

---

# **SOFTWARE ENGINEERING**

## **SOFTWARE REQUIREMENTS SPECIFICATION**

**FOR**

**ConferNow - A CONFERENCE MANAGEMENT  
SYSTEM**

Version 2.0 approved

### **GROUP MEMBERS-**

IIT2020113 Meghana Pedduri

IIT2020133 Niranjani Koteswar

IIT2020134 Shah Krishna Dineshkumar

IIT2020200 Prakhar Jalan

**9 March 2022**

## Revision History

Name	Date	Reason For Changes	Version
SRS Document for International Conference Management System	8th March	Lack of system features and incomplete interface requirements	1
SRS Document for International Conference Management System	13th March	Formatting product functions	2

# Table of Contents

<b>1. Introduction</b>	<b>4</b>
1.1 Purpose	4
1.2 Intended Audience	4
1.3 Product Scope	4
1.4 Definitions, Acronyms, and Abbreviations	5
1.5 References	5
1.5 Overview	5
<b>2. Overall Description</b>	<b>5</b>
2.1 Product Perspective	5
2.2 Product Functions	6
2.3 User Characteristics	7
2.4 Principal Actors	7
2.5 Constraints	7
2.6 User Documentation	8
2.7 Assumptions and Dependencies	8
<b>3. External Interface Requirements</b>	<b>8</b>
3.1 User Interfaces	8
3.2 Hardware Interfaces	8
3.3 Software Interfaces	9
3.4 Communications Interfaces	9
<b>4. System Features</b>	<b>9</b>
4.1 Register	9
4.2 Login	9
4.3 Dashboard	10
4.4 Host a conference	11
4.5 Register for a conference	11
4.6 Attend Conference	11
4.7 Audio/Video Conferencing	12
4.8 Q&A session	12
4.9 Leave conference	13
4.10 End conference	13
<b>5. Nonfunctional Requirements</b>	<b>13</b>
5.1 Performance Requirements	13
5.2 Safety Requirements	14
5.3 Security Requirements	14
<b>Appendix A: USE CASE DIAGRAM</b>	<b>15</b>

# **1. Introduction**

“ConferNow©” is a web based software that supports the organization of online conferences, webinars, and meetings for people all around the world. This software specification document consists of a full set of features and functions for this online conference management system.

## **1.1 Purpose**

With the increasing number of individuals wanting to share, learn and discuss on a wide range of interesting subjects, it has become a necessity to build a platform connecting people from all corners of the globe to take part in the joy of exchanging ideas and knowledge. ConferNow is a detailed software, aimed towards organizations with frequent conference scheduling and administration needs. It will facilitate conference management for the target audience to meet the needs of modern work environments. It supports

- Interpersonal Communication
- Collaboration
- Presentations and education

## **1.2 Intended Audience**

We can broadly say that there are three types of audience :

- 1.Conference organizers
- 2.Large organizations or companies that needs such facilities for internal meeting which have large participants spread across geographies of the world
- 3.Educational and informational webinars

## **1.3 Product Scope**

ConferNow is a web application that shall support every aspect of the conference organization process.We describe what features are in the scope of the software to be developed.

In scope:

1. Hosting of online conferences and webinars
2. Registering of participants into their interested conventions

3. Detailed description of each held conference along with their program schedule and introduction of the speakers
4. Q&A boards and constant updates of the conducted meeting

## **1.4 Definitions, Acronyms, and Abbreviations:**

"ConferNow©" - copyright application name

DATABASE - Database is used to verify login and store the details of candidates.

PARTICIPANTS - People who register to their interested conference held in the platform

HOST - Organizes or arranges the conference and addresses the participants on the decided topic of the discussion

SESSION - Every event like a conference will have sessions

SRS: Software Requirement Specification

DBMS: Database management system

## **1.5 References**

IEEE SRS Format

## **1.6 Overview**

The software is described in detail in Section 2 of this SRS. It specifies the user's degree of expertise, certain general limits encountered when developing the software, and some assumptions and dependencies assumed. Section 3 outlines the particular requirements that the programme must meet. Various use cases provide functional needs.

# **2. Overall Description**

## **2.1 Product Perspective**

ConferNow is a user-friendly tool developed to assist humans in a corporate environment to schedule meetings . This application enables users to set up meetings based on a decision oriented methodology. Users select the date, time and resources required to effectively conduct the meetings between the participants. All the details of the meeting are shared including the date-time, program schedule , speaker information and planned activities for the interested. It also provides the capability for the users to register to the conference priorly and access the system anytime and anywhere.

