SOFTWARE REQUIREMENTS

SPECIFICATION

FOR

ONLINE SALON MANAGEMENT SYSTEM

VERSION 1.0

SUBMITTED TO

MD. ANWARUL KABIR

SOFTWARE REQUIREMENT ENGINEERING

SEC D

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References

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CONTENTS

1. Introduction

1.1. Purpose

This document is to describe all the software requirement specification (SRS) for the online salon management. The system aims to help the customer to make an appointment online through the internet and track their records through it. With the increase in the number of customer visiting, it has become difficult to manage the appointment system manually. The purpose of this project is to solve these complications by creating custom-built database software to manage the salon management system.

1.2. Scope

The system provides for a salon customer online appointment system. The customer uses the system to find a stylist and view their schedule. The schedules show information such as the beautician working hours, lunch breaks, holidays, vacations and unavailable appointment times. Next, the customer requests for an appointment. The beautician looks at a control view of the schedule and approves the requested appointments. The customer will receive a confirmation notification. Salon can specify the beautician that work at their salon, as well as the services they offer. Salon can also book appointments for customers and can cancel. Customers can also write and read reviews of salon and particular beautician.

2. Stakeholder Analysis

2.1. Internal Stakeholder

2.1.1. Primary Stakeholder

2.1.1.1. Employees

2.1.1.2. Manager

2.1.2. Secondary Stakeholder

2.1.2.1. Owner

2.2. External Stakeholder

2.2.1. Primary Stakeholder

2.2.1.1. Customer

3. Specific Requirements

3.1. User Story

3.1.1. As a < customer >, I want < to appoint an appointment > so that < I can take a service >. **Acceptance criteria** < customer will be able to set up the appointment >

3.1.2. As a < customer >, I want < to cancel my appointment > so that < I can inform I do not take the service >. **Acceptance criteria** < customer will be able to cancel the appointment >

3.1.3. As a < customer >, I want < to select services > so that < I can confirm my wanted service >. **Acceptance criteria** < customer will be able to select the services >

3.1.4. As a < customer >, I want < to select beautician > so that < I can confirm my wanted beautician >. **Acceptance criteria** < customer will be able to select the beautician >

3.1.5. As a < customer >, I want < to edit my profile > so that < I can add/delete information >. **Acceptance criteria** < customer will be able to edit profile >

3.1.6. As a < customer >, I want < to give feedback on their services > so that < I can help other people >. **Acceptance criteria** < customer will be able to provide feedback on the service >

3.1.7. As a < employee >, I want < to cancel the customer appointment > so that < I can inform I am not available to give service >. **Acceptance criteria** < employee will be able to cancel the appointment >

3.1.8. As a < employee >, I want < to edit my profile > so that < I can update information >. **Acceptance criteria** < employee will be able to edit profile >

3.1.9. As a < manager >, I want < to make the customer appointment > so that < I can confirm customer services >. **Acceptance criteria** < manager will be able to make the customer appointment >

3.1.10. As a < manager >, I want < to cancel the customer appointment > so that < I can inform services are not possible to give >. **Acceptance criteria** < manager will be able to cancel the customer appointment >

3.1.11. As a < manager >, I want < to see the customer profile > so that < I can take some previous preparation for services >. **Acceptance criteria** < manager will be able to get access to the customer profile >

3.1.12. As a < manager >, I want < to check the transaction list > so that < I can make sure everything is ok >. **Acceptance criteria** <manager will be able to get the transaction list>

3.1.13. As a < manager >, I want < to update the employee profile > so that < I can add or delete information of the employee >. **Acceptance criteria** < manager will be able to get access to the employee profile >

3.1.14. As a < manager >, I want < to set the employee's working time schedule > so that < I can confirm the employees are working well >. **Acceptance criteria** < manager will be able to set the working time schedule for the employees >

3.1.15. As a < manager >, I want < to see the payroll > so that < I can calculate the revenue if my company >. **Acceptance criteria** < manager will be able to set the working time schedule for the employees >

3.1.16. As a < manager >, I want < to update the services > so that < I can confirm the services are up to date with trend >. **Acceptance criteria** < manager will be able to update the services >

3.1.17. As a < manager >, I want < to update the price of services > so that < I can confirm the services are priced well with customer expectation >. **Acceptance criteria** < manager will be able to update the price of services >

3.1.18. As a < manager >, I want < to add the discount of services > so that < I can give discount for the customer >. **Acceptance criteria** < manager will be able to add discount of services >

4. Priority List

4.1. MoSCoW Prioritization

4.1.1. MUST

4.1.1.1. < Customer > requirement **3.1.1** < to appoint an appointment >

4.1.1.2. < Customer > requirement **3.1.2** < to cancel my appointment >

4.1.1.3. < Customer > requirement **3.1.3** < to select services >

4.1.1.4. < Customer > requirement **3.1.4** < to select beautician >

4.1.1.5. < Customer > requirement **3.1.5** < to edit my profile >

4.1.1.6. < Employee > requirement **3.1.7** < to cancel the customer appointment>

