Software requirement specification

1. **Introduction**

This document includes the software requirement specification(SRS) of the system. The overall working of the system and the requirements of the system is understood by this document.

Adding to the innumerous facilities of SDMC the Samyakdarshan hall or the Seminar hall is one of the 'so-very-busy' rooms of the college that after fixing a programme what the organizers worry about is nothing but the availability of Seminar hall. This well equipped hall is a pride of SDMC.

It, when started 10 years ago, was used by the SDM sister institutions and other colleges of the locality as well, since it was the only hall with modern facilities in this area. At present the Seminar hall has LCD projectors, OHP projectors, Slide projector, Mike, Audio recording and other facilities. It has the capacity of holding 200 people which makes it a perfect venue for guest lectures, seminars, power point presentations, interclass competitions, and other cultural events.

This Seminar hall has witnessed one international seminar, more than a hundred UGC/national level events and hundreds of state level programmes. The hall serves as a venue for the important meetings of the college like BOS meeting and so on. The rotary programmes, JCI meetings take place here. It is busy throughout the year because in the vacations too the answer paper evaluation process, admission process keep the hall engaged. It is also a place for bus pass distribution, uniform distribution and other related affairs. The vast room behind the seminar hall is used to make food arrangements for the guests and it is also a rest room.

The gentlemen who work behind the screens of the seminar hall are Mr. Sandeep and Mr. Surendra. They make arrangements for the programmes , stage setting and they also keep records of the events which are held and also of the upcoming events. "*Per day the seminar hall* *will be engaged at least for 5 hours*", says Mr. Sandeep, "*and the experience of dealing with* *these many programmes has rendered me quickness and expertise in this work*." He has been working here since the beginning of the Seminar hall. Mr. Surendra who has been working here for the past 5 years manages the photography section. Recording the events, bookings, making food arrangements for the guests, decoration of the hall etc come under the responsibility of these men. Both of them are very cooperative, and committed to their duties. To book the seminar hall the organizers should approach Mr. Sandeep at least one week before the event. In case of national level events the organizers are expected to consult him a month earlier.

It is often noted that on finding the seminar hall unavailable for their programme, the organizers turn towards the audio visual halls or any other alternatives. But the Seminar hall is everybody's first preference and this makes it the most desirable venue for the events of SDMC.

The system uses MySQL database hence all the records of the system will be stored in the MySQL database server. Whenever the users of the website view any data in webpage, the data from the database is fetched and made available to the users. Hence MySQL database server plays the prominent role in the working of the system.

**1.1 Purpose**

The main purpose of this project is to develop a Seminar hall project will will be helpful to book college seminar halls through online. Along with this we can add various event types, Requirements to arrange the seminar and staff can order food items after booking. This also helps the college management to keep track of all the booking records. Even staff can send change request through this system. The system shows chart which shows helps to book the hall, view hall booking records, request hall booking etc.

**1.2 Project Scope and Product Features**

The features of this system are as follows:

* Staff members can book seminar halls through online.
* The system allows staff members to book hall through calendar.
* Admin is having full authority of the system.
* Staff can book the hall. While booking staff can add requirements to arrange seminar.
* The admin can approve or reject booking requests. The admin must update the booking details in the website which is available for the staff to view.
* Staff can order food items through online for seminar. Staff can select hotel and they can select food items. Hotel owners will receive an email confirmation after food order process.

## Definitions, acronyms, abbreviations

* SRS – Software requirements specifications.
* PHP - A server side scripting language.
* MySQL - The database that will be used for this project.
* http – Hypertext transfer protocol
* www – World wide web

## References

* Software engineering by Pankaj Jalote
* www.w3schools.com
* [www.tutorialspoint.com](http://www.tutorialspoint.com)

**1.5 Overview**

The SRS document includes the overview of the Online Seminar Hall. It includes all the description about the proposed project. All the requirements of the system such as perspective of the system, interfaces and characteristics of the system is included in the SRS document. All the specific, external, functional and non functional requirements are met in this document.

1. **Overall description**

Overall description in the SRS document includes the product perspective, system interfaces of the website, user classes and characteristics, operating environment of the system, various design and implementation constraints and all the documentation and the requirements are specified.

**2.1 Product perspective**

The proposed project helps college to book halls for seminar or any other events staff can book directly through online.

**2.2 System interfaces**

The website which is designed uses the internet and also works without internet for some of the functionalities. The interface used in the system communicates with all the users of the system.

**2.3 User classes and characteristics**

The characteristics of the system includes that the administrator of the system must have the complete knowledge about all the technology used in the system. The users of the system must have the knowledge of the internet, computer and some features which are required to use the system.

**2.4 Operating environment**

The proposed system can be executed in most of the browsers such as Chrome, Firefox, Microsoft edge, internet explorer etc.

The project uses xampp control panel and Apache server to run the project and MySQL server is used to create and manage the database.

**2.5 Design and implementation constraints**

The system is designed using the PHP, HTML5 and CSS3 coding and all other documentation is maintained. The system design follows the problem solving methodologies of the software system such as problem definition, design, coding, testing and debug and document processes are followed.

