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| **International School**  Đồ Án CDIO  **CMU-CS 447**    Reflection  Version 1.0  Date: 05- April - 2025  Airline Reservation System  Submitted by  Nguyen Pham Anh Huong  Cao Minh  Le Minh Hieu  Nguyen Thi Thanh Huong  **Approved by**  **Capstone Project 1 - Mentor:**  Name Signature Date  Tinh, Le Van \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_04 - April- 2025 |

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# PROJECT INFORMATION

Table 1 - Project Information

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| **PROJECT INFORMATION** | | | |
| **Project Acronym** | ARS | | |
| **Project Title** | Airline Reservation System | | |
| **Project Web URL** |  | | |
| **Start Date** | 5-Apr - 2025 | | |
| **End Date:** | 24 - May - 2025 | | |
| **Lead Institution** | International School, Duy Tan University | | |
| **Project Mentor** | M.Sc Tinh, Le Van | | |
| **Scrum Master** | Minh, Cao | Minhcao05092004@gmail.com | 0905575080 |
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# DOCUMENT INFORMATION

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| --- | --- | --- | --- |
| **DOCUMENT INFORMATION** | | | |
| **Document Title** | Reflection | | |
| **Author(s)** | Group 3 | | |
| **Role** | Reflection\_v1.0 | | |
| **Date** | 5-Apr - 2025 | File name | Reflection\_v1.0 |
| **URL** | https://github.com/nnkq/myproject.git | | |
| **Access** | Project and CMU Program | | |

Table 2 - Document Information

# REVISION HISTORY

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Person(s)** | **Date** | **Description** | **Approval** |
| 1.0 | All members | 12-Apr - 2025 | Complete reflection document | x |
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|  |  |  |  |  |

Table 3 - Revision History

# 1. INTRODUCTION

Nowadays, searching for a suitable room or house using traditional methods is a very time-consuming and labor-intensive task. Furthermore, managing rental contracts and living expenses such as electricity, water, and waste disposal can still be challenging in the traditional way. This is especially true for international students or people working far from home. Therefore, this website project aims to meet these user needs and help them find accommodation more quickly and manage expenses with ease. With an e-commerce business model, the website can provide images, addresses, and other information about available properties, making it easy and convenient for users to search for accommodation.

# 2. EVALUATION

## 2.1. What challenges did you face while completing this project?

* New technology. This is the team's first JS project
* Programming language with MVC pattern. Although it does not have much impact, this is also a common difficulty for the group in completing the project
* Lack of practical experience. Estimating the workload depends greatly on each individual's feelings and experiences
* Learn about locations and prices in each area.

## 2.2. How to join process of project

* The team begins the project by understanding in detail how a Scrum team works.
* Effectively exploit each member's strengths, as well as discuss difficulties encountered to find the best solution.
* Research programming instructions for JS, ReactJS, NodeJS languages.
* During each Sprint, all members support each other on technical issues

## 2.3. What learned

* Regarding professional knowledge: We have improved typical knowledge
* Programming like JS, ReactJS, NodeJS, GitHub. Besides, we better understand the steps of the software development process.
* For teamwork skills: The most important thing is communication. The key to successful teamwork is the connection between team members. To get that, you have to talk to each other as much as possible.
* Regarding management skills: each member has the ability to manage their time and work to complete on time. We were using Jira to manage process tasks inefficiently.

## 2.4. Experience

* Cohesion: The team members are motivated and encouraged to work together. We understand each other and are not afraid to comment on each other to make them better.
* Time Conflict: From the beginning of the project, we have yet to arrange working time in the company and capstone project reasonably. But all conflicts are always solved in the most obvious way.

# 3. Direction Development

* Learn and apply technology in real time.
* Learned and applied optimization algorithms that can increase system performance.
* The process of implementing and applying to the website by technology.

# 4. Retrospective

## 4.1. Sprint 1

|  |  |
| --- | --- |
| **Coordinator** | Minh, Cao |
| **Participants** | Minh, Cao  Huong, Nguyen Pham Anh  Huong, Nguyen Thi Thanh  Hieu, Le Minh |
| **Metrics** | Planning: Evaluates Sprint 1  Meeting (meeting duration multiplied by the number of participants): 16 hours |

***Table 1:*** *Summary*

|  |  |
| --- | --- |
| **Requirements** | Good requirements analysis |
| **Process** | Process Apply the sprint model |
| **Project Management** | Track progress with sprint logs and backlogs.  Remind members using Jira. |
| **Technology** | Can use the programming language JavaScript, MongoDB |

