

Conference Registration Management System

Software Requirements Specification



Submitted By

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Third draft	

Revision History

Date	Version	Description	People
18 Feb 2018	1.0	First draft	Lakshya Garg (B16CS012) Shashank Mohabia (B16CS035)
11 Mar 2018	2.0	Project extended from single conference registration to multiple conferences	Lakshya Garg (B16CS012) Shashank Mohabia (B16CS035)
24 April 2018	3.0	Updated class diagram	Lakshya Garg (B16CS012) Shashank Mohabia (B16CS035)

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Software Requirements Specification

1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed description of the development and operation of the Conference Registration Management System. It will also include the system constraints, user interface, and the response of the system to various external factors.

1.2 Scope

This software system is designed to help both the attendees and the organizers to eliminate the process of offline registration of any conference to smoothen the overall user as well as admin experience of registration. This software can be used by any organization to conduct conferences or events like conferences.

Organizers can use this software to create a new conference and a portal for registration of each conference. The software has functionality to create two types of user i.e. normal user and a super user (admin/organizers). The super users have higher privileges as compared to a normal user.

A normal user can register for the conference created by a super user. After logging into the software, a user can see the conference details, register for it and make payments within a stipulated time decided by the super user. The software also checks whether the seats are available for registration.

The super user has access to grant super user status or revoke it for any user. The former can also view all the details of the registrants.

1.3 Constraints

1.3.1. No refunds and seat cancellation is possible.

1.4 Assumptions and Dependencies

1.4.1. The number of seats available are fixed and known.

1.4.2. There are different types of registrations with different types of payment amounts.

1.4.3. The registrations are closed even when not all the registered users have paid the fee.

1.4.4. Registration is closed before a week of the commencement of the conference.

1.5 Definitions, Acronyms and Abbreviations

Term	Definition
User	Any type of user who is registered in the software.
Super user	A user with excess privileges i.e. the organizers/admin.
Normal user	All users other than super users i.e. the attendees.

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1.6 References

- [1] IEEE, *IEEE STD 830-1998 IEEE Recommended Practice for Software Requirements*
- [2] UML @ Classroom: An Introduction to Object-Oriented Modeling - Christian Huemer and Gerti Kappel