4.1.1.7. < Manager > requirement **3.1.9** < to make the customer appointment

4.1.1.8. < Manager > requirement **3.1.10** < to cancel the customer appointment >

4.1.1.9. < Manager > requirement **3.1.11** < to see the customer profile >

4.1.1.10. < Manager > requirement **3.1.12** < to check the transaction list >

4.1.1.11. < Manager > requirement **3.1.13** < to update the employee profile >

4.1.1.12. < Manager > requirement **3.1.14** < to set the employee's working time schedule >

4.1.1.13. < Manager > requirement **3.1.15** < to see the payroll >

4.1.1.14. < Manager > requirement **3.1.16** < to update the services >

4.1.1.15. < Manager > requirement **3.1.17** < to update the price of services >

4.1.2. SHOULD

4.1.2.1. < Customer > requirement **3.1.6** < to give feedback on their services >

4.1.2.2. < Employee > requirement **3.1.8** < to edit my profile >

4.1.2.3. < Manager > requirement **3.1.18** < to add the discount of services >

5. Functional Requirements by Modules

5.1. Manager Panel

5.1.1. MoSCoW Prioritization

5.1.1.1. MUST

5.1.1.1.1. The system will provide the access of **appointment booking and scheduling** to the manager.

5.1.1.1.2. The system will provide the access of **employee management** to the manager.

5.1.1.1.3. The system will provide the access of **customer management** to the manager.

5.1.1.1.4. The system will provide the access of **service management** to the manager.

5.1.1.1.5. The system will provide the access of **accounts** to the manager.

5.2. Appointment Booking and Scheduling

5.2.1. MoSCoW Prioritization

5.2.1.1. MUST

5.2.1.1.1. The system will approve the appointment schedule of customer.

5.2.1.1.2. The system will cancel the appointment schedule of a cancellation appointment request from the customer.

5.2.1.1.3. The system will cancel the customer requested appointment schedule by a cancellation appointment request from the employee.

5.3. Customer Panel

5.3.1. MoSCoW Prioritization

5.3.1.1. MUST

5.3.1.1.1. The system will approve the registration of customer with their name, date of birth, address, marital status and phone number.

5.3.1.1.2. The system will provide the access of **appointment booking and scheduling** to the customer.

5.3.1.1.3. The system will provide the access of services choice to the customer.

5.3.1.1.4. The system will provide the access of beautician choice to the customer.

5.3.1.1.5. The access of profile customization, the system will provide the customer.

5.3.1.2. SHOULD

5.3.1.2.1. The system will accept the feedback from the customers.

5.4. Employee Panel

5.4.1. MoSCoW Prioritization

5.4.1.1. MUST

5.4.1.1.1. The system will provide the access of **appointment booking and scheduling** to the manager.

5.4.1.1.2. The system will inform the working time schedule to the employee.

5.4.1.2. SHOULD

5.4.1.2.1. The access of profile customization, the system will provide the customer.

5.5. System Panel

5.5.1. MoSCoW Prioritization

5.5.1.1. MUST

5.5.1.1.1. The system will generate a unique code number for each of the registered customer.

5.5.1.1.2. The system will count the number of customer.

5.5.1.1.3. The system will store the information of the customers.

5.5.1.1.4. The system will ranking the services of taken by customers.

5.5.1.1.5. The system will generate a unique code number for each of the registered employee.

5.5.1.1.6. The system will count the number of employee.

5.5.1.1.7. The system will store how many service employee give.

5.6. Employee Management

5.6.1. MoSCoW Prioritization

5.6.1.1. MUST

5.6.1.1.1. The system will show employees profile list in a different category.

5.6.1.1.2. The system will provide access to the employee profile for update profile.

5.7. Customer Management

5.7.1. MoSCoW Prioritization

5.7.1.1. MUST

5.7.1.1.1. The system will show customers profile list in a different category.

5.7.1.1.2. The system will provide the discount access for add discount.

5.8. Service Management

5.8.1. MoSCoW Prioritization

5.8.1.1. MUST

5.8.1.1.1. The system will provide the price of services access to the accounts for change services price.

5.8.1.1.2. The system will provide the services change access to the accounts for update services.

5.9. Accounts

5.9.1. MoSCoW Prioritization

5.9.1.1. MUST

5.9.1.1.1. The system will provide the payroll access to the accounts.

5.9.1.1.2. The system will provide the daily transections document to the accounts.

5.9.1.1.3. The system will provide the price list of services to the accounts.

6. Non-Functional Requirements

6.1. Functionality

6.1.1. The System shall be capable of providing configurable error messages, workflows, and alerts.

6.1.2. Accuracy

6.1.2.1. The System shall display appointment time with appropriate time zones.

6.1.3. Interoperability

6.1.3.1. The System shall support content transportation standards and implementation specifications set forth in 45 CFR 170.205.

