

WORKPLACE ORGANIZATION APPLICATION

REQUIREMENTS ANALYSIS DOCUMENT

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INTRODUCTION

This document provides an analysis of the requirements for the “Workplace Organization Application”. The goal of this analysis is to identify the key features and functionalities required for the application and to determine the value and potential challenges of implementing these features.

The main objective of the “Workplace Organization Application” is to provide users with a platform to schedule meetings, collaborate with team members, and share meeting notes. The application should be easy to use and should enable users to streamline their workflow by allowing them to manage their meetings and collaborate with their team members in one place.

The following pages of this document will explore the functional requirements, the non-functional requirements and the technical requirements of the application.

FUNCTIONAL REQUIREMENTS / USER STORIES

The following are the functional requirements for the Workplace Organization Application

User Story 1: As a user, I want to be able to create an account so that I can access the application.

- A user should be able to create a new account by providing their details email, username, password, etc.
- After creating an account, the user should receive a confirmation email.
- The system should store the user's information securely.
- The user should be able to use their credentials to log in to the application.

Acceptance Criteria:

- A user can create a new account by providing their details email, username, password, etc.
- After creating an account, the user receives a confirmation email.
- The system can store the user's information securely.
- The user can use their credentials to log in to the application.

User Story 2: As a user, I want to be able to log in to my account, so that I can use the application.

- The login page should be accessible from the application's home page.
- The login page should contain input fields for the user's email address or username, and their password.
- The login page should have a "Forgot password" link to allow users to reset their password if they forget it.
- Upon successful login, the user should be redirected to the application's main dashboard.
- If the user enters incorrect login credentials, they should be shown an error message indicating that their login attempt was unsuccessful.
- The user's session should be stored securely and should expire after a certain period of inactivity or upon logging out.
- If the user is already logged in and tries to access the login page, they should be redirected to the application's main dashboard.
- The login functionality should be tested to ensure that it works as expected, including testing for edge cases such as invalid input, server errors, and security vulnerabilities.

Acceptance Criteria:

- The login page is accessible from the application's home page.

- The login page contains input fields for the user's email address or username, and their password.
- The login has a "Forgot password" link to allow users to reset their password if they forget it.
- Upon successful login, the user is redirected to the application's main dashboard.
- If the user enters incorrect login credentials, they are presented with an error message indicating that their login attempt was unsuccessful.
- The user's session is stored securely and expires after a certain period of inactivity or upon logging out.
- If the user is already logged in and tries to access the login page, they are redirected to the application's main dashboard.
- The login functionality has been tested to ensure that it works as expected, including testing for edge cases such as invalid input, server errors, and security vulnerabilities.

User Story 3: As a user, I want to be able to schedule a meeting so that I can invite others to attend.

- The user should be able to create a new meeting by specifying the meeting name, date, time, and location.
- The user should be able to invite other users to attend the meeting.
- Invited users should receive an email invitation containing the meeting details and a link to join.
- The system should prevent scheduling conflicts and notify the user if the proposed meeting time conflicts with an existing meeting.

Acceptance Criteria:

- The user can create a new meeting by specifying the meeting name, date, time, and location.
- The user can invite other users to attend the meeting.
- Invited users receive an email invitation containing the meeting details and a link to join.
- The system prevents scheduling conflicts and notifies the user if the proposed meeting time conflicts with an existing meeting.

User Story 4: - As a user, I want to be able to see a calendar of all my upcoming meetings.

- The user should be able to view a calendar preview of all their upcoming meetings.
- The calendar should include the meeting title, date, time, and location.

Acceptance Criteria:

- The user should be able to view a calendar preview of all their upcoming meetings.
- The calendar should include the meeting title, date, time, and location.

User Story 5: As a user, I want to receive notifications about upcoming meetings.

- The user should be able to set the time interval for receiving reminders.
- The reminder should be sent at the specified time before the meeting starts.
- The user should receive the reminder through their preferred communication channel (email, SMS, push notification, etc.).
- The reminder should include the meeting details (title, time, location, etc.).
- The user should be able to turn off reminders for specific meetings if they no longer wish to receive them.

Acceptance Criteria:

- The user can set the time interval for receiving reminders.
- The reminder is sent at the specified time before the meeting starts.
- The user receives the reminder through their preferred communication channel (email, SMS, push notification, etc.).
- The reminder includes the meeting details (title, time, location, etc.).
- The user can turn off reminders for specific meetings if they no longer wish to receive them.

User Story 6: As a user, I want to be able to take notes during a meeting so that I can remember important points.

- The user should be able to create a new note for a meeting or edit an existing one.
- The note should be associated with the corresponding meeting.
- The note should include a title, description, and optional tags for easy categorization.
- The user should be able to view all their notes for a specific meeting or all meetings.
- The user should be able to search for notes by title or tags.

Acceptance Criteria:

- The user can create a new note for a meeting or edit an existing one.
- The note is associated with the corresponding meeting.
- The note includes a title, description, and optional tags for easy categorization.
- The user can view all their notes for a specific meeting or all meetings.
- The user can search for notes by title or tags.

User Story 7: As a user, I want my data to be secure and protected.

- The system should use encryption to protect user data during storage and transmission.
- The system should have secure user authentication and authorization mechanisms to prevent unauthorized access to user data.

Acceptance Criteria:

- The system uses encryption to protect user data during storage and transmission.
- The system has secure user authentication and authorization mechanisms to prevent unauthorized access to user data.

NON-FUNCTIONAL REQUIREMENTS

The following are the non-functional requirements for the Workplace Organization Application

Performance:

- **Response Time:** The application should respond to user actions within 2 seconds on average.
- **Load Time:** The application should load and be ready for user interaction within 5 seconds.
- **Concurrent Users:** The application should be able to handle 100 simultaneous users without a significant decrease in performance.

Security:

- **Authentication:** The application should require users to authenticate with a valid username and password before accessing any sensitive data or features.
- **Data Encryption:** All sensitive user data, such as passwords and personal information, should be encrypted both during transmission and storage.
- **Access Control:** The application should implement role-based access control to ensure that only authorized users can access specific functionalities or data.

Scalability:

- **User Capacity:** The application should be able to handle a minimum of 1000 concurrent users without experiencing performance degradation.
- **Meeting Capacity:** The application should support a minimum of 500 simultaneous meetings without impacting performance.
- **Resource Utilization:** The application's resource usage (CPU, memory, disk space) should not exceed 80% even under peak load conditions.

Reliability:

- **Uptime:** The application should have an uptime of at least 99.9%, allowing for scheduled maintenance windows.
- **Error Handling:** The application should gracefully handle errors and provide meaningful error messages to users when something goes wrong.

TECHNICAL REQUIREMENTS

The following are the technical requirements for the Workplace Organization Application

Front-end Framework:

The application should use a modern front-end framework to ensure a smooth and responsive user experience.

Back-end Architecture:

The application should be built using a microservices architecture to ensure scalability and maintainability.

Database:

The application should use a scalable and reliable database to store user and meeting data.

API Gateway:

The application should use an API gateway to manage the communication to the microservices.

Message Broker:

The application should use a message broker such as RabbitMQ to enable communication between the microservices.

CONCLUSION

This analysis document has identified the key features and functionalities required for the “Workplace Organization Application”, as well as the technical and non-functional requirements necessary for a successful implementation. With this guide I can now begin designing and building the application to meet these requirements and deliver a high-quality product.