2. Overall Description

2.1 Product Functions

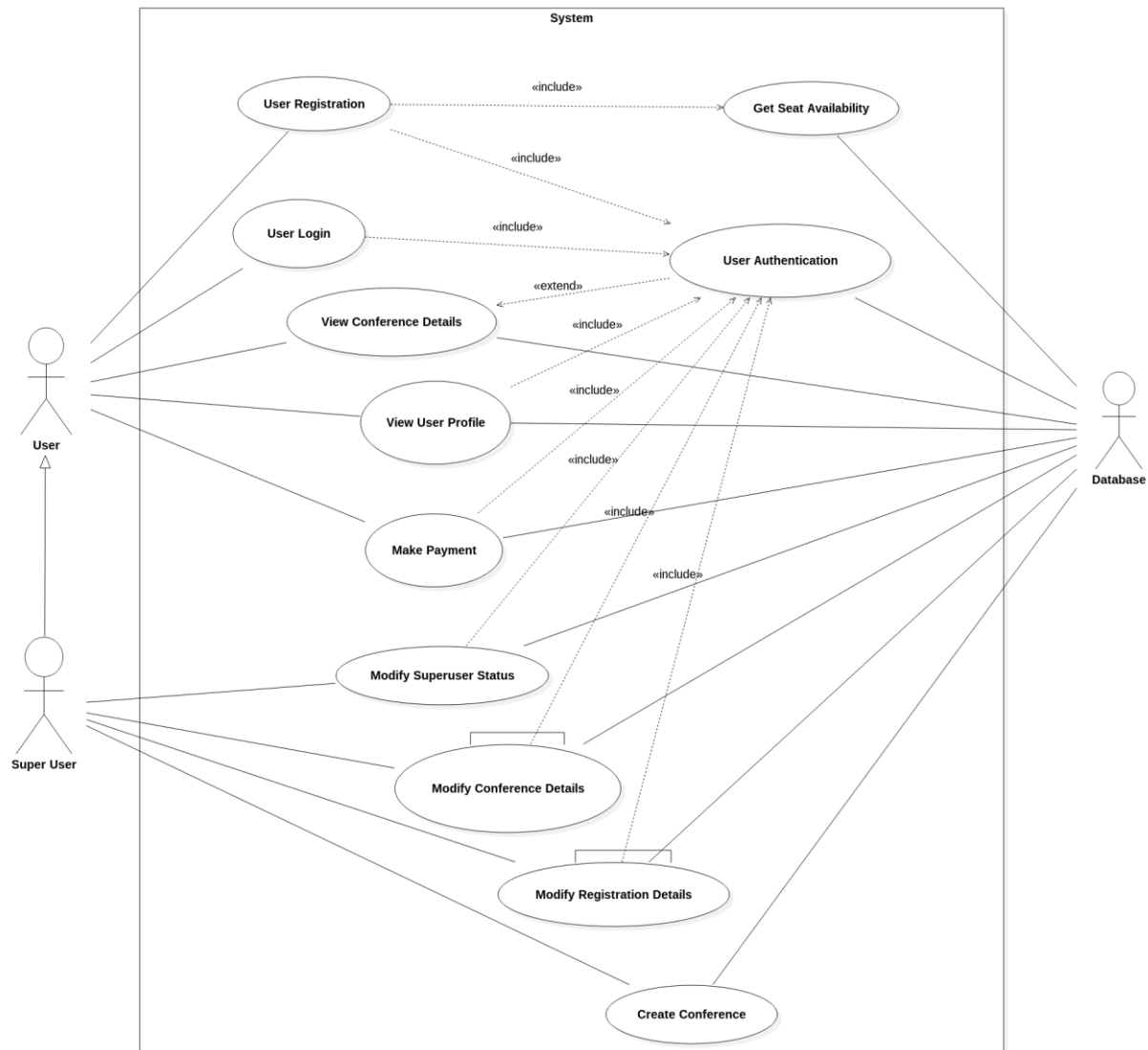
2.1.1 Functional Requirements

This software is expected to ship with the following functionalities:

- For normal users
 - Register and login in the software's authentication module
 - View the conference details
 - Choose to pay for the given conference after registration
 - View user profile
- For super users
 - Register and login in the software's authentication module
 - Create a new conference
 - View and edit conference details
 - View registration details
 - Grant/revoke super user status
 - View user profile