6.1.3.2. The System shall be capable of navigating seamlessly among related modules throughout the end-to-end scheduling process.

6.1.4. Security

6.1.4.1. The System shall be able to support secure messaging

6.2. Usability

6.2.1. Understandability

6.2.1.1. The System shall be self-descriptive and explain itself through cues. (e.g., screen, area, and group titles indicating the purpose of the respective interface element; on-screen instructions/diagrams; explanations/answers that are available on request; no implicit assumptions about how users are expected to behave that would contradict users' expectations; and feedback is given on user actions, system actions, and the system state)

6.2.1.2. The System shall be usable across multiple operating systems, browsers, and platforms.

6.3. Maintainability

6.3.1. Analyzability

6.3.1.1. The System shall be capable of providing transaction logs, error logs and audit trails for pertinent scheduling transactions.

6.4. Testability

6.4.1. The System shall provide criteria to enable the measurement to test pieces of code or functionality or a provision added in software so that systematically test plans and scripts could execute.

7. Hardware Requirements

7.1. Devices

7.1.1. Computer

7.1.2. Mobile

7.1.3. Server

7.1.4. Printer

8. Developing Tools

8.1. JAVA

Programming with Java is incredibly common for banking and financial technology applications. Compared to other programming languages, Java stands out in terms of security functionality and environment. First, it comes with certain built-in security features such as:

Cryptography, which includes comprehensive APIs including digital signatures, message authentication codes, cyphers and more.

Advanced Authentication and Access Control that allows incorporating a range of secure login mechanisms, along with creating the custom security policy and enforce a well-defined permission access policy to sensitive data. In simple words, “breaking into” your application becomes not so easy and your internal data stays safe and sound.

8.2. IBM (DB2)

8.2.1. DB2 exploits the file system/storage, it uses different kinds of table spaces to extract the data as fast as it can from the physical device.DB2 has different editions; the basic free edition, which is called Express-C, incorporates basic features, and just with that.

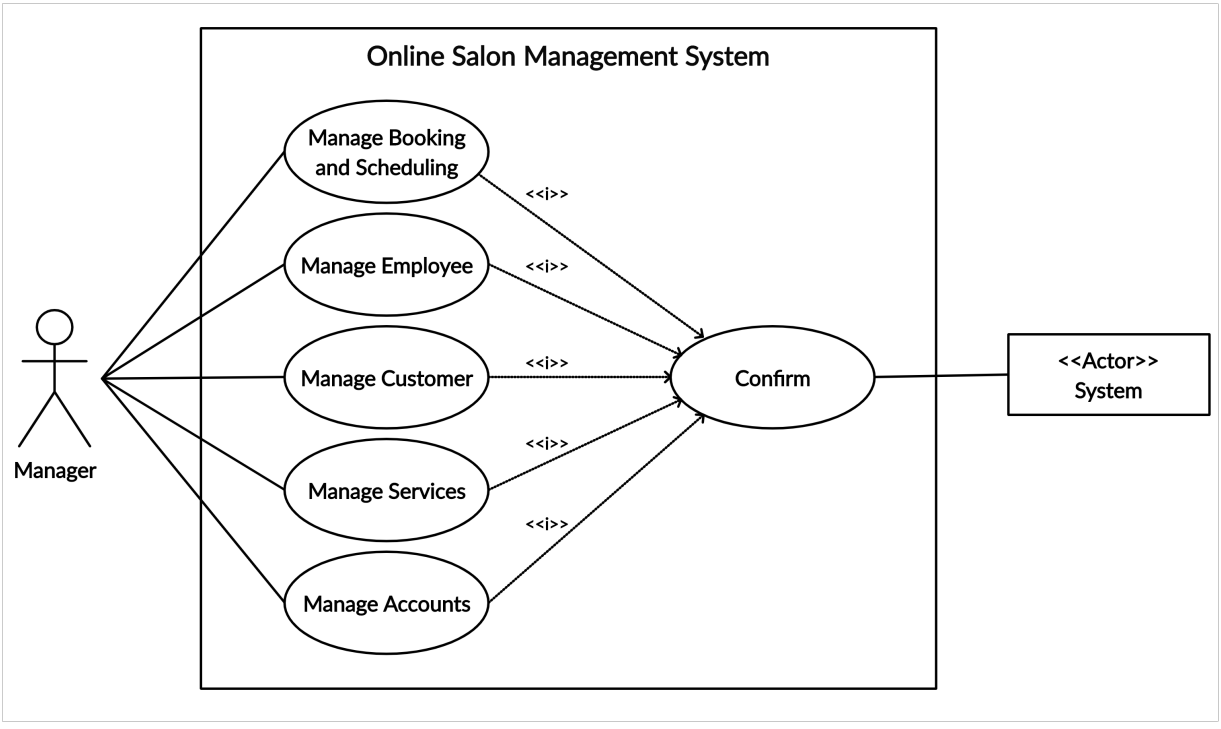
8.2.2. The price is another factor. In the past, MySQL was an interesting Open Source project, but now it is part of Oracle. Currently, Oracle has finished the support to many of the Open Source projects that came from Sun and we do not know the plans for this database. Instead, IBM has released this basic version for "free" and the big blue keeps releasing the most recent version free.