## 2.2 Product Functions

ConferNow supports the following use cases:

Use Cases	Description
Authorized login	Users must register into the platform to access its features.
Mail Notifications	Registered users will be sent an email notification , welcoming them to our international conference management portal
Dashboard	View the dashboard for options of host or attend a conference .The upcoming conferences , status and important details will be shown here
Host an event	Users can host a conference and provide the necessary details including topic ,date, time , topic , no of seats , keynotes, speakers ...
Update event	The details of an upcoming meeting can be edited by the host .
Invite users via link	Hosts can create an invite link and send it to their target audience in order to invite them.
Search for an event	Users can search for an event they're interested in.
Register for an event	Users have to register for an event prior to attending them, in order to reserve a seat. They can register, either via the invite link or by manually searching for the event.
List of events	Users can view a list of all the events they registered for in the dashboard.
View Participants	The host of the event can view all the registered participants.

Attend Conference	The registered participant can attend the conference
Q&A with the host	Participants can ask queries to the host( organizer or the speaker) amidst the conference. These queries can be addressed via text/audio chat by the host.
Video/Audio Chat	Participants can turn on their mic and camera in order to interact during the conference.
Present screen	The host and the participants can present their screen during the conference
Leave Conference	The participants can leave the ongoing session .
End event	The host can end a created event.

## 2.3 User Characteristics

Users should be able to operate a computer. Users should be familiar with navigating a Web browser like Chrome, Firefox etc. Users should be familiar with general concepts of scheduling a meeting , leaving the meet etc.

## 2.4 Principal Actors

The two principal actors in "ConferNow©" are "Host" and "Participants". The host can consist of organizers and speakers for the session.

## 2.5 Constraints

1. Active Internet Connection is required for working of this application
2. User interface shall be provided through the web browser. This means that it is constrained by the web browser capabilities.
3. Only registered users can host or participate in a conference.
4. Although security is given high importance, there is always a chance of intrusion in the web world which requires constant monitoring.

## **2.6 User Documentation**

Our application will be primarily designed with user-friendliness in mind. The application will have a lightweight and simplistic GUI that will attempt to hide application and network complexities. In addition a manual will be provided on how to use and to show basic functionality of ConferNow for incoming users (both host and participants).

## **2.7 Assumptions and Dependencies**

1. This being a web based application, can be accessed 24/7.
2. Network connection should be available to use the application.
3. System requires the User to be familiar with basic windows and web browser operations.
4. System assumes that all the participants will be actively involved in responding to meeting requests and honor the commitments

## **3. External Interface Requirements**

ConferNow is a browser based web service application, which will be accessible by any popular web browser services such as google chrome, safari, mozilla firefox etc. ConferNow will be utilizing Agora to facilitate the video conferencing feature. The scheduled meets as well as the meeting data will be stored in a database system. An additional chat interface will be provided for inter-user communications during the conference.

### **3.1 User Interfaces**

All the interactions between the user and the software product will occur through a web-based interface. All the services we provide will be accessed through a secure user interface requiring the use of username and password credentials, which will be predetermined by the user itself. Any unexpected system operation will be announced to the user with an error web page stating the cause of the error. In the event that a cause can not be readily determined a generic error message will be presented. The layout of the web interface will conform to a standard screen resolution of 1024x768.

### **3.2 Hardware Interfaces**

The software will interact only with the provided web server and database server. Any additional system interaction will be handled directly by the operating system and any other supporting software systems.



### **3.3 Software Interfaces**

- Connecting to the browser
- React JS for making it a single page application
- NextJS to optimize the server side rendering
- Connecting to the database
- FireBase for login/signup
- Connecting with the Agora SDK for video and audio calling
- Agora SDK uses WebRTC in the background to provide the audio video functionality

### **3.4 Communications Interfaces**

The software will be using the email-id of the user for the register option.

## **4. System Features**

### **4.1 Register**

#### **4.1.1 Description**

Register page for the user. The users must be registered into the platform to have access to its features .

#### **4.1.2 Stimulus/Response Sequences**

If the user doesn't have a priorly existing account, he or she is redirected to the registration page where they must enter their .

#### **4.1.3 Functional Requirements**

- All mandatory details must be filled
- Email verification is required

### **4.2 Login**

#### **4.2.1 Description**

Login via registered credentials in order to authenticate your identity.

#### **4.2.2 Stimulus/Response Sequences**

If the user has an existing account, he/she will be directed to this page, where they can login using registered email and password. Click on the forgot password button, where you can reset your password in case you forgot.

#### **4.2.3 Functional Requirements**

- An existing account on ConferNow
- Password and email

### **4.3 Dashboard**

#### **4.3.1 Description**

Users can access all the features through their dashboard page.