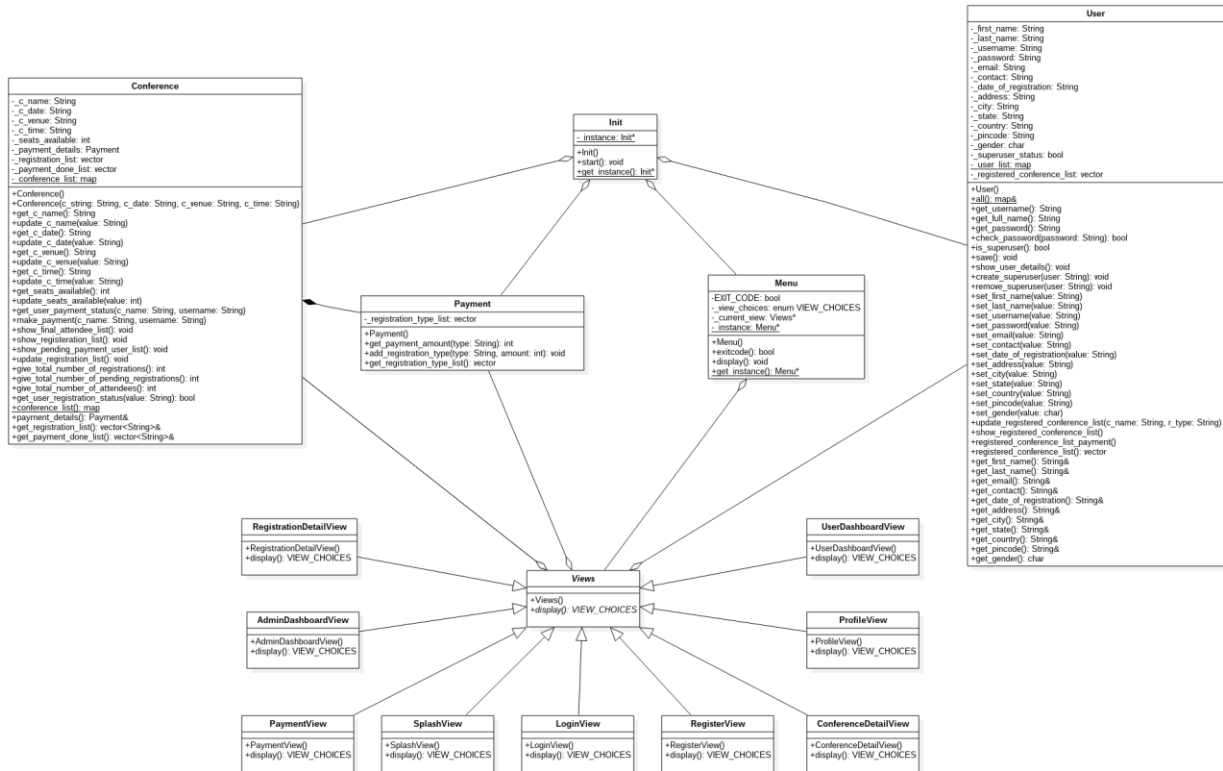
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2.1.1.1 Use Case Diagram

