**INTERNATIONAL PROGRAMMERS TRAINING CENTER**

**SOFTECH APTECH**

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**EPROJECT JAVA**

PROJECT:

**HOTEL MANAGER**

INSTRUCTOR: Mr. Tran Anh Huy

MEMBERS:

1. Pham Phu Dien
2. Nguyen Si An
3. Ton That Hao Phuc
4. Nguyen Van Duc

BATCH: 165

 SEMESTER: 2



1/2022

**TEACHER’S EVALUATION**

Project Document

**HOTEL MANAGER**

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| **Group 1** | |
| **Instructor** | Mr. Tran Anh Huy |
| **Group Members** | 1. Pham Phu Dien 2. Nguyen Si An 3. Ton That Hao Phuc 4. Nguyen Van Duc |
| **Batch** | 165 |
| **Semester** | 2 |

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# I. ACKNOWLEDGEMENTS

We would like to sincerely acknowledge the kindness of all the people who have given moral support and helped us make a successful project.

We wish to express our deep gratitude to the e-Project Team at the Head office, who guided and helped us. Particular thanks to Mr. Tran Anh Huy who suggested the “form validation” and help us connect storage to our project, develop the analysis proceeding from it and debugged code. We also would like to express our great gratitude to all the student members of our center (Softech Aptech).

Although we have made many attempts, because of the limited time, the practice could not be able to avoid the mistakes and missions. We hope that our project will be considered and evaluated. And finally, we would like to offer many thanks to all our friends for their valuable suggestions and constructive feedbacks.

**II. INTRODUCTION**

**1. Introduction**

This application will have the following functions:

+ It can manage the services of the Motel

  + It can manage the rooms with guests

+ It can add, manage, charge for services that customers demand

+ It can manage customers and employees

**2. Requirement**

This app will be used in the Hotel, have friendly application user. Users can easily learn to use, and the application must also ensure accuracy in the calculation of cash. In addition, applications can be compatible with all operating systems.

**3. Target**

Applying the knowledge learned java. Application design platform java FX, use JPA to connect data between application and database. Applications will be written based on the MVC pattern.

**III. PROBLEM DEFINITION**

**IV. REQUIREMENT ATTRIBUTES**

1. **Use Case Diagram**

**Diagram

Description automatically generated**

1. **Critical Use Case Specification**

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC01 | **Use-case Version** | 1.0 |
| **Use-case Name** | Home Page Form | | |
| **Purpose:**  This is the main interface of the application. It allows users to make reservations for guests, manage hotel services, set hotel rooms, manage staff, manage guests. Also make payments. It also contains buttons for linking to other windows application.  **Input:**  Data from tables and input data.  **Output:**  It will calculate the customer's total amount upon check out | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC02 | **Use-case Version** | 1.0 |
| **Use-case Name** | Login Form | | |
| **Purpose:**  If you want to use the app, users must have an account, and log in to this form.  Application has two types of account, one type for administrator (manager) and one for an employee.  **Input:**  The user will enter username and password.  **Output:**  If the login is valid, the application will display the Home Page Form for users to use.  Otherwise will announce the account or the password is invalid. | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC03 | **Use-case Version** | 1.0 |
| **Use-case Name** | Room Manage | | |
| **Purpose:**  Room management allows admin or staff to manage reservations, check out, cancel reservations and view room details.  **Input:**  The user enters the customer's name and id to proceed with the reservation.  The user can search the room by name or by the floor of the room to view room details.  **Output:**  After successful booking or cancellation, there will be a notification from the application. And the data will be updated in the database.  Information about the room to be searched will be displayed after the user presses the search button. | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC04 | **Use-case Version** | 1.0 |
| **Use-case Name** | Booking Services | | |
| **Purpose:**  Booking services for customers when customers request.  **Input:**  Input service type and select service from customer request.  **Output:**  Notify the user whether the service has been successfully ordered or not. The database will store the service requested by the client. | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC05 | **Use-case Version** | 1.0 |
| **Use-case Name** | Customer Manage | | |
| **Purpose:**  Manage the information of customers, whether old or new customers. Does this customer get a discount?  Can add, edit, delete and update customer information.  **Input:**  Enter the customer's name, id, date of birth, and other necessary information.  **Output:**  Notify users whether customer information has been successfully added, edited, deleted, or updated.  Customer information will be saved in the database. | | | |

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| USE CASE SPECIFCATION | | | |
| **Use-case No.** | UC06 | **Use-case Version** | 1.0 |
| **Use-case Name** | Employee Manage | | |
| **Purpose:**  This function can only be used by the administrator. Used to manage employees who are working at the hotel.  Can add, edit, delete, update employee information.  **Input:**  Enter name, id, email, and other necessary information to manage employees.  **Output:**  Notify users whether the employee information has been successfully added, edited, deleted, or updated.  Update employee information in the database. | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC07 | **Use-case Version** | 1.0 |
| **Use-case Name** | Setting room | | |
| **Purpose:**  This function can only be used by the administrator. Used to manage existing rooms at the hotel.  Can add, edit, delete, update information about rooms in the hotel.  **Input:**  Enter information about room number, floor, room rate, and other information.  **Output:**  Notify users whether adding, editing, deleting, updating information, and room prices are successful or not.  Room information will be saved to the database. | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC08 | **Use-case Version** | 1.0 |
| **Use-case Name** | Services Manage | | |
| **Purpose:**  This function can only be used by the administrator. Used to manage the types of services that the hotel can provide to customers.  Can add, edit, delete, update the service and the price of the service.  **Input:**  Enter the information, name, and price of the hotel providing the service.  **Output:**  Notify users whether adding, editing, deleting, or updating information about the service has been successful or not.  Save service information to the database. | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC09 | **Use-case Version** | 1.0 |
| **Use-case Name** | Stock Manage | | |
| **Purpose:**  This function can only be used by the administrator. Used to manage inventory, bought items include information and prices.  The user can add, edit, delete, update bought items and view information on inventory items.  **Input:**  Enter the name, quantity, price, and information of the purchased items.  **Output:**  Notify users whether the purchased item has been successfully added, edited, deleted, or updated.  Save data to the database. | | | |

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| **USE CASE SPECIFCATION** | | | |
| **Use-case No.** | UC10 | **Use-case Version** | 1.0 |
| **Use-case Name** | Revenue Manage | | |
| **Purpose:**  This function can only be used by the administrator. Used to manage hotel revenue by day, week, month, year.  Users can view the hotel's revenue chart to come up with a reasonable business strategy.  **Input:**  Choose the type of revenue statistics, by day, week, month, or year.  **Output:**  Show revenue chart by selected item. | | | |

1. **Business Process Management**

Diagram

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*BPM (Business Process Manage) of booking and check in.*

*Diagram

Description automatically generated*

*BPM (Business Process Manage) of check out.*

*Diagram

Description automatically generated*

*BPM (Business Process Manage) of change room.*