TỔNG LIÊN ĐOÀN LAO ĐỘNG VIỆT NAM

**TRƯỜNG ĐẠI HỌC TÔN ĐỨC THẮNG**

**KHOA CÔNG NGHỆ THÔNG TIN**



**ĐỒ ÁN CUỐI KÌ MÔN CÔNG NGHỆ PHẦN MỀM**

**NT Cosmectic Management**

*Người hướng dẫn*: **Đặng Minh Thắng**

*Người thực hiện*: **Tạ Huỳnh Minh Tiến – 51600089**

Lớp **: 16050310**

Khoá  **: 20**

**THÀNH PHỐ HỒ CHÍ MINH, NĂM 2019**

TỔNG LIÊN ĐOÀN LAO ĐỘNG VIỆT NAM

**TRƯỜNG ĐẠI HỌC TÔN ĐỨC THẮNG**

**KHOA CÔNG NGHỆ THÔNG TIN**



**ĐỒ ÁN CUỐI KÌ MÔN NHẬP MÔN TRÍ TUỆ NHÂN TẠO**

**DỰ ĐOÁN NHIỆT ĐỘ**

*Người hướng dẫn*: **Ts Bùi Thanh Hưng**

*Người thực hiện*: **Tạ Huỳnh Minh Tiến – 51600089**

Lớp **: 16050310**

Khoá  **: 20**

**THÀNH PHỐ HỒ CHÍ MINH, NĂM 2019**

LỜI CẢM ƠN

Xin được gửi lời cảm ơn chân thành và sâu sắc đến thầy Đăng Minh thắng đã giúp đỡ và truyền tải kiến thức cho em để chúng em có thể hoàn thành đồ án cuối kì.

**ĐỒ ÁN ĐƯỢC HOÀN THÀNH**

**TẠI TRƯỜNG ĐẠI HỌC TÔN ĐỨC THẮNG**

Tôi xin cam đoan đây là sản phẩm đồ án của riêng tôi / chúng tôi và được sự hướng dẫn của thầy Đặng Minh Thắng. Các nội dung nghiên cứu, kết quả trong đề tài này là trung thực và chưa công bố dưới bất kỳ hình thức nào trước đây. Những số liệu trong các bảng biểu phục vụ cho việc phân tích, nhận xét, đánh giá được chính tác giả thu thập từ các nguồn khác nhau có ghi rõ trong phần tài liệu tham khảo.

Ngoài ra, trong đồ án còn sử dụng một số nhận xét, đánh giá cũng như số liệu của các tác giả khác, cơ quan tổ chức khác đều có trích dẫn và chú thích nguồn gốc.

**Nếu phát hiện có bất kỳ sự gian lận nào tôi xin hoàn toàn chịu trách nhiệm về nội dung đồ án của mình.** Trường đại học Tôn Đức Thắng không liên quan đến những vi phạm tác quyền, bản quyền do tôi gây ra trong quá trình thực hiện (nếu có).

*TP. Hồ Chí Minh, ngày tháng năm 2019*

*Tác giả*

*(ký tên và ghi rõ họ tên)*

*Tạ Huỳnh Minh Tiến*

PHẦN XÁC NHẬN VÀ ĐÁNH GIÁ CỦA GIẢNG VIÊN

**Phần xác nhận của GV hướng dẫn**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tp. Hồ Chí Minh, ngày tháng năm 2019

(kí và ghi họ tên)

**Phần đánh giá của GV chấm bài**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tp. Hồ Chí Minh, ngày tháng năm 2019

(kí và ghi họ tên)

TÓM TẮT

Trong thời đại ngày nay, bất kì cửa hàng nào nên có một phần mềm để tiện cho việc quản lý cửa hành của mình. Đây là một phần mềm quản lý tiệm bán mỹ phẩm được viết trên nền web sử dụng angular 8.

