SOFTWARE ENGINEERING CS301

SOFTWARE DESIGN SPECIFICATION

International Conference Management (Back End)

GROUP MEMBERS

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The Software Design Specification

1. Introduction

A conference management system is a web-based software that supports the organization of conferences to manage the submission activities in any conference. It helps the organizers and users to easily submit and review their submissions.

1.1 Purpose of this document

The purpose of this project is to develop a web application for managing the submission of activities or research papers at any conference. The entire conference is divided into two roles one admin and the other is the user.

1.2 Scope of the development project

This software can be used by audiences who need to share the documents at a specified conference. We can say it is an alternative to google classroom/ Easy chair. Here in this software, a specific set of people can upload documents for reading and admins have the access to the documents.

1.3 Definitions, acronyms, and abbreviations

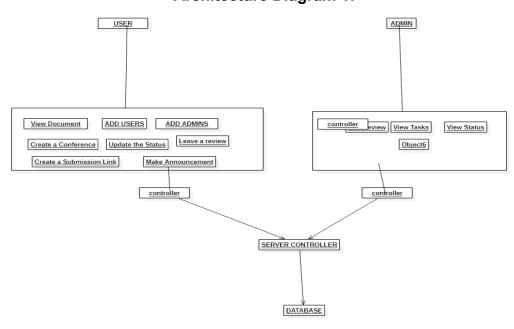
IEEE: Institute of Electrical and Electronics Engineers

SDS: Software Design Specification CRS: Campus Recruitment System

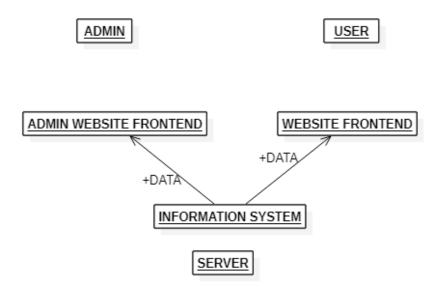
Mieten: The name of CRS, an android application.

2. Conceptual Architecture/Architecture Diagram

Architecture Diagram 1:

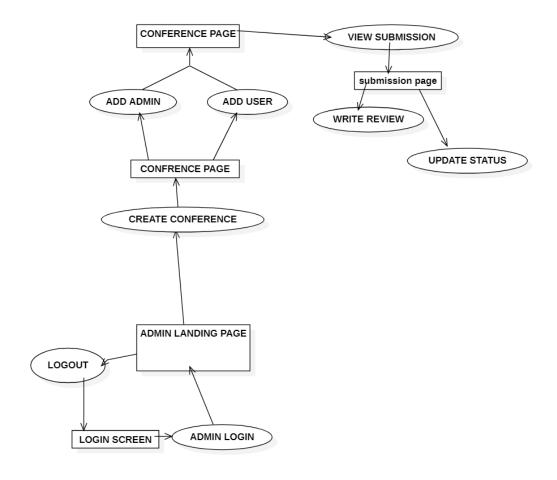


Architecture Diagram 2:

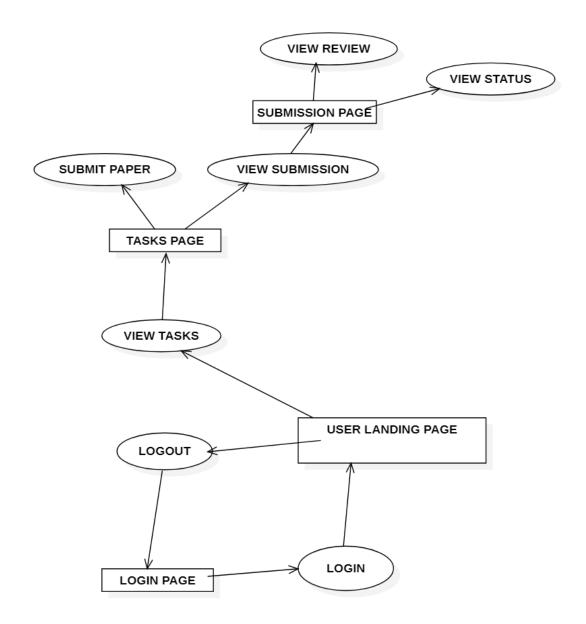


2.1 Structure and relationships

2.1.1 Admin's Side



2.2.USERS Side



NOTE:

The boxes represent individual screens.

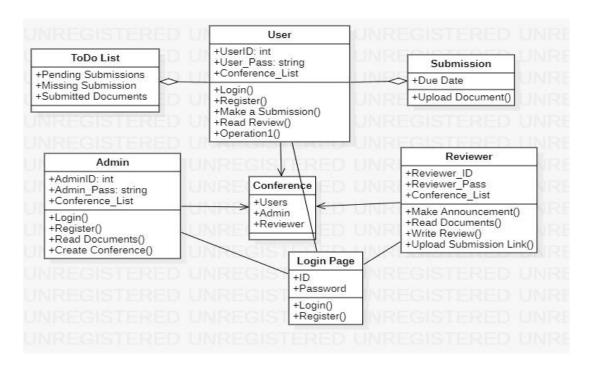
The circles represent actions that do not have screens.