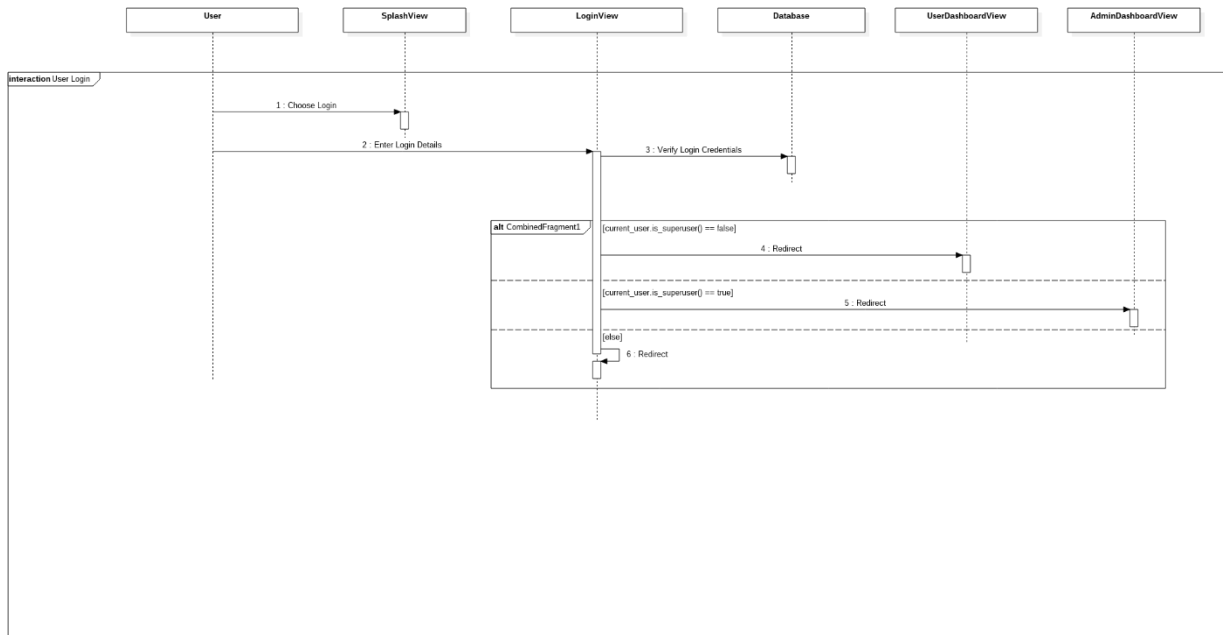


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