8.2.3. DB2 can run in many platforms: Windows, Linux, UNIX (AIX, HP-UX and Solaris).

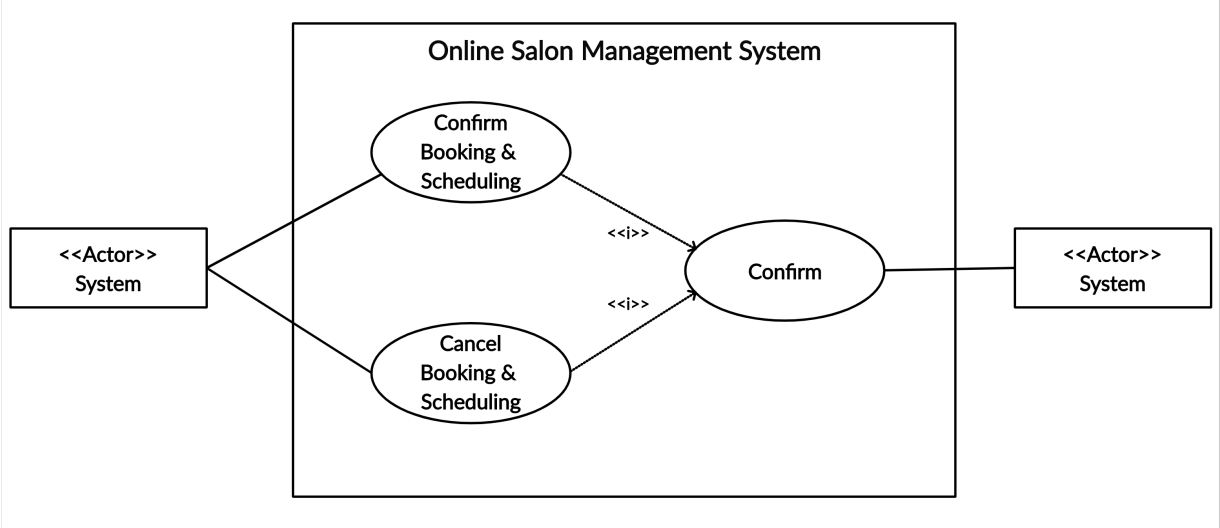
8.2.4. DB2 has many tools and features: disaster recovery (backup online/backup merge, restore full/incremental/delta), High availability (HADR), the capability to scale to Pure Scale (DB in a cluster), stores XML natively and retrieves them via

