# Web-COMS Conference Management System

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#### Introduction

This final documentation is to provide overall description of 'Web - COMS' conference management system. And final product is highly depicted with this documentation.

Now, different vendors provide conference management systems as a commercial product. But there is no single platform to handle main processes in a conference. Most of the CMSs support only to the paper submission process and the paper review process. Also they provide other major processes manually. Because of this reason conference organizers must have to pay a huge effort and time to conduct other tasks. Therefore, the availability of a single platform to handle main processes in a conference is highly essential when manage a conference.

With this project our effort is to provide a web-based conference management system that can cater your multiple requirements proficiently.

# **Project Scope**

Defining scope is an exercise in fact finding, documenting and gaining agreement about what needs to be done and how.

## In-Scope

- Event publicizing process
- Paper submission process
- Paper review process
- Registration process
- Reporting

## **Out-Scope**

- Conference schedule preparation process
- Internal activities of committee arrangements

## **System Requirements**

#### **Functional Requirements**

- The administrator will add users to the system.
- The administrator will store user details in the database.
- The administrator will store user roles for each user in the database.
- The administrator defines conference tracks and assign track chair to each track.
- The administrator will add paper types.
- The administrator should store details of the paper type in the database.
- The administrator will achieve submission or instance.
- The administrator will define registration packages.
- The administrator should store the details of the registration package in the database.
- The conference-chair will define the event publicizing details.
- The conference-chair sends important messages to the users who registered with the system and email recipients.
- The conference chair defines several notification templates.
- The conference-chair defines to do assigned committee in charge or members to the committees.
- The conference-chair will add details of the conference guidelines.
- The Author will register to the system as an "Author".
- The Author will add research paper details.
- The author will edit research paper details for up to two days.
- The author will track the status of his/her paper.
- The author will view the review comments.
- The author will submit the camera-ready submission after the acceptance.
- The reviewer will check the paper submission according to his research interests.
- The reviewer will view the review form.
- The reviewer sends review comments and recommendations.
- The track-chair will assign reviewers for research papers.
- The track-chair can send acceptance notifications to the authors.
- The track-chair will reject research papers in first-round evaluation.
- The publication-chair will publish guidelines for the camera-ready copy submissions.
- The publication-chair will view the final camera-ready copy submission.
- The publication-chair will filter-out papers according to some criteria.
- The publication-chair will send notifications for authors who submit the low-quality research papers.
- The publication-chair can upload cover pages and sub-pages in proceeding.

#### **Quality Attributes**

#### Intuitive user interface

'Web-coms' is used by various level users, so the system should have an intuitive user interface.

- User interfaces should be consistent within views of the system and across platforms.
- The system should be responsive and should provide indications for the user's actions and background processes.
- The color scheme should be light and dark text for readability.
- Context-specific icons should be used alongside text to make systems actions intuitive.

#### **▶** Availability

Availability is concerned with system failure and its associated consequences.

To keeping available,

- The system should backup data periodically to prevent any data loss.
- Standby mirror of the web services should be set to make minimum system downtime in case of an incident.
- Users should be able to get the most current information when they are connected to the internet.
- When users are offline, they should be able to view previously loaded information which should be updated once they are connected again.

#### Security

Information in the system is only accessible to users with activated accounts. And only administrators can manage users in the system. So, the system should be implemented with required security measures.

- The system should be secure in various platforms.
- Users should be able to authenticate in the system using e-mail and password.
- All user passwords should be encrypted and stored securely.
- An industry-standard identification server should be used to make sure that user data is secured and to provide other security features (account recovering)

#### ▶ Maintainability

Active users are targeted users of the system. This group changes every year, and there is a chance of changes to the scheduling and conference management process every year. Therefore, the system should be open to changes and should be easier to maintain.

- The system should be built with current industry-standard technologies.
- Common language styles and universal conventions should be used when writing the system.
- The database can be exported (as a backup copy) or imported to the system.