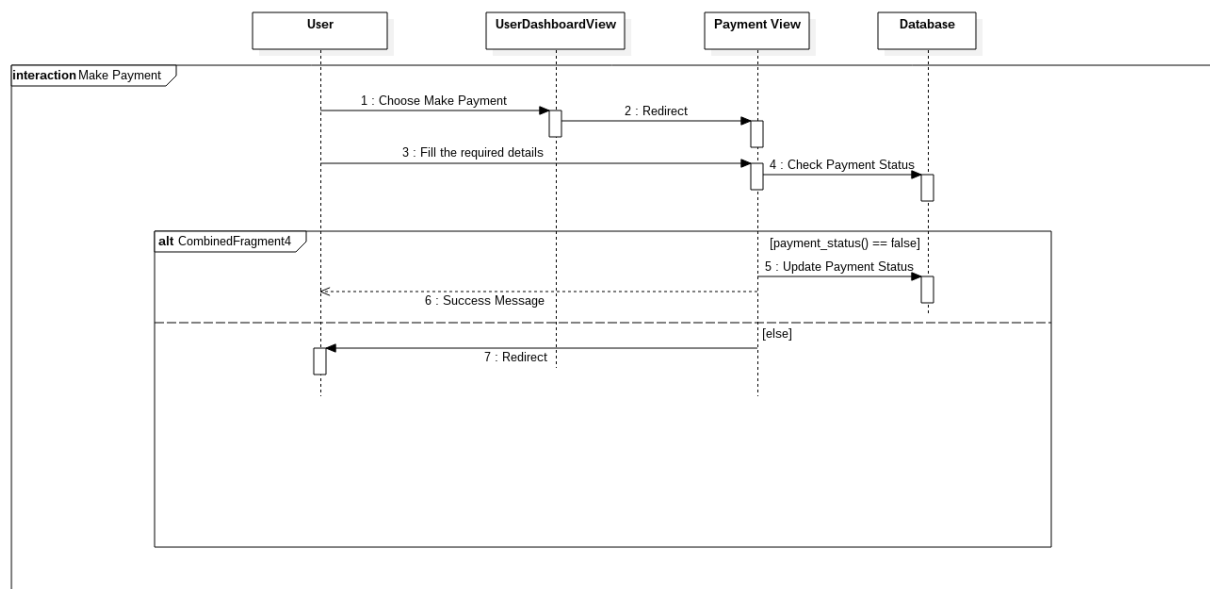
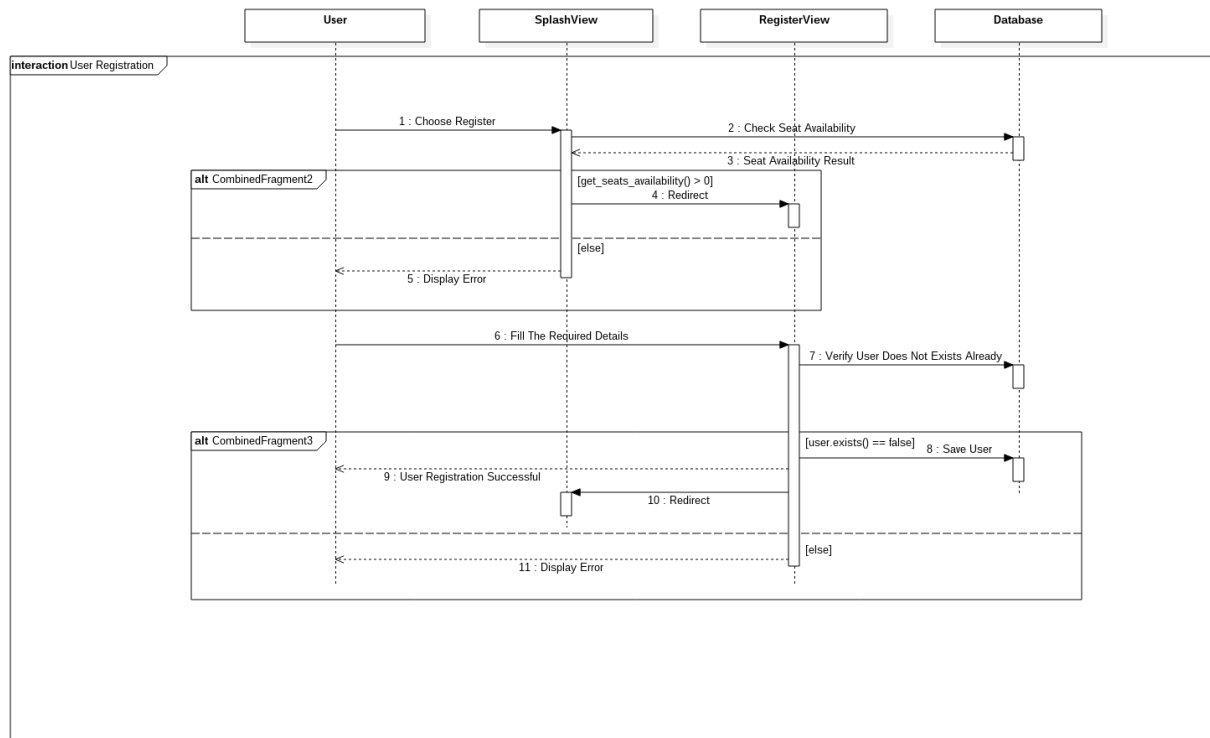
2.1.1.2 Class Diagram