MỤC LỤC

[LỜI CẢM ƠN i](#_Toc26735019)

[PHẦN XÁC NHẬN VÀ ĐÁNH GIÁ CỦA GIẢNG VIÊN iii](#_Toc26735020)

[TÓM TẮT iv](#_Toc26735021)

[MỤC LỤC 1](#_Toc26735022)

[CHAPTER 1 – REQUIREMENTS ENGINEERING 3](#_Toc26735023)

[1.1 Define Requirement 3](#_Toc26735024)

[1.1.1 User Requirement 3](#_Toc26735025)

[1.1.2 System Requirement 3](#_Toc26735026)

[1.2 Functional and Non - Functional 3](#_Toc26735027)

[1.2.1 Functional 3](#_Toc26735028)

[1.2.2 Non - Functional 4](#_Toc26735029)

[CHAPPTER 2 – ANALYSIS AND DESIGN PRESENTION 4](#_Toc26735030)

[2.1 Usecase diagram. 4](#_Toc26735031)

[2.2 Usecase specification 5](#_Toc26735032)

[2.3 Active diagram 19](#_Toc26735033)

[2.4 Sequence diagram 20](#_Toc26735034)

[2.5 Class diagram 21](#_Toc26735035)

[2.6 Relational data diagram 23](#_Toc26735036)

[ 23](#_Toc26735037)

CHAPTER 1 – REQUIREMENTS ENGINEERING

1.1 Define Requirement

1.1.1 User Requirement

**-** Manager can login into Cosmectic Management

Manager can add information, edit and delete information of employee

Manager can add product, edit product, delete product

Manager can see total money of product was sold

1.1.2 System Requirement

When manager go on web, manager must have account to login system

After login, manager can click to see information of employee or product

If Store have a new employee, manager can add information of new employee to system, name of employee, age, email, and address