***Table 2:*** *Thing what went well*

|  |  |
| --- | --- |
| **Requirements** | Not finish completely requirement of sprint 1 |
| **Process** | Not fully understand the process sprint |
| **Project Management** | Action and management are not uniform  Members were prevented from meeting to much due to conflicting study time with each other |
| **Technology** | The members do not know much about JavaScript. |

***Table 3:*** *Things That Could Have Not Good*

|  |  |
| --- | --- |
| **Requirements** | No Problem |
| **Process** | Learn more process sprint |
| **Project Management** | More punishment for more effective management Need to arrange a reasonable time |
| **Technology** | Need more time to research |

***Table 4:*** *Lessons Learned*

## 4.2 Sprint 2

|  |  |
| --- | --- |
| **Coordinator** | Minh, Cao |
| **Participants** | Minh, Cao  Huong, Nguyen Pham Anh  Huong, Nguyen Thi Thanh  Hieu, Le Minh |
| **Metrics** | Planning: Evaluates Sprint 2  Meeting (meeting duration multiplied by the number of participants): 16 hours |

***Table 5:*** *Summary(sprint 2)*

|  |  |
| --- | --- |
| **Requirements** | Complete 70% requirement of sprint 2  Good requirements analysis |
| **Process** | Process Apply the sprint model |
| **Project Management** | Track progress with sprint logs and backlogs.  Remind members using Slack, Trello. |
| **Technology** | Can use the programming language JavaScript, MongoDB |

***Table 6:*** *Thing what went well*

|  |  |
| --- | --- |
| **Requirements** | Not finish completely requirement of sprint 2 |
| **Process** | Not fully understand the process sprint |
| **Project Management** | Action and management are not uniform  Members were prevented from meeting to much due to conflicting study time with each other |
| **Technology** | The members do not know much about JavaScript. |

***Table 7:*** *Things That Could Have Not Good*

|  |  |
| --- | --- |
| **Requirements** | No Problem |
| **Process** | Learn more process sprint |
| **Project Management** | More punishment for more effective management Need to arrange a reasonable time |
| **Technology** | Need more time to research |

***Table 8:*** *Lessons Learned*

## 4.3 Sprint 3

|  |  |
| --- | --- |
| **Coordinator** | Minh, Cao |
| **Participants** | Minh, Cao  Huong, Nguyen Pham Anh  Huong, Nguyen Thi Thanh  Hieu, Le Minh |
| **Metrics** | Planning: Evaluates Sprint 3  Meeting (meeting duration multiplied by the number of participants): 16 hours |

***Table 9:*** *Summary(sprint 3)*

|  |  |
| --- | --- |
| **Requirements** | Complete 80% requirement of sprint 2  Good requirements analysis |
| **Process** | Process Apply the sprint model |
| **Project Management** | Track progress with sprint logs and backlogs.  Remind members using Slack, Trello. |
| **Technology** | Can use the programming language JavaScript, MongoDB. |

***Table 10:*** *Thing what went well*

|  |  |
| --- | --- |
| **Requirements** | Not finish completely requirement of sprint 2 |
| **Process** | Not fully understand the process sprint |
| **Project Management** | Action and management are not uniform  Members were prevented from meeting to much due to conflicting study time with each other |
| **Technology** | The members do not know much about JavaScript. |

***Table 11:*** *Things That Could Have Not Good*

|  |  |
| --- | --- |
| **Requirements** | No Problem |
| **Process** | Learn more process sprint |
| **Project Management** | More punishment for more effective management Need to arrange a reasonable time  Not a High level  Difficulty in using JavaScript |
| **Technology** | Need more time to research |

***Table 12:*** *Lessons Learned*

## 4.4 Sprint 4

|  |  |
| --- | --- |
| **Coordinator** | Minh, Cao |
| **Participants** | Minh, Cao  Huong, Nguyen Pham Anh  Huong, Nguyen Thi Thanh  Hieu, Le Minh |
| **Metrics** | Planning: Evaluates Sprint 4  Meeting (meeting duration multiplied by the number of participants): 16 hours |

***Table 13:*** *Summary(sprint 4)*

|  |  |
| --- | --- |
| **Requirements** | Complete 70% requirement of sprint 4  Good requirements analysis |
| **Process** | Process Apply the sprint model |
| **Project Management** | Track progress with sprint logs and backlogs.  Remind members using Slack, Trello. |
| **Technology** | Can use the programming language JavaScript, MongoDB |

***Table 14:*** *Thing what went well*

|  |  |
| --- | --- |
| **Requirements** | Not finish completely requirement of sprint 3 |
| **Process** | Not fully understand the process sprint |
| **Project Management** | Action and management are not uniform  Members were prevented from meeting to much due to conflicting study time with each other |
| **Technology** | The members do not know much about JavaScript. |

***Table 15:*** *Things That Could Have Not Good*