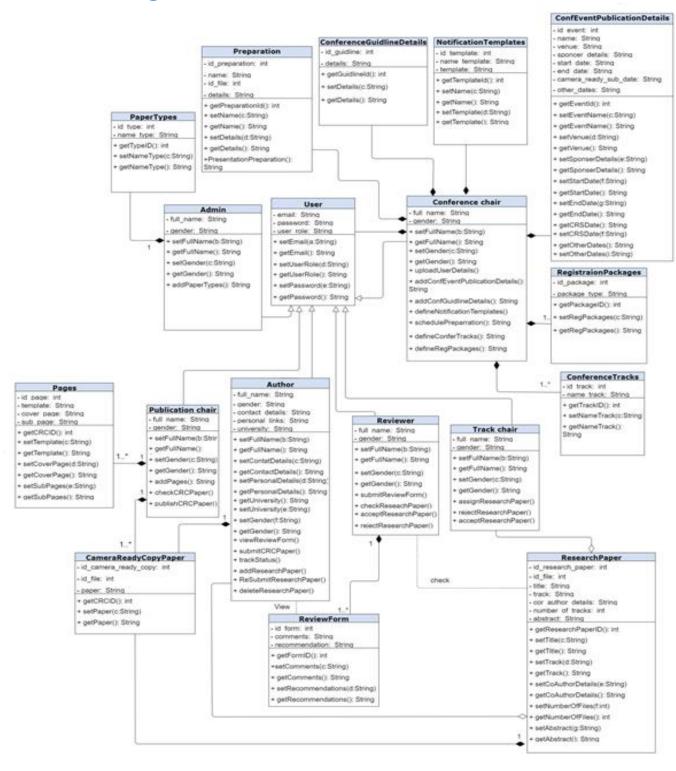
#### **▶** Testability

The system is built as a web-application. Also, the project is carried out with a waterfall methodology. So, the feature and deliverables should be tested in a very good manner.

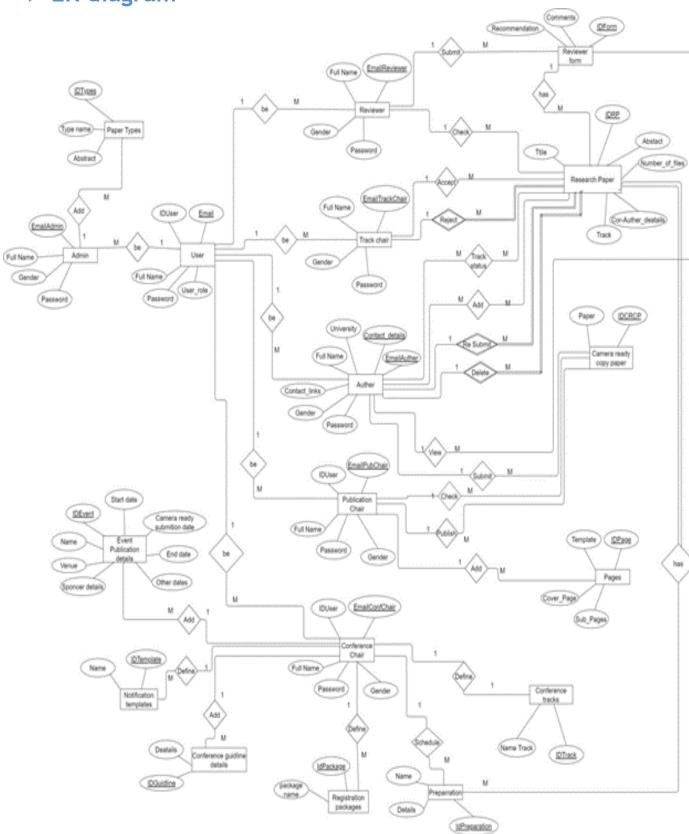
- Unit tests should be written to the functions of the system.
- An automated unit test should be done on the web application.