The arrows represent navigation between screens.

3. Logical Architecture (Class Diagram, Sequence Diagram, State

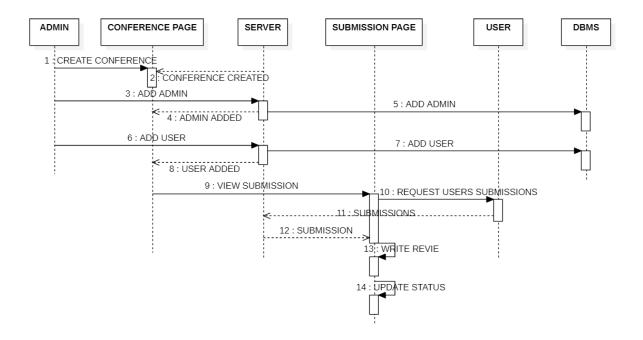
Diagram)

Class Diagram:

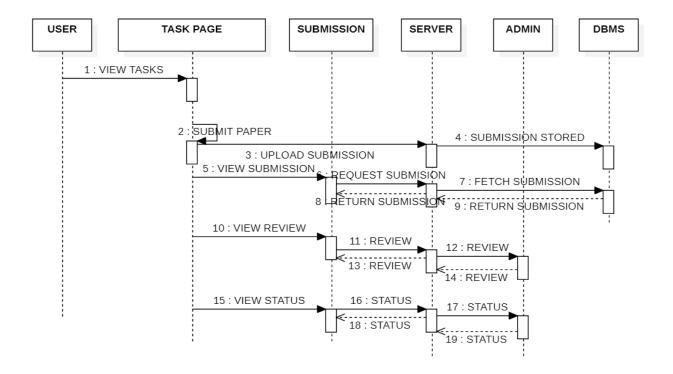


Sequence Diagrams:

Sequence Diagram: Admin

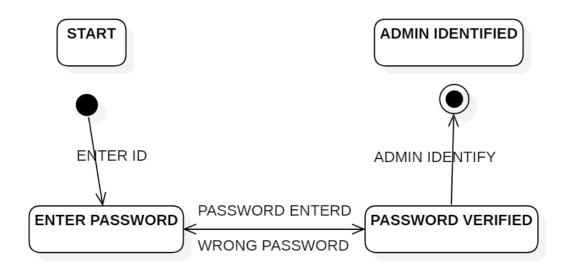


Sequence Diagram: User

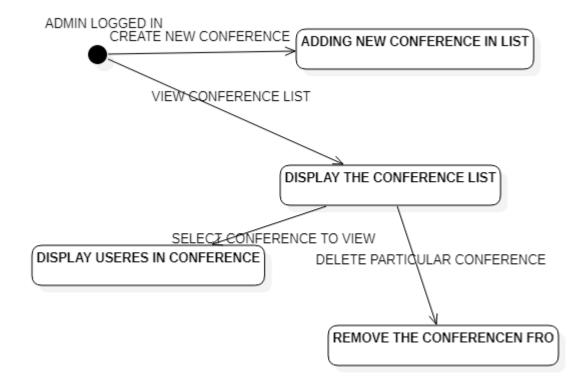


State Diagrams:

State Diagram: Admin Login

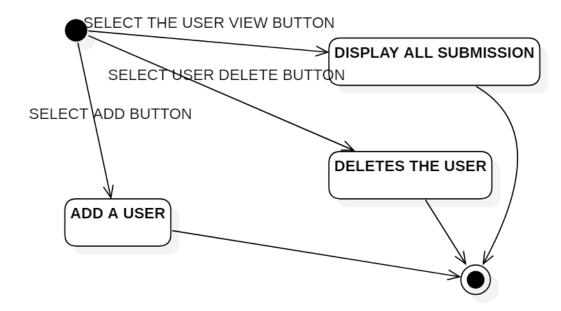


State Diagram: Admin Logged in page

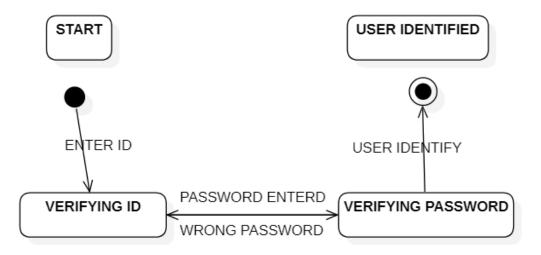


State Diagram: View Profiles Page

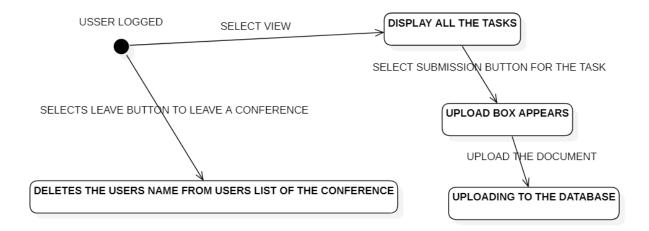
USERS LIST OPENED



State Diagram: User Login



State Diagram: User Home Page



3. Diagrams Description

3.1 Class Diagram explanation:

Admin, Reviewer(Teacher), User are the Classes connected to the conference class. In this admin can create a conference and in that he can add reviewers and users. So in a conference, he can have separate meetings and announcements with the required set of people. And some can upload and others can verify. The user will have a separate Todo List among all the conferences. He will also have submission links for all the submissions he needs to do along with the due date.