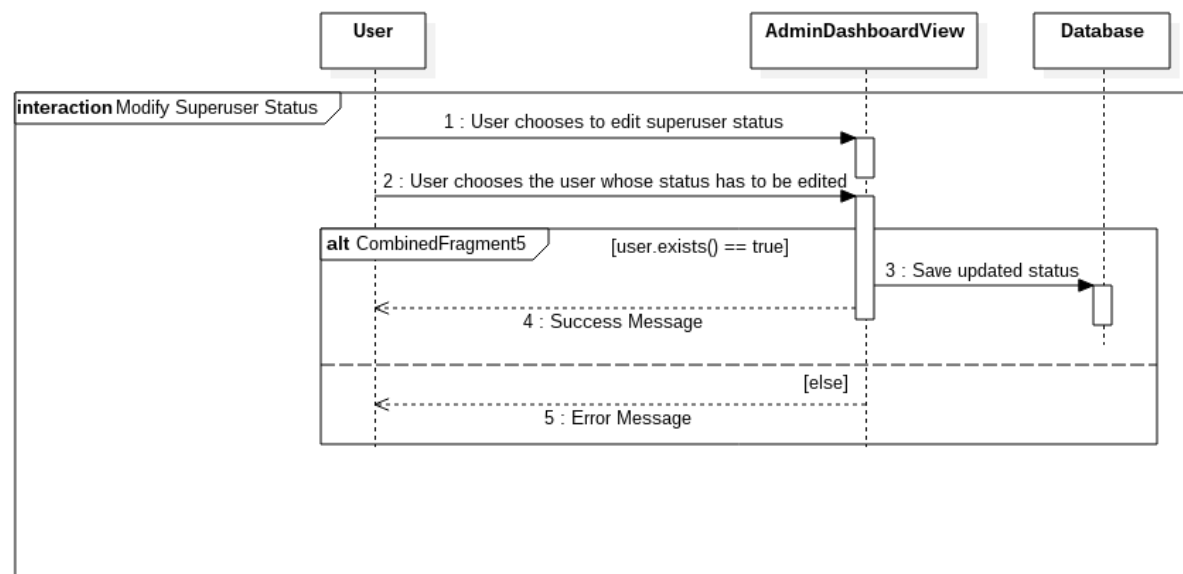
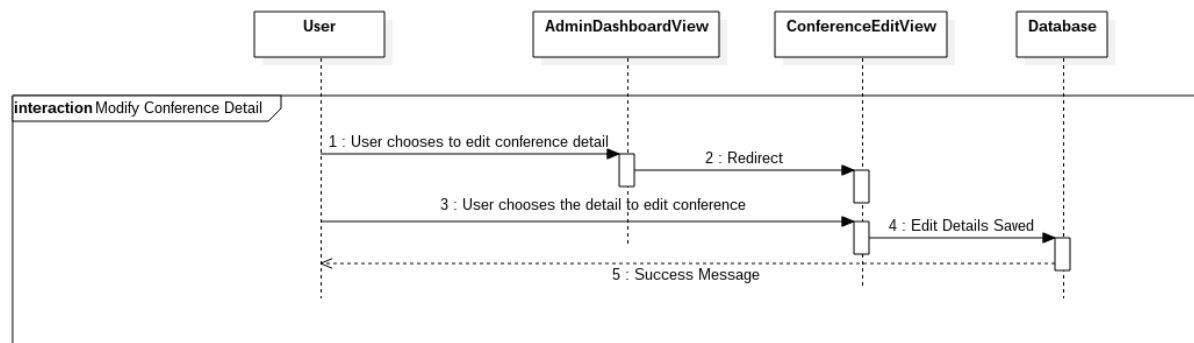
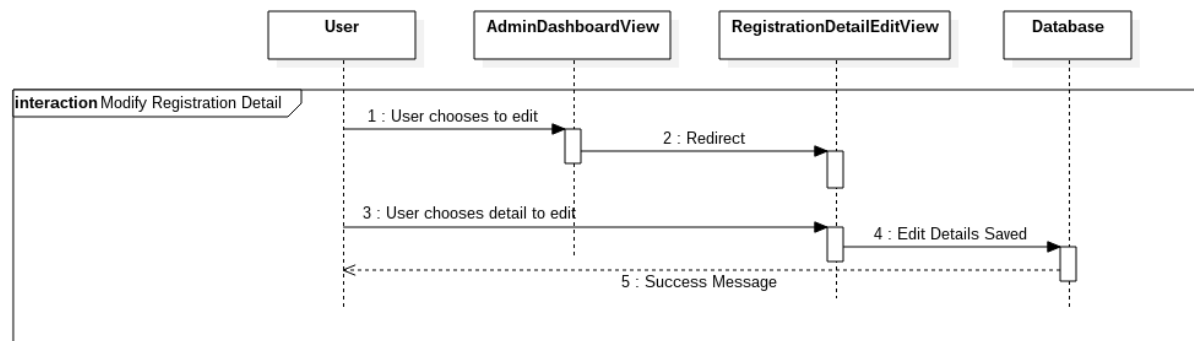
2.1.1.3 Sequence Diagram



