| 3 | Seller Shipping Management | 07/12/2021 | 07/12/2021 | 07/12/2021 | 07/12/2021 |

## **Lý Hoài Thu (1901040213)**

### 1.2.1. Use Case Specification

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Use Case** | **Day Start** | **Day Finish** |
| 1 | Manage Account | 29/11/2021 | 06/12/2021 |
| 2 | Buyer Manage Order | 29/11/2021 | 06/12/2021 |
| 3 | Buyer Manage Product | 29/11/2021 | 06/12/2021 |

### Use Case Realization

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Use Case** | **Class Diagram** | | **Sequence Diagram** | |
| **Day Start** | **Day Finish** | **Day Start** | **Day Finish** |
| 1 | Manage Account | 05/12/2021 | 07/12/2021 | 03/12/2021 | 07/12/2021 |
| 2 | Buyer Manage Order | 05/12/2021 | 07/12/2021 | 03/12/2021 | 07/12/2021 |
| 3 | Buyer Manage Product | 05/12/2021 | 07/12/2021 | 03/12/2021 | 07/12/2021 |

## **Đỗ Hoàng Duy (1901040045)**

### 1.3.1. Use Case Specification

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Use Case** | **Day Start** | **Day Finish** |
| 1 | Manage Bank Account | 29/11/2021 | 06/12/2021 |
| 2 | Manage Shopping Cart | 29/11/2021 | 06/12/2021 |
| 3 | Customer Service | 29/12/2021 | 06/12/2021 |

### Use Case Realization

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Use Case** | **Class Diagram** | | **Sequence Diagram** | |
| **Day Start** | **Day Finish** | **Day Start** | **Day Finish** |
| 1 | Manage Bank Account | 05/12/2021 | 06/12/2021 | 04/12/2021 | 06/12/2021 |
| 2 | Manage Shopping Cart | 05/12/2021 | 06/12/2021 | 04/12/2021 | 06/12/2021 |
| 3 | Customer Service | 05/12/2021 | 06/12/2021 | 04/12/2021 | 06/12/2021 |

# Supplementary Specification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Title** | **Members** | | |
| Nguyễn Xuân Bách | Lý Hoài Thu | Đỗ Hoàng Duy |
| 1 | Introduction |  | 🗹 |  |
| 2 | Functionality |  | 🗹 |  |
| 3 | Usability |  | 🗹 |  |
| 4 | Reliability |  | 🗹 |  |
| 5 | Performance |  | 🗹 |  |
| 6 | Supportability |  | 🗹 |  |
| 7 | Design Constraint |  | 🗹 |  |
| 8 | Online User Documentation and Help System Requirements |  | 🗹 |  |
| 9 | Purchased Components |  | 🗹 |  |
| 10 | Interfaces |  | 🗹 |  |
| 11 | Lisensing Requirements |  | 🗹 |  |
| 12 | Legal, Copyright, and Other Notices |  | 🗹 |  |
| 13 | Applicable Standards |  | 🗹 |  |

|  |  |
| --- | --- |
| **Day Start** | **Day Finish** |
| 02/12/2021 | 07/12/2021 |

# System Architecture

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Title** | **Members** | | |
| Nguyễn Xuân Bách | Lý Hoài Thu | Đỗ Hoàng Duy |
| 1 | Introduction | 🗹 |  |  |
| 2 | Architecture Representation | 🗹 |  |  |
| 3 | Architecture Goals and Constraints | 🗹 |  |  |
| 4 | Use-Case View | 🗹 |  |  |
| 5 | Logical View | 🗹 |  |  |
| 6 | Size and Performance | 🗹 |  |  |
| 7 | Quality | 🗹 |  |  |

|  |  |
| --- | --- |
| **Day Start** | **Day Finish** |
| 02/12/2021 | 05/12/2021 |