In admin class, he will have login credentials, methods to read documents and upload reviews. In User, he will have login credentials, and upload Documents, read Review. In submissions due date and upload Document method.

3.2 Sequence Diagram:

Arrow line signifies there is a send message taken place. The response is being shown by dotted arrows.

- **3.2.1 User:** User puts the user credentials and if successful login it goes to a user landing page where he can also log out, then he can view tasks in the tasks page from there he can submit a paper by uploading submission then it will be stored in the database. He can also view his submission which will be fetched and returned from the database. He also can view the review made by the admin. The status of the document can also be checked.
- **3.2.2 Admin:** Admin after the successful login can create a conference then he can add other admins, reviewers, and users. After a user makes a submission the admin/ reviewer can write a review and the

status is updated.

3.3 State Diagram:

The initial state is being shown by starting with a black dot. The final State is being shown by the black dot surrounded by an empty circle.

- **3.3.1 Admin Login:** This allows users to enter credentials, which are being checked for authentication in the back-end. After being authenticated successfully, it lands upon the AdminLanding page. It has various buttons like FAQ, ViewProfile, Training, InsertCompany, and About to land upon their respective pages, and click on Back to return to the AdminLanding page. On clicking on Logout, it returns to the parent page.
- **3.3.2 Admin Logged in Page:** This allows Admin to create a new Conference or view the conference list. In the conference list, Admin can either delete a particular conference or Select a conference to view the user's list in that conference.
- **3.3.3 View Profile Page:** Once the user's list is opened for the admin, He can select the user view button to view all his/her submissions OR he can select the delete button beside the user's name to remove the user from the user's list OR he can select the add button to add a new user in the conference.
- **3.3.4 User Login:** This allows users to enter a login ID which is firstly being verified. If the ID exists in the database, the User has a block to enter the password. If the password matches the corresponding password to the entered email ID in the database, the User is landed on the home page else re-enter the password textbox appears for re-entering the password.
- **3.3.5 User Home Page:** This allows the user to either view tasks in which he can submit his document OR select the left button to leave the conference resulting in his name being deleted from the user's list of the conference.

3.2 Class name: Login

Description: This class allows the user to enter the system by authenticating the entered credentials.

3.2.1 Method 1: User Login

Input: User ID, Password

Output: User landing page of a successful login.

Method Description:

When a user tries to log in it checks in the database whether the user credentials are correct or not.

3.2.2 Method 2: Submit Documents

Input: Document

Output: N/A

Method Description: Users can submit the documents in the given link.

3.2.3 Method 3: Read Review

Input: N/A

Output: Review by the Reviewer.

Method Description: Here users can read reviews submitted by the

reviewer.

3.3 Class Name: Admin

Description

This class enables the admin to enter into the subsystem (Landing page) after authenticating the entered credentials.

3.3.1 Method 1: Admin Login()

Input: Admin ID, Password

Output: Admin landing page of login successful

Method Description:

When an Admin tries to log in it checks in the database whether the user credentials are correct or not.

3.3.2 Method 2: Create Conference

Input: Admins, Users, Reviewers list.

Output: Creating a conference.

Method Description:

Here the admin creates the conference and adds the other admins and users.

3.4 Class Name: Reviewer

3.4.1 Method 1: Read Documents()

Input: N/A

Output: Document in pdf format

Method Description:

Here the pdf uploaded by the user is read by the Reviewer/ Teacher.

3.4.2 Method 2: Create Submission Link

Input: Deadline Date

Output: N/A

Method Description:

Here the submission link is created for the users where they can submit the documents.

3.4.3 Write Review

Input: Review
Output: N/A

Method Description:

The reviewer can write the review for the submission made by the users for a task.

3.4.4 Make Announcement

Input: Announcement

Output: Announcement is made.

Method Description: Here announcement can be given to all the users at the

conference.

4.0 Execution Architecture

Runtime environment required is any device supporting Android Operating System with the minimum version of Ice-cream Sandwich, Android Studio as a deployment platform.

4.1 Reuse and relationships to other products

NIL

5.0 Design decisions and tradeoffs

The design decision to use two screens separately for admin and student is to provide encapsulation. It may have been possible to get all the information on one screen. However, using two screens will keep the data of the admin separate from the data being accessed by students.

A possible tradeoff when considering links is to use buttons instead of items in the menu. This design decision - to use buttons for navigating between screens - is to enhance visibility. Text links in the menu bar located at the bottom of the PDA's screen can be hard to see. The tradeoff for buttons with descriptive labels rather than text links in the menu bar will be that navigation from screen to screen will be easier. Descriptive labels will let the user know where he is navigating. Buttons are larger than the text links located in the menu bar of the PDA. Therefore, it is easier for the user to locate the mechanisms needed to navigate from screen to screen.