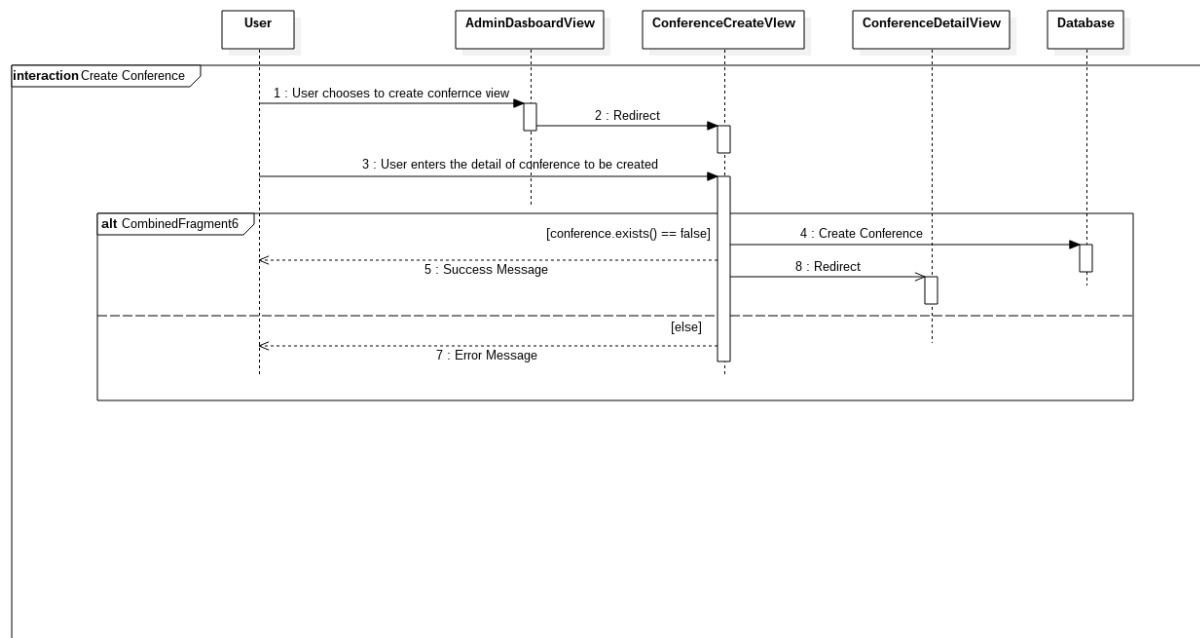
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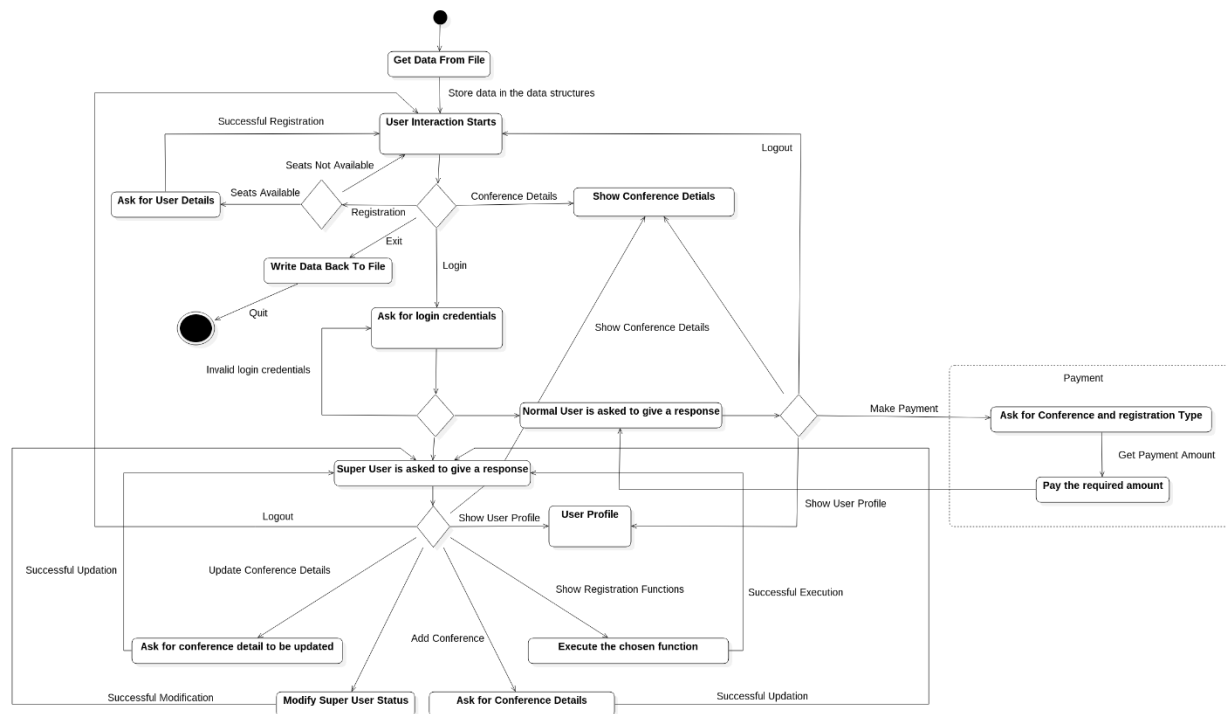
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2.1.1.4 Activity Diagram