The database is designed using the MySQL server and the database is connected to the project in the coding using the SQL queries.

**2.6 User documentation**

Documenting the designed project is necessary for the understanding of the user. Any system which is developed must be documented as it is required for the future user to know the deep knowledge of the system.

The user document acts as a manual for the future users as it helps them to know the details of the system as well as to maintain and modify the system in the future.

**2.7 Assumptions and dependencies**

The development system will work without any complexity in any of the platform such as in mobile phones, laptops, desktops in any remote areas.

The necessity for the project is the continuous supply of internet.

Since the system works under several servers for project as well as database, must make sure that the servers are on throughout.

1. **Specific requirements**

This section includes the requirements of the system such as external, user and various functional requirements which are to be followed by the system design to assure the quality of the system.

**3.1 External interface requirements**

There are several features in this section which gives the detailed description of the system requirements. It concentrates on the various interfaces of the system such as user interface, hardware and software interface and communication interface.

**3.1.1 User interface**

This includes the users of the system. The system is used by three of its users.

* **Admin**: The one who manages the entire website. Admin monitors all the activities that happens in the webpage and also monitors the hall booking and staff accounts.
* **Staff**: The staff is verified by the admin. The staff doesn’t not have all the authorities as the admin. But staff is also the one user who has prominence in the system.
* **Hotel**: Hotel owners or staff members can add food items and they can view order details.

**3.1.2 Hardware interface**

* **Operating system:** Windows XP or higher
* **Hard disk:** 40 GB hard disk
* **RAM:** 1 GB RAM
* **Processor:** Intel Pentium or above

**3.1.3 Software interface**

* XAMPP 1.8.2
* Apache server
* PHP 7.4
* MYSQL server 7.4
* Notepad++

**3.1.4 Communication interface**

The only source of communication of the system is internet. The system uses internet to keep the website active as well as all the users of the system can use the system by having the internet connection in their respective devices.

**3.2 Functional requirements**

This includes the features of the various modules of the project.

* **Hall Booking module**: This module allows staff to book the halls. The staff needs to select the hall name before booking. After selecting hall name the system displays Scheduler where staff can select date and time to book the hall. The staff needs to fill hall booking form to book the hall.

**Sub modules are:**

* + View hall booking chart
  + Pending Hall booking report
  + Accepted hall booking report
* **Change Request Module**: This module allows user to send Change request to existing hall booking. Staff can accept or reject change requests. If the change request is for more than 1 booking then the system will send authority to administrator.

**Sub modules are:**

* + Send Change Request
  + View change request
  + Accept/Reject Change request
* **Hotel Account module**: This module allows hotel staff to login to the website. After the login hotel staff can view food order details. Hotel accounts created by administrator.

**Sub modules are:**

* + Add hotel
  + View hotel
  + Hotel Login
  + Hotel account detail
  + Add Food item
  + View food item
  + View Food orders
  + Reject food order booking
* **Settings module**: This module used to configure the website. This module allows user to update event types, department and equipment details.

**Sub modules are:**

* + Add Event Type
  + View Event Types
  + Add department
  + View departments
  + Add equipment
  + View equipment
* **Staff Account Module**: Staff can login to the website by entering valid login credentials. Staff can book halls after the login. Admin is creating staff account. The staff dashboard which shows hall booking details. Staff can book halls in the scheduler.

**Sub modules are**:

* + Staff Dashboard
  + Edit Profile
  + Change Password
  + Hall booking
  + View Change request
  + View Food orders
* **Admin Account module**: Admin is the one who manages the entire website and also has the full authority over all the activities of the seminar hall. The admin monitors the other users of the website. Admin is having full privilege of the website. Administrator can view various kinds of report and admin can do settings of the website.

**Sub modules are**:

* + Login Module
  + Add admin
  + View admin
  + Add Event type
  + View event type
  + Add hall
  + View hall
  + View Report
* **Report module**: This website generates various kinds of report. All 3 types of users can view their respective records.

**Sub modules are**:

* + Pending hall booking requests
  + Approved hall booking requests
  + Food order report
  + Change request report

1. **Other non-functional requirements**

**4.1 Performance requirements**

* The users all over the world can use the system at any time since it is available 24/7.
* The response from the system is quick enough as the web servers used perform at a good speed.
* Since the system is independent of the device, users can access the system anywhere from the world using any device provided they must remember their login information.

**4.2 Safety requirements**

Since the development system is the website there is no necessity of the safety requirements.

**4.3 Security requirements**

The system is managed only by the admin and staff of the college. The admin as well as the staff are authorised members of the system and have a valid login credentials.

The other user of the system is the Hotel staff, since the hotel staff is verified by the admin and only then the account is activated there is no chance of misuse of the system by any other intruders.

**4.4 Software quality attributes**

Since the system doesn’t operate well in the absence of internet, the breakage of internet would cause the system not function. In such scenarios the system will notify the users of the website to resume their work once the internet connection is back with speed.