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| |  |  | | --- | --- | | **HANOI UNIVERSITY** | A picture containing text, sign, vector graphics  Description automatically generated | | **Faculty of Information Technology** |   **SYSTEM ANALYSIS AND DESIGN**  **FINAL REPORT**   |  |  | | --- | --- | | **Faculty:** | **Information Technology** | | **Module Name:** | **System Analysis and Design** | | **Year:** | **Fall 2022** | | **Topic:** | **BIDV Banking System** | | **Group members:** | **Đàm Thị Linh (2001040116)** | |  | **Lại Thị Minh Trang (2001040209)** | |  | |  | | **Class:** | **A03** | |

**TABLE OF CONTENTS**

[ABSTRACT 3](#_heading=h.1t3h5sf)

[GROUP ROLES 5](#_heading=h.3rdcrjn)

[1. Use case Specification & Usecase Realization 6](#_heading=h.26in1rg)

[1.1. Withdraw online saving, Transfer, Top up, Book movie ticket online (Dam Thi Linh) 6](#_heading=h.lnxbz9)

[1.2. Register periodical payment, Pay with QR code, Open online saving, Change password (Lai Thi Minh Trang) 6](#_heading=h.35nkun2)

[2. Supplementary Specification (Lai Thi Minh Trang) 6](#_heading=h.44sinio)

[3. Software Architecture Document (Dam Thi Linh) 6](#_heading=h.2jxsxqh)

[4. Conclusion 7](#_heading=h.z337ya)

# ABSTRACT

In recent years, we see an increasing number of users of online banking applications. So why that increase? To answer the above questions, we conducted a project named “A BIDV based Banking System app” to analyze the functions of the application. Our project is conducted based on MVC architecture, all use cases mentioned are created from real user experiences. They are presented by Unified Modeling Language (UML) model developed using Visual Paradigm and Figma application. The results of our work include Use Case Specification, Use Case Realization, Supplementary Specification and Software Architecture

# GROUP ROLES

|  |  |
| --- | --- |
| **Members** | **Roles** |
| Đàm Thị Linh (2001040116) | Use Case: Withdraw online saving, Transfer, Top up, Book movie ticket online  Software Architecture Document |
| Lại Thị Minh Trang (2001040209) | Use Case: Register periodical payment, Pay with QR code, Open online saving, Change password  Supplementary Specification  Activity Report |

As this project is the final project of this SAD course and make us have more real knowledges and skills when working in the future so it is significantly important and quite challenging project for the members. Therefore, our group has cooperated in most of the processes especially in Supplementary Specification and Software Architecture Document. The members combined together to give ideas, suggestions and then we shared each person is each document I listed above to edits, and fixes for all problems to get the best version of this project.

# Use case Specification & Usecase Realization (Group)

The reason we choose those use-cases since it’s functions which users usually use conduct the transaction, so we analyze to users have more information and understand about functions

Despite the varied use cases that were chosen, the members' research and documentation processes are relatively similar. To begin with, with regard to the use case specification documents, each member logs into their respective user accounts to record the interaction between the agent and the system. That is, in certain use cases, members have figured out how users interact with the system and how the system reacts to user activities. After gathering the required data, the team members systematically and logically rewrite it in the form of documents.

After finishing writing the use case specification documentary, the members continued to write the use case realization documentary. Members continue to analyze the use case from both the user's and the system's points of view in order to document the actions and reactions that take place there. Members gain from having a general understanding of the events' design thanks to this procedure. Then, using tools like Visual Paradigm and the Figma application, the members redraft the diagrams in the order of events, including class diagrams and sequence diagrams. Members of this document also make reference to non-functional needs or other criteria that are not depicted in the design model of each use case.

## Withdraw online saving, Transfer, Top up, Book movie ticket online (Dam Thi Linh)

## [Register periodical payment, Pay with QR code, Open online saving, Change password (Lai Thi Minh Trang)](#_heading=h.3j2qqm3)

# Supplementary Specification (Lai Thi Minh Trang)

Based on the knowledge learned in the SAD tutorials, we have learned the characteristics and requirements of BIDV Banking System. In the process of finalizing the supplementary specification, we encountered quite a lot of difficulties when we got to deeply understand the system to provide an objective and easy-to-understand view for special subjects such as: software engineers, developers, users and other stakeholders that have some relation to the system. We have also consulted a number of related documents online so that we can capture more necessary information. In addition, the team members are also very active in learning and discussing to reach the final result. Because we created this document from the perspective of real user experience even ourselves experience, we have more detail understood about each of function.

# Software Architecture Document (Dam Thi Linh)

This document is a real challenge for us. To be able to perform better, we review the lectures and the tutorial's exercises in addition to using the sample documents that were provided during the tutorial class. To build this Software Architecture Document, we also drew from the Use Case materials we worked on. We really tried to make this document to give the best version of its to bring the good experiences for user

# Conclusion

By using the knowledge which we learned from this course, we analyzed the BIDV Banking System’s features from the perspective of users. Additionally, using Model-View-Controller models as the basis when we studied the system. After analyzing, we also found the areas where the system needs to be upgraded. Due to our poor background knowledge and lack of expertise, we still make mistakes in various areas of System Analysis & Design and Information Technology in general. Consequently, we shall keep expanding our expertise to enable our document to perform better in the future.