9. Use Case Diagram by Modules

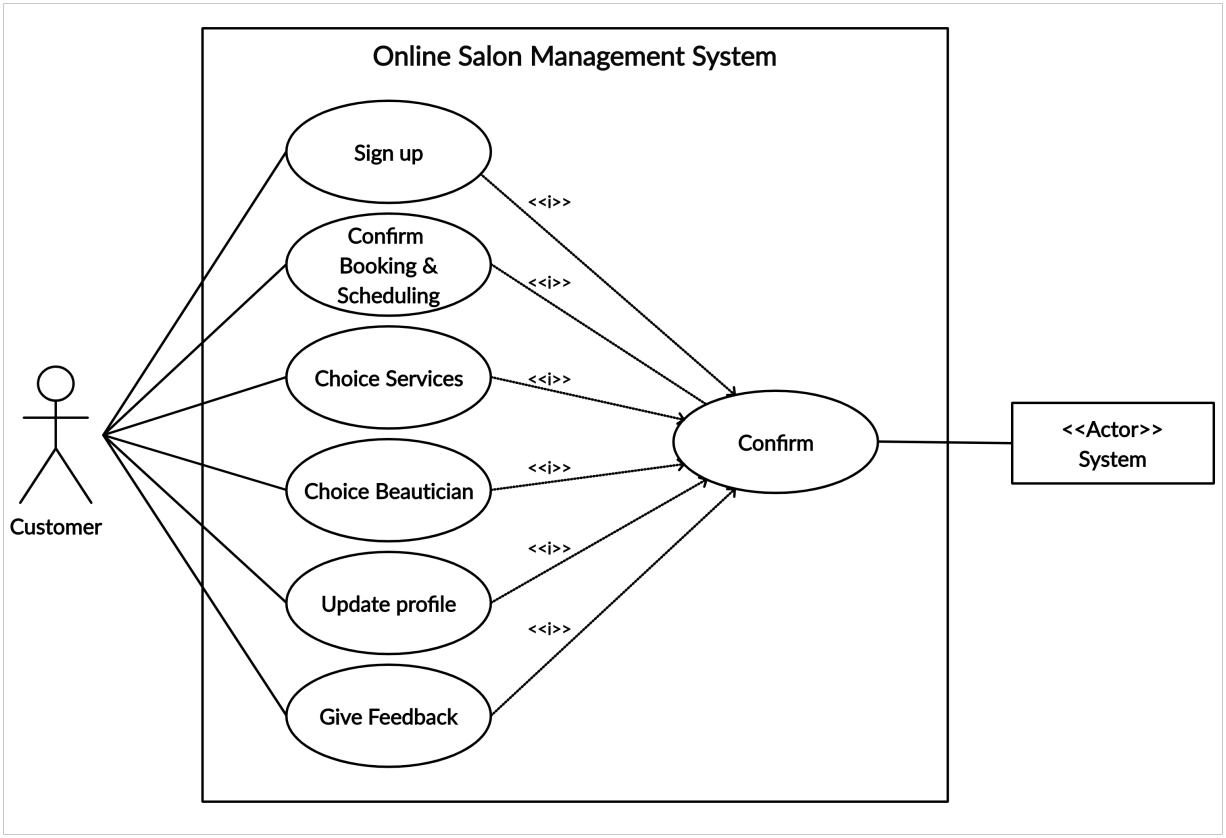
9.1. Manager Panel Diagram



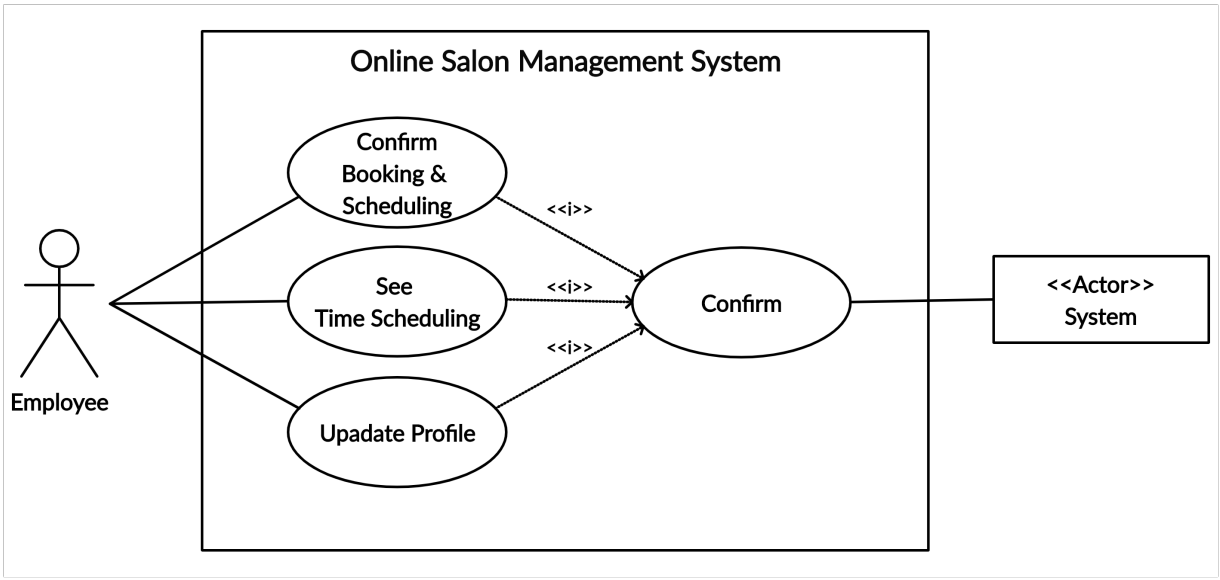
9.2. Appointment Booking and Scheduling Diagram