#### **4.3.2 Stimulus/Response Sequences**

- Authenticated users will be directed to this page.
- You can view a list of your registered events by clicking on 'Upcoming events' accordion.
- You can view a list of your previously hosted events by clicking on 'My events' accordion.
- You can join an event by -> find an event in 'Upcoming events' -> check whether it has started or not -> click on the join button .
- You can contact us by clicking on the Contact button.

#### **4.3.3 Functional Requirements**

- Users should be Logged in.

### **4.4 Host a conference**

#### **4.3.1 Description and Priority**

This is the key feature of ConferNow, where an organization can host a conference, and send an invitation to the desired audience.

### **4.3.2 Stimulus/Response Sequences**

The system will ask for the following inputs from the organization while they use the host feature:

1. Date
2. Time (IST)
3. Information about the hosting organization

Once the system receives these inputs, it will generate an invite link for the conference and the host can send this invite link to their target audience.

### **4.3.3 Functional Requirements**

- When creating an event, all necessary information should be given in detail .

## **4.5 Register for a conference**

### **4.5.1 Description**

One can register for a conference, via the invite link sent by the hosting organization or by selecting the interested conference out of many in the dashboard . The user can view all talks they registered for, via the provided option in the side panel.

### **4.5.2 Stimulus/Response Sequences**

When directed to the information page of a particular conference , on reading all the details of the upcoming conference , the user can choose to register in the conference , using the register button . A confirmation dialog box will appear notifying successful registration.

### **4.5.3 Functional Requirements**

- There must be at least one seat available, yet.

## **4.6 Attend conference**

### **4.6.1 Description**

The users registered into a conference can join the ongoing session

#### **4.6.2 Stimulus and response**

After successful registration, the user can click on the “Join” button, which will be enabled once the conference starts. During the conference, the participants will have the access to a broad panel of options such as video chat, audio chat, a Q&A panel in the form of text chat as well as the option to present their screen.

#### **4.6.3 Functional Requirements**

- Already registered for the conference.
- Conference has started

### **4.7 Audio/Video conferencing**

#### **4.7.1 Description**

ConferNow also provides audio and video conferencing options during the conference, for better interaction.

#### **4.7.2 Stimulus/Response**

The audio and video button, named as mute and camera respectively, enables the participants and host to turn on/off their audio or video accordingly.

#### **4.7.3 Functional Requirements**

- Must have a microphone and camera connected.
- Must allow ConferNow to access the system’s camera and microphone.

### **4.8 Q&A session**

#### **4.8.1 Description**

During a conference, the participants can ask questions to the hosts through the Q&A option as well.

#### **4.8.2 Stimulus/Response**

The Q&A panel present on the side ,on clicking will allow the participant to type all their queries and even their responses to the speaker that will only be received and read by the host.The host can respond via panel.

## **4.9 Leave conference**

### **4.9.1 Description**

The participants can leave amidst the conference

### **4.9.2 Stimulus and response**

The end option only visible to the participant can be used to exit the ongoing session. The participant can join again using the attend feature.

### **4.9.3 Functional Requirements**

- The user must have the role of a participant

## **4.10 End Conference**

### **4.10.1 Description**

The host can end the conference using the end option.

### **4.10.2 Stimulus and response**

The end option only visible to the host can be used to end the session. The conference ends

### **4.10.3 Functional Requirements**

- The user must have the role of a host to have this feature

## **5. Nonfunctional Requirements**

### **5.1 Performance Requirements**

For the best experience, it is recommend viewing from a desktop or laptop computer with the following specifications:

- Webcam , microphone and speakers
- Operating System: Mac, Linux, Windows
- Web Browser: Firefox, Chrome , Safari
- Internet Connection: 1.5 Mbps "up" minimum (3+ Mbps "up" recommended).

If using mobile then smartphone with mobile web browser (Chrome, Edge, Firefox, or Safari recommended).

## **5.2 Safety Requirements**

- The users shall know when their camera is broadcasting live and they are muted(or unmuted).
- Users may not use the system for immoral and unethical practices.In the event of such practices being known to the system administrators, the content will be immediately removed and the appropriate authorities will be notified resulting in possible disciplinary action.

## **5.3 Security Requirements**

- Users must comply with all local ,state and federal laws when using available resources.Any infringements or violations including but not limited to: harassment , unauthorized use, exploitation of any gaps in the application , inflammatory/derogatory content or defacing the system will result in the appropriate authorities being notified.
- The user is responsible for maintaining the user account .Actions must be taken from the user to prevent his/her account from being compromised.
- Unfortunately if the user account has been compromised , report to the system developers immediately and refrain from using the infected account to communicate with others.

## Appendix :

### Use Case Diagram