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2.1.2 Non-Functional Requirements

2.2 User Characteristics

There are two types of users who will use this software, they include the organizers/admin or the super users and the attendees or the normal users.

The attendees will use the software to register and pay for the conference according to their registration types within 7 days of registration of the user. The user has to fill all the required details during registration.

The organizers will use this software to create any number of conferences and register the attendees on this software. They can also use it to view the registration list according to whether they have paid the fee or not, view the payment details and edit some of the details for smooth process of registration.

3. Specific Requirements

3.1 Use case description

3.1.1 User Login

Use Case Name	User Login
Actors	User, Database
Trigger	User selects the login option
Precondition	The User must be registered
Basic Path	User enters its user ID and password
Alternative Path	No alternative path.
Post Condition	The user is taken to Dashboard depending on the type of user
Exception Paths	Invalid username or password
Others	None

3.1.2 User Registration

Use Case Name	User Registration
Actors	User, Database
Trigger	User selects the register option
Precondition	There must not be any user with the same username and seats must be available
Basic Path	User fills in the required details
Alternative Path	No alternative path.
Post Condition	Redirected to splash screen
Exception Paths	Username already exists Seats are not available
Others	None

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3.1.3 Make Payment

Use Case Name	Make Payment
Actor	User, Database
Trigger	User chooses to pay
Precondition	The user must be logged in.
Basic Path	User selects the registration type and then pays accordingly.
Alternative Path	No alternative path.
Post Condition	Redirected to User Dashboard after giving a success message.
Exception Paths	Invalid registration type Required amount not paid
Others	None

3.1.4 Modify Registration Details

Use Case Name	Modify Registration Details
Actor	User, Database
Trigger	Super user choses to edit registration details.
Precondition	1. The user must be logged in. 2. The user must be a super user.
Basic Path	User selects the detail to edit and edits the detail.
Alternative Path	No alternative path.
Post Condition	The edited details are saved and a success message is shown.
Exception Paths	The edited detail is not of the specified type or no detail is entered.
Others	None

3.1.5 Modify Conference Details

Use Case Name	Modify Conference Details
Actor	User, Database
Trigger	Super user choses to edit conference details.
Precondition	1. The user must be logged in. 2. The user must be a super user.
Basic Path	User selects the detail to edit and edits the detail.
Alternative Path	No alternative path.
Post Condition	The edited details are saved and a success message is shown.
Exception Paths	The edited detail is not of the specified type or no detail is entered.
Others	None

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3.1.6 Modify Super User status

Use Case Name	Update Super User
Actor	User, Database
Trigger	Super user choses to update super user status of another user..
Precondition	1. The user must be logged in. 2. The user must be a super user. 3. The user whose super user status has to be modified shall be already registered.
Basic Path	The user enters the username of the user whose super user status has to be modified and choses the change(Grant/revoke super user access)
Alternative Path	No alternative path.
Post Condition	A success message is shown and the super user returns to its dashboard
Exception Paths	The user whose super user status has to be modified is not already registered.
Others	None

3.1.7 Create Conference

Use Case Name	Create Conference
Actor	User, Database
Trigger	Super user choses to create new conference
Precondition	1. The user must be logged in. 2. The user must be a super user.
Basic Path	The user enters the details of the conference required to create new conference.
Alternative Path	No alternative path.
Post Condition	A success message is shown and the super user returns to its conference detail view.
Exception Paths	There is another conference with the same name show error message.
Others	None

3.2 Design Constraints

3.2.1 Software Language

The language used in developing CRMS is C++.

3.5.2 Software Architecture

The architecture used in making of this software is the Model View Controller (MVC)

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architecture. It was used in this project to distribute the code and to prevent users from directly interacting with the models or database. One can easily add functions without changing models because the models are separate from the view and the controller.