# System Analysis & Design

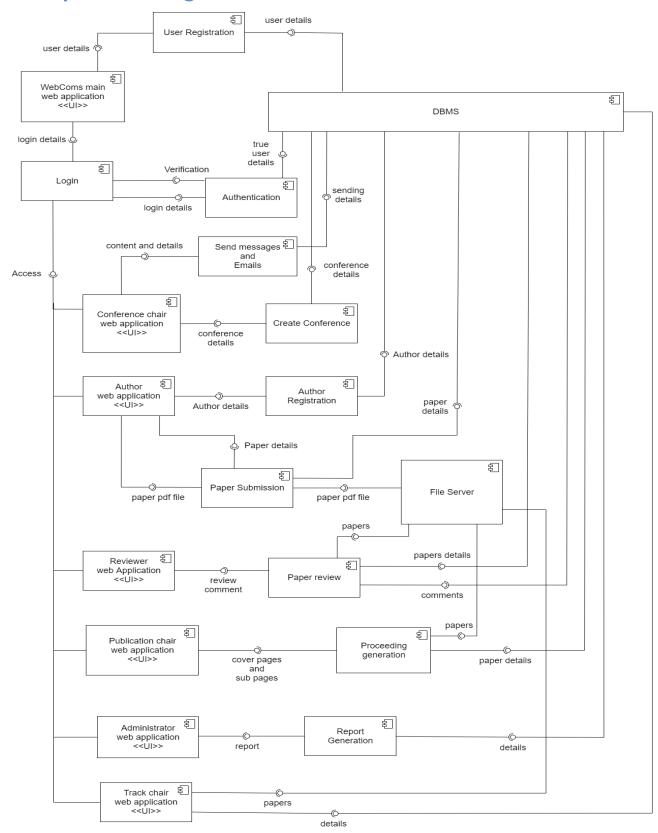
## ▶ Class diagram



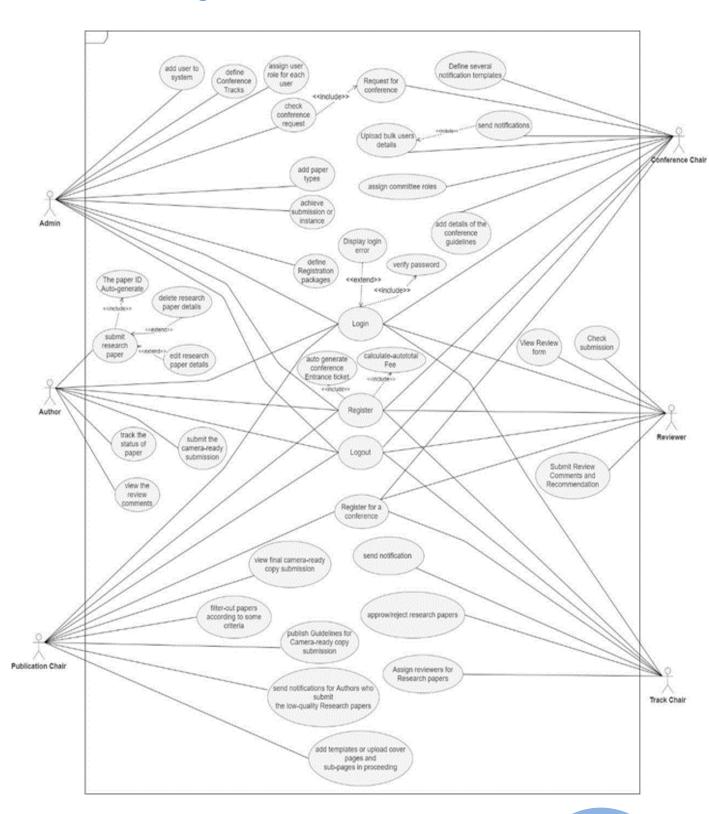
# ► ER diagram

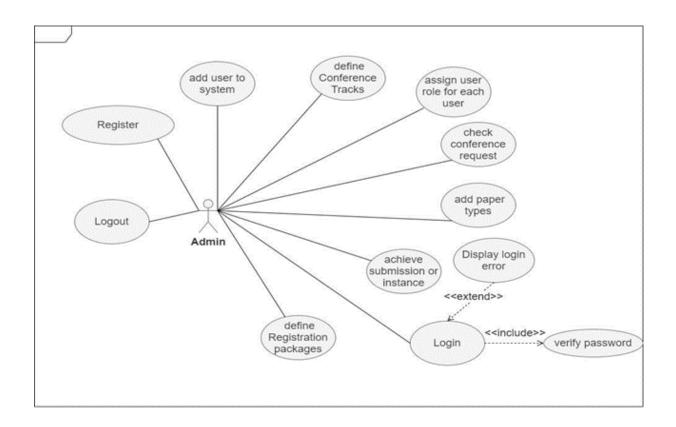


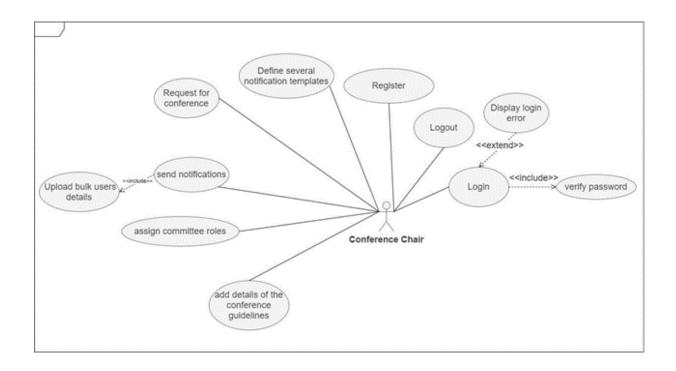
# ► Component diagram

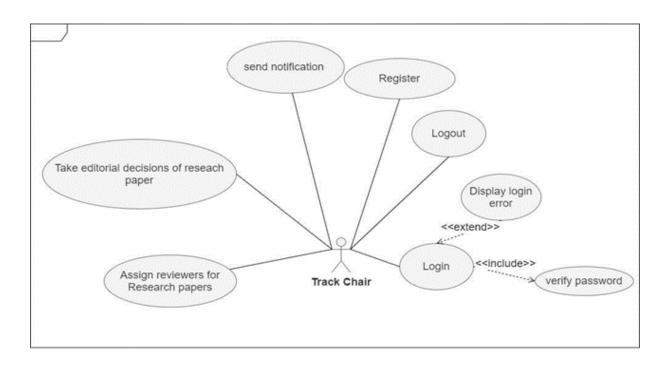


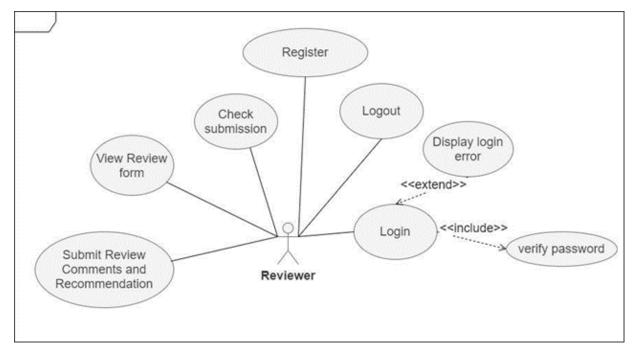
# ▶ Use case diagrams

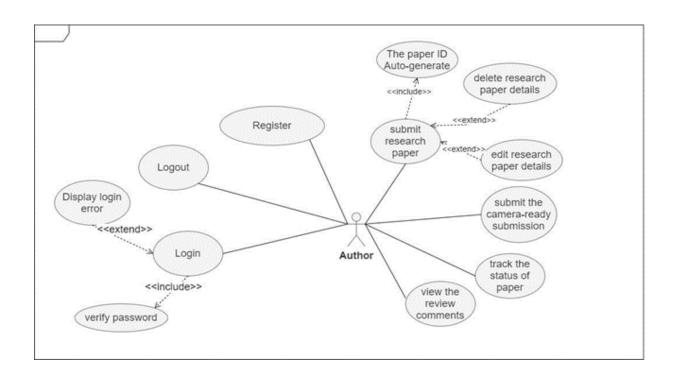


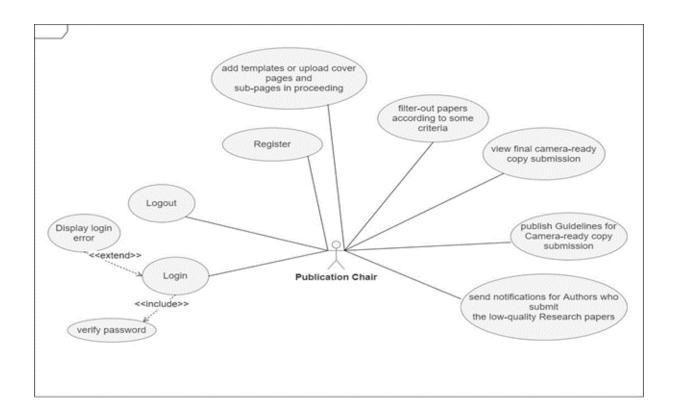












# ► Sequence diagrams

Finally add them.

# ► Activity diagrams

Finally add them.

► State transition diagrams

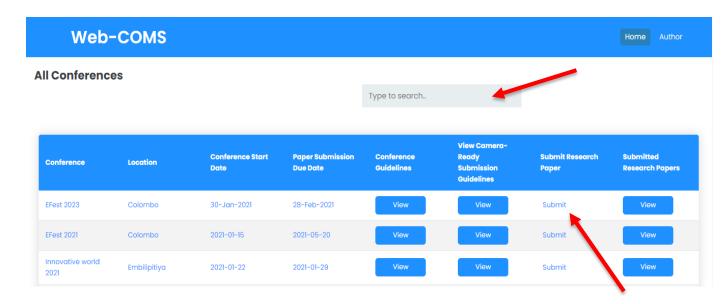
Finally add them.

# **System's Architecture**

- o Present your system's architecture in a proper way
- o Clearly show modules, components, sub-components and their communication, interaction.
- o Again, make sure the diagram is clear and visible to the audience.

## **Usability & User Experience**

## ▶ Author Home Page



- If you have an account in Web-COMS conference management system, enter your credentials as an author then log in to the site. If you don't have an account then, please refer and create new account.
