**SOFTWARE REQUIREMENT SPECIFICATION**

**Introduction**

**Purpose**

The purpose of a conference room booking system is to allow to reserve conference rooms for hosting a meeting or participating in a meeting. This system helps users to plan and book their rooms in advance, avoiding the double booking, uncertainty of getting a room and the knowledge about which rooms are free and which are occupied. The conference room booking system manages the entire process of booking rooms, including checking availability, issuing and deducting credits, cancellations, and managing waitlists.

**Scope**

The scope of a conference room booking system is quite broad, encompassing various aspects related to the booking and management of rooms. The system helps passengers to plan their day by providing information about meeting schedules, time, and stoppages.

**DEFINITIONS**

Credits -Each user has their own count of credits, higher their credits more rooms each user can book. It gets refreshed by the start of every month.

Web browser - A web browser is an**application for accessing websites**. When a user requests a web page from a particular website, the browser retrieves its files from a web server and then displays the page on the user's screen.

GUI-Graphical User interface

OS-Operating system

**2.OVERALL DESCRIPTION**

**2.1 PRODUCT PERSPECTIVE**

The product perspective of a conference room booking system refers to the system's overall context and its relationship with other systems or components.

From a product perspective, the Conference room booking is a software application that interfaces with other users and admin to perform its functions. The system receives input from users, including their booking timings and participant information, and communicates with various databases to check room availability, calculate credits, and reserve rooms.

Overall, the product perspective of a Conference room booking focuses on the system's role within the company infrastructure, its relationship with other users and admin, and the overall user experience it provides.

**2.2 PRODUCT FUNCTIONS**

Some of the key product functions of a Conference room bookinginclude:

Room booking and reservation: The system allows users to search for and book rooms for their desired timings. Users can also choose their preferred size and amenities.

Room cancellation and refunds: The system enables users to cancel their bookings if needed and receive refunds of credit .

Room availability and waitlisting: The system provides real-time information about Room availability on different trains and allows users to add themselves to waitlists if the desired Rooms are not available.

Credit calculation and refresh: The system calculates the credits for the journey based on various factors such as duration, size of rooms. It also enables users to make requests for their credits to their admin.

Overall, the product functions of a Conference room bookingare designed to provide a seamless and hassle-free experience for users, from booking rooms to checking for any upcoming meetings.

**2.3 USER CHARACTERSTICS**

The users of a Conference room bookingcan be broadly categorized into the following groups:

Host: The Hosts of the Conference room booking are company staff who want to book rooms and conduct meetings. These users may have different levels of familiarity with the system and may require different levels of support and assistance.

Participants: The Conference room booking is also used by company staff who did not book a conference room but included by the host into the meeting.

Administrators: The Conference room booking is also used by system administrators who are responsible for managing the system infrastructure, maintaining databases, and adding and removing rooms and distributing credits.

**2.4 CONSTRAINTS**

The constraints of a conference room booking system refer to the limitations or factors that may impact the design and implementation of the system. Some of the key constraints of a conference room booking system include:

Infrastructure limitations: The conference room booking system may be limited by the availability and reliability of the underlying infrastructure, including communication networks, servers, and databases.

Regulatory compliance: The conference room booking system must comply with various regulatory requirements, such as data protection laws.

Security and privacy: The conference room booking system must ensure the security and privacy of user data, including personal information.

Integration with existing systems: The conference room booking system must be designed to integrate with existing systems, such as webex meeting and communication networks.

Scalability: The conference room booking system must be scalable to accommodate increasing numbers of users, rooms and participants.

Cost: The conference room booking system must be designed within a budget and operational costs must be sustainable over time.

Cultural and linguistic diversity: The conference room booking system must be accessible and usable by users from diverse cultural and linguistic backgrounds

**ASSUMPTIONS AND DEPENDENCIES**

The assumptions and dependencies of a conference room booking system refer to the underlying factors and assumptions that the system relies on for its functioning. Some of the key assumptions and dependencies of a conference room booking system

The system assumes that users will be on time and that their schedules will be accurate and up-to-date.