The information manager add will be saved to database

1.2 Functional and Non - Functional

1.2.1 Functional

- Manager login into system

- Manger add information employee

- Manger edit information employee

- Manger delete employee

- Manager add product

- Manager edit product

- Manager delete product

- Manager add agency

- Manager edit agency

- Manger delete agency

- Manger see prodcut was sold in day

1.2.2 Non - Functional

- In month, system must turn off 8 hour to maintain

- The system must fast and run on web

- System can run on mobile

- Simple and easy to use

CHAPPTER 2 – ANALYSIS AND DESIGN PRESENTION

2.1 Usecase diagram.



2.2 Usecase specification

|  |  |  |
| --- | --- | --- |
| Use Case Name | Login | |
| Scenario | Login | |
| Triggering Event | Manager login system | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Account available | |
| Postconditions | Logged in successfully | |
| Flow of Events | Actor | System |
|  | 1.1 When you enter to system, it show you a place to fill your username and password |
| 2.Manger will give the username and password to login |  |
|  | 3. If the process is successful, the system will redirect to mangement interface |
| Exception conditions | 1 If username or password wrong or account don’t have in database, the system will return a message and must give username and password again | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Add Employee | |
| Scenario | Add Employee | |
| Triggering Event | Add employee and information of employee to system | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions |  | |
| Postconditions | Employee information is saved in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose add employee | 1.1 System will request for employee’s information |
| 2. Actors choose enter employee’s information | 2.1 System will save the current employee’s information |
| 3. Actors enter other employee’s information | 3.1 System will check that employee’s information.  3.2 The employee’s quantity will increase by 1 |
| Exception conditions |  | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Delete Employee | |
| Scenario | Delete Employee | |
| Triggering Event | User choose remove employee | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that employee’s information successful | |
| Postconditions | Employee information is removed in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose remove employee | 1.1 System will be request to employee’s id  1.2 System send messenger to sure again |
| 2. Confirm remove this employees | 2.1 System will remove that employee’s information |
| 3. Actor enter other employee | 3.1 System will remove employee’s information.  3.2 The employee’s quantity will decrease by 1 |
| Exception conditions | This employee is not exist. | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Edit Employee | |
| Scenario | Edit Employee | |
| Triggering Event | User choose edit employee | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that employee’s information successful | |
| Postconditions | Employee information is edited in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose edit employee | 1.1 System will be show form edit and information of employee |
| 2. Confirm edit employees | 2.1 System will save that employee’s information |
|  |  |
| Exception conditions | This employee changed | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Login | |
| Scenario | Login | |
| Triggering Event | Manager login system | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Account available | |
| Postconditions | Logged in successfully | |
| Flow of Events | Actor | System |
|  | 1.1 When you enter to system, it show you a place to fill your username and password |
| 2.Manger will give the username and password to login |  |
|  | 3. If the process is successful, the system will redirect to mangement interface |
| Exception conditions | 1 If username or password wrong or account don’t have in database, the system will return a message and must give username and password again | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Add Employee | |
| Scenario | Add Employee | |
| Triggering Event | Add employee and information of employee to system | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions |  | |
| Postconditions | Employee information is saved in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose add employee | 1.1 System will request for employee’s information |
| 2. Actors choose enter employee’s information | 2.1 System will save the current employee’s information |
| 3. Actors enter other employee’s information | 3.1 System will check that employee’s information.  3.2 The employee’s quantity will increase by 1 |
| Exception conditions |  | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Delete Employee | |
| Scenario | Delete Employee | |
| Triggering Event | User choose remove employee | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that employee’s information successful | |
| Postconditions | Employee information is removed in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose remove employee | 1.1 System will be request to employee’s id  1.2 System send messenger to sure again |
| 2. Confirm remove this employees | 2.1 System will remove that employee’s information |
| 3. Actor enter other employee | 3.1 System will remove employee’s information.  3.2 The employee’s quantity will decrease by 1 |
| Exception conditions | This employee is not exist. | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Edit product | |
| Scenario | Edit product | |
| Triggering Event | User choose edit product | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that product’s information successful | |
| Postconditions | Product information is edited in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose edit product | 1.1 System will be show form edit and information of product |
| 2. Confirm edit product | 2.1 System will save that product’s information |
|  |  |
| Exception conditions | This product changed | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Add product | |
| Scenario | Add product | |
| Triggering Event | Add product and information of product to system | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions |  | |
| Postconditions | Product information is saved in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose add product | 1.1 System will request for product’s information |
| 2. Actors choose enter product’s information | 2.1 System will save the current product’s information |
| 3. Actors enter other product’s information | 3.1 System will check that product’s information.  3.2 The product’s quantity will increase by 1 |
| Exception conditions |  | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Delete product | |
| Scenario | Delete product | |
| Triggering Event | User choose remove product | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that product’s information successful | |
| Postconditions | Product information is removed in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose remove product | 1.1 System will be request to product’s id  1.2 System send messenger to sure again |
| 2. Confirm remove this product | 2.1 System will remove that product’s information |
| 3. Actor enter other product | 3.1 System will remove product’s information.  3.2 The product’s quantity will decrease by 1 |
| Exception conditions | This product is not exist. | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Edit product | |
| Scenario | Edit product | |
| Triggering Event | User choose edit product | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that product’s information successful | |
| Postconditions | Product information is edited in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose edit product | 1.1 System will be show form edit and information of product |
| 2. Confirm edit product | 2.1 System will save that product’s information |
|  |  |
| Exception conditions | This product changed | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Edit agency | |
| Scenario | Edit agency | |
| Triggering Event | User choose edit agency | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that agency’s information successful | |
| Postconditions | Agency information is edited in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose edit agency | 1.1 System will be show form edit and information of agency |
| 2. Confirm edit agency | 2.1 System will save that employee’s agency |
|  |  |
| Exception conditions | This agency changed | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Add agency | |
| Scenario | Add agency | |
| Triggering Event | Add agency and information of product to system | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions |  | |
| Postconditions | Agency information is saved in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose add agency | 1.1 System will request for agency’s information |
| 2. Actors choose enter agency’s information | 2.1 System will save the current agency’s information |
| 3. Actors enter other agency information | 3.1 System will check that agency’s information.  3.2 The product’s quantity will increase by 1 |
| Exception conditions |  | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Delete agency | |
| Scenario | Delete agency | |
| Triggering Event | User choose remove agency | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor search that agency’s information successful | |
| Postconditions | Agency information is removed in the system | |
| Flow of Events | Actor | System |
| 1. Actors choose remove agency | 1.1 System will be request to agency’s id  1.2 System send messenger to sure again |
| 2. Confirm remove this agency | 2.1 System will remove that agency’s information |
| 3. Actor enter other product | 3.1 System will remove agency’s information.  3.2 The product’s quantity will decrease by 1 |
| Exception conditions | This agency is not exist. | |

|  |  |  |
| --- | --- | --- |
| Use Case Name | Show total money in date | |
| Scenario | Show total money in date | |
| Triggering Event | Choose total money | |
| Brief Description |  | |
| Actors | General manager | |
| Related Use Cases |  | |
| Stakeholders | Cosmectic Management System | |
| Preconditions | Actor choose show total management | |
| Postconditions | System show list product was sold in day | |
| Flow of Events | Actor | System |
| 1. Actors choose total management | 1.1 System will be show list product was sold |
|  |  |
|  |  |
| Exception conditions |  | |

2.3 Active diagram



2.4 Sequence diagram



2.5 Class diagram



2.6 Relational data diagram