- In this author's home page an author can see all the conferences that already registered in Web-COMS. Author can search for the conference to which he/she wish to submit a research paper.
- An author can view conference guidelines, submission guidelines, previously submitted research papers (If has) and all the information about a particular conference.
- Then author can click on 'Submit' button. After that he/she can submit the research papers with relevant information.

# **Testing**

o Introduce your system testing approaches and what sort of tests you have carried out.

# Completeness

- o Demonstrate how well your system cater to the problem and how good it will be performing
- o Quality of the product

# **Technical Exposure**

#### **Technologies Used**

#### ► HTML / CSS / JavaScript

Front-end development and design of the web application.

#### ▶ PHP

Used as the back-end development language of the web application.

#### ► SQL

• **SQL** is the language for querying and storing data in the database. Used this special-purpose language to work with relational databases.

#### Selenium

 Selenium is the most popularly used freeware and open source automation tool. Importantly, it enables record and playback for testing web applications and can run multiple scripts across various browsers.

#### ▶ Git

Git is a free and open source distributed version control system
designed to handle everything from small to very large projects with
speed and efficiency.

#### Theoretical & Technical Knowledge Gained

- With HTML, we were be able to create the structure of the web-application.
- CSS gave us the ability to make the web-application look more visually appealing.
- As for JavaScript, this is a robust programming language that allowed us to
  effectively change the HTML and CSS components of the web-application to
  match our specifications precisely.
- **PHP** is executed at the server side that means it functions on the **web** server. Because of the open-source feature, as developers we could learn about the scripting code in easily through online platforms.
- With this project the team could earn a better knowledge about **Git** and **GitHub**. GitHub was important for us to collaboratively work on code.

# Other

# Key POINTS

# **Summary**

# **Conclusion**