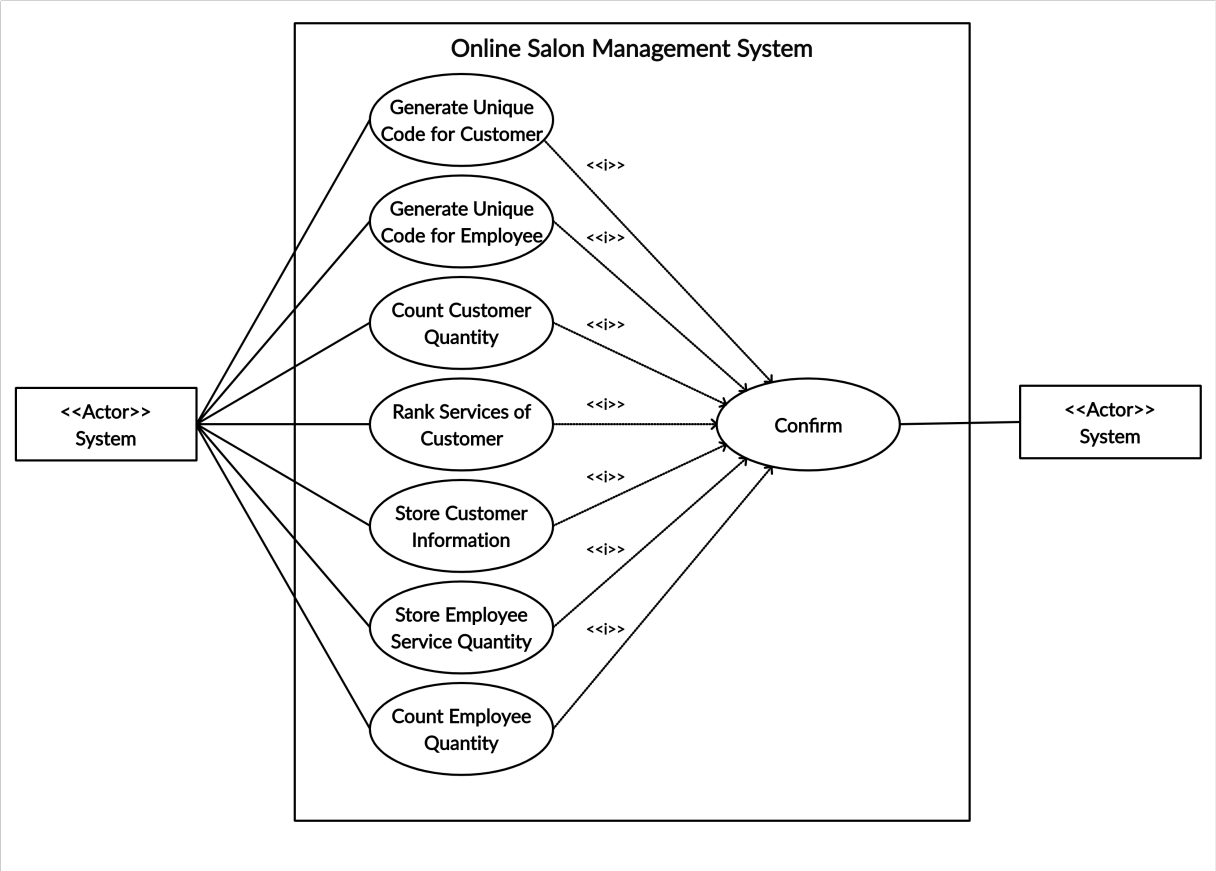
9.3. Customer Panel Diagram



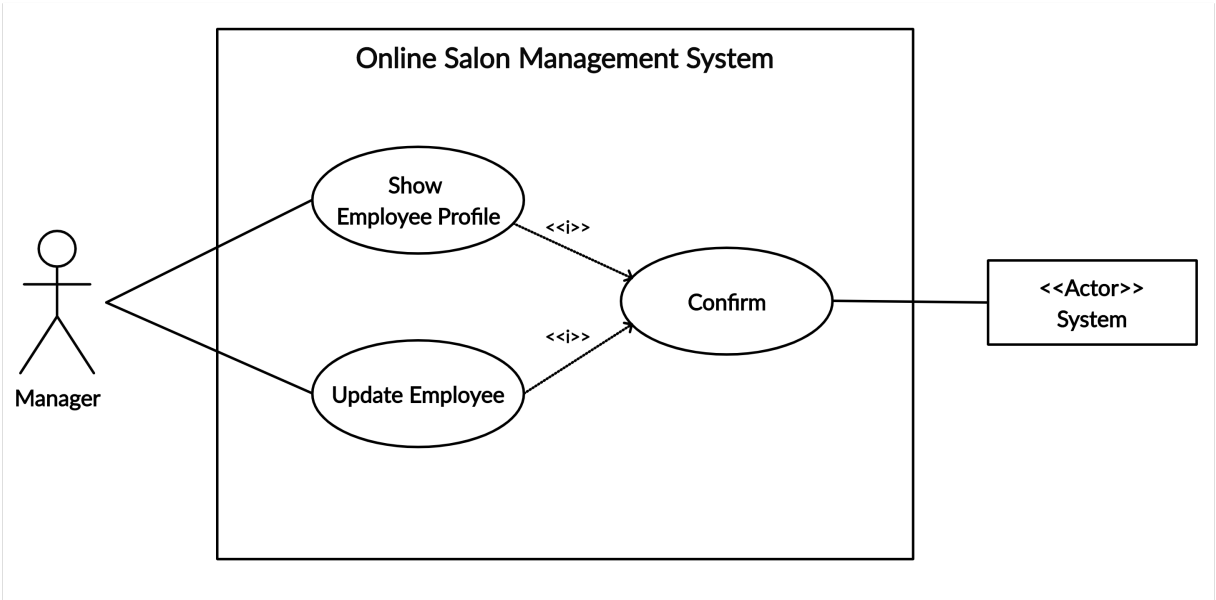
9.4. Employee Panel Diagram



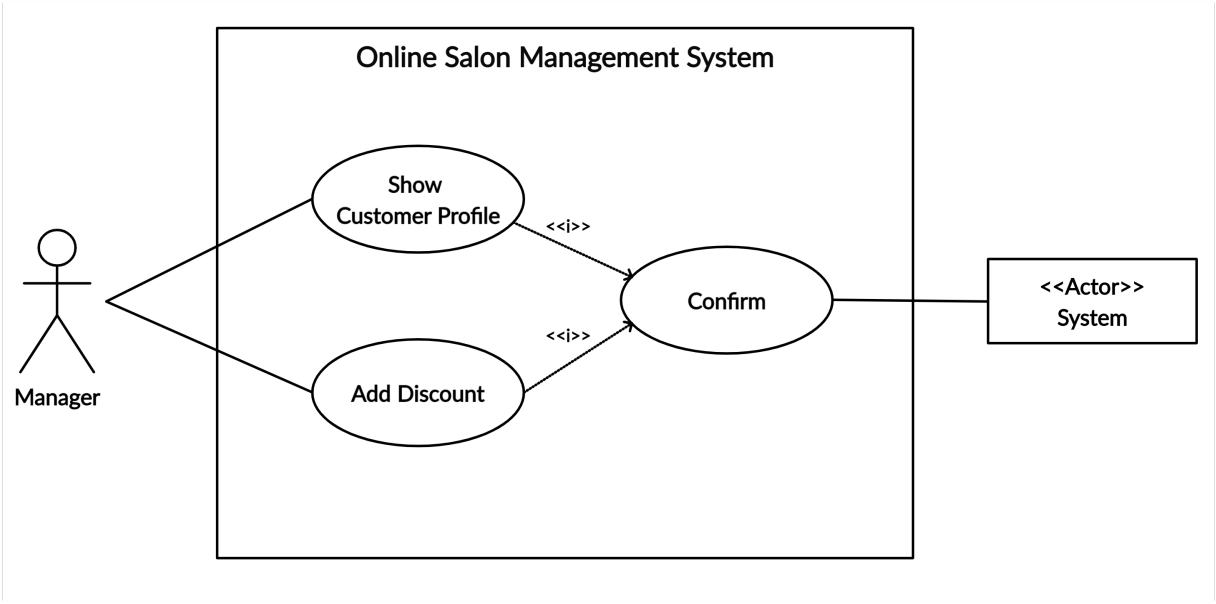
9.5. System Panel Diagram



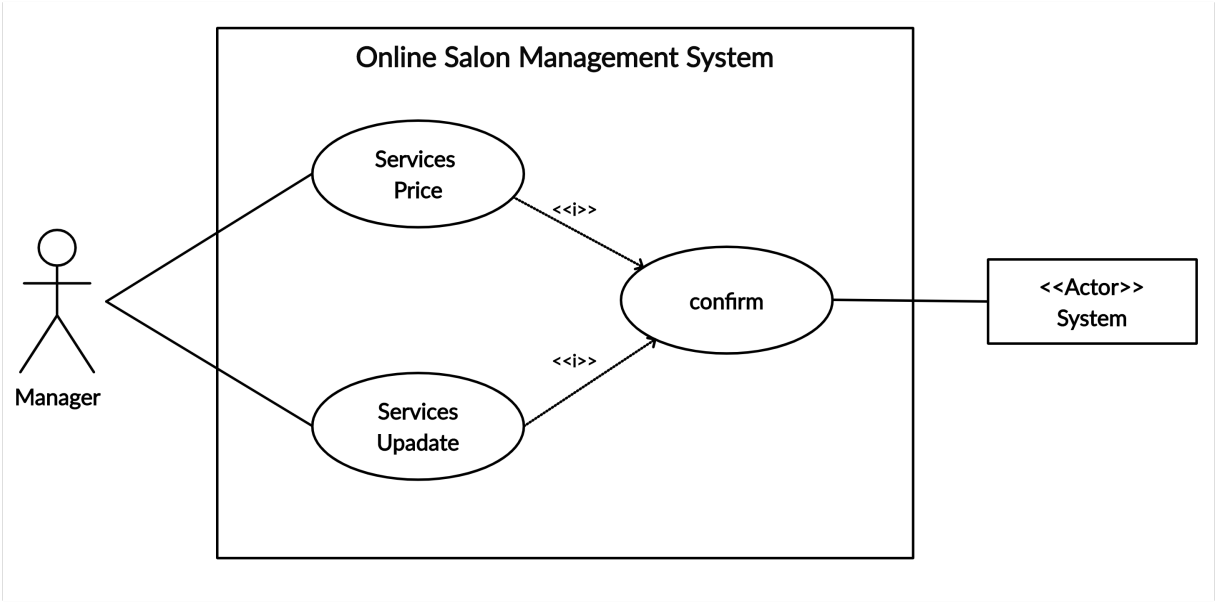
9.6. Employee Management Diagram



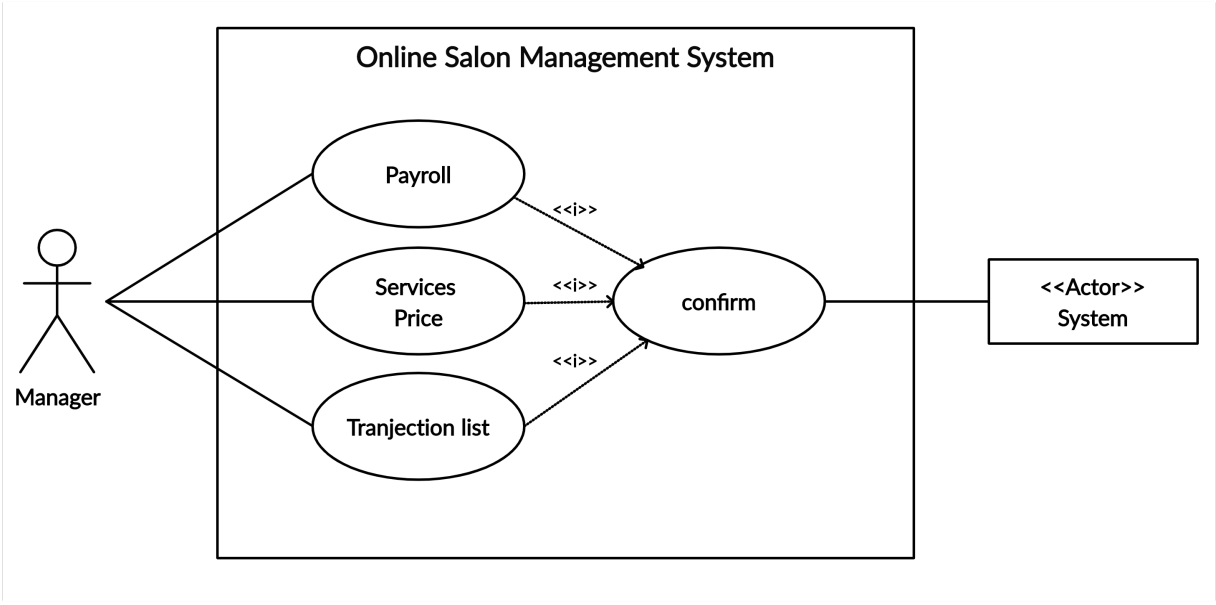
9.7. Customer Management Diagram



9.8. Service Management Diagram



9.9. Accounts Diagram



10. Project Duration

10.1. Customer Requirements

10.1.1. The customer wants the software in 2 months.

10.2. Effort Estimation

Effort = **PM** = **Coefficient**<**Effort Factor**>*(**SLOC**/1000) ^**P**

Development time = **DM** = 2.50*(**PM**) ^**T**

Required number of people = **ST** = **PM**/**DM**

[100,000 SLOC/1000 = 100k SLOC]

Software Project Type	Coefficient <Effort Factor>	P	T
Organic	2.4	1.05	0.38

Effort = PM = Coefficient<Effort Factor>*(SLOC/1000) ^P

= 2.4*(10000/1000) ^1.05

= 27 person-week

Development time = DM = 2.50*(PM) ^T

=2.50*(27) ^0.38

= 9 weeks

Required number of people = ST = PM/DM

= 27/9

= 3 person

11. Conclusion

The demand of Visual Studio for application is increasing day by day in the Software industry, due to high expectations of client companies. Hence, an attempt at automating an office application had added to our learning experience. It has also helped in adopting an analytical approach to solving and made us realize that system development is a systematic process. Thereby appreciating the role of SDLC (Systems development life cycle) model in organizing the complex process of system development into manageable chunks. Indeed, it was a great learning experience.