The system depends on the availability and reliability of communication networks, such as the internet and mobile networks, to process bookings.

The system assumes that it will comply with various regulatory requirements, such as data protection laws, payment regulations, and ticketing policies.

The system depends on the availability and reliability of infrastructure, such as servers and databases, to store and process user data.

The system assumes that users will follow the rules and regulations of the system, such as canceling rooms within the prescribed time frame and not engaging in fraudulent activities.

**3. External Interface Requirements**

**User interface Requirements**

The user interface requirements of a conference room booking system refer to the design specifications and features that ensure the system is easy to use and accessible to its users. Some of the key user interface requirements of a conference room booking system include

1.The system should have a clear and intuitive interface that is easy to navigate and use for users of all ages and technical backgrounds.

2.The system should use clear and concise language that is easy to understand for users with varying levels of literacy and language proficiency.

3. The system should have a visually appealing and well-organized layout that makes it easy for users to find information and complete tasks.

4. The system should include accessibility features, such as support for screen readers and alternative input devices, to ensure that users with disabilities can access and use the system.

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6. The system should have clear and informative error messages that help users understand and resolve any issues that arise.

**3.1.2 HARDWARE INTERFACE REQUIREMENTS**

The hardware interface requirements of a conference room booking system refer to the specifications and features that are necessary to ensure the system is compatible with the hardware it is deployed on. Some of the key hardware interface requirements of a conference room booking system include:

Operating system: The system should be compatible with the operating system(s) it is deployed on, such as Windows, Linux, or macOS.

Processor: The system should be designed to run on the processor architecture(s) supported by the target hardware.

Storage: The system should be designed to work with the storage devices available on the target hardware, such as hard disk drives or solid-state drives.

Network connectivity: The system should support the network connectivity options available on the target hardware, such as wired and wireless networks.

**3.1.4 COMMUNICATION INTERFACE REQUIREMENTS**

The communication interface requirements for a conference room booking system should ensure that all the components of the system can communicate effectively and securely to provide a seamless user experience for users and other stakeholders.

**4. FUNCTIONAL REQUIREMENTS**

The functional requirements of a conference room booking system typically include the following:

The system should allow users to create an account and log in to access the booking system.

The system should provide information about the booking schedules, credits and availability of seats for different classes.

The system should allow users to reserve rooms for a specific time, and provide information about the availability.

The system should allow users to cancel their bookings and receive refunds according to the cancellation policies.

The system should provide real-time tracking and monitoring of meetings, their schedules, and delays.

**5. NON-FUNCTIONAL REQUIREMENTS**

**5.1 PERFORMANCE REQUIREMENTS**

The functional requirements of a conference room booking system should ensure that the system provides a seamless user experience for admin and other users, and meets the business objectives of the company.

**5.1.1 CAPACITY**

The capacity of a conference room booking system refers to its ability to handle a certain number of users and transactions within a given time period. Capacity planning is an essential aspect of designing and maintaining a reservation system that can handle the expected workload without experiencing performance issues.

**5.1.2 DYNAMIC REQUIREMENTS**

Dynamic requirements for a conference room booking system refer to the features and functionalities that need to adapt to changing business needs and user requirements. These requirements can evolve over time based on market trends, user feedback, and technological advancements.

**5.2 SOFTWARE SYSTEM ATTRIBUTES**

**5.2.2 AVAILABILITY**

Availability refers to the ability of a conference room booking system to be operational and accessible to users whenever they need it. The system needs to be available 24/7, as users may want to book tickets at any time.

**5.2.3 SECURITY**

Personal and financial information, security is a critical concern. Security in a conference room booking system refers to protecting the system and its users' data from unauthorized access, modification, or theft.

**5.2.4 MAINTAINABILITY**

Maintainability in a conference room booking system refers to the ease with which the system can be maintained and updated over its lifecycle. A maintainable system is crucial to ensure that it can evolve and adapt to changing business needs, technological advancements, and user requirements.