**TeamChat Requirements Document**

**Introduction**

Purpose The purpose of this document is to define the functional and non-functional requirements for the development of TeamChat, a cutting-edge communication platform. This document will guide developers, designers, and stakeholders throughout the project, ensuring clarity and alignment with the project goals.

Scope TeamChat aims to provide users with a comprehensive and engaging communication experience, focusing on efficient messaging, team collaboration, and customizable chat environments. The scope includes user registration, chat management, voice and video call features, and integrations with third-party tools.

**Functional Requirements**

User Management

1. User Registration

* Users can sign up for TeamChat using an email address or social media accounts.

1. User Authentication

* Secure login mechanisms, including two-factor authentication (2FA) for enhanced security.

Chat Management

1. Message Exchange

* Enable users to send text messages, images, videos, and files within private or group chats.

1. Channel Creation and Management

* Users can create channels for specific topics or projects, with options to set permissions and roles.

1. Search Functionality

* Implement a search feature to find messages, files, and channels quickly.

Voice and Video Call Features

1. Individual and Group Calls

* Facilitate one-on-one and group voice and video calls with high-quality audio and video.

1. Screen Sharing

* Include screen sharing capabilities during calls for presentations and collaborative work.

**Integrations**

1. Third-party Integrations

* Support integration with popular tools and services for project management, scheduling, and more.

1. Bots and Automation

* Allow the creation or integration of bots for automated responses, notifications, and task management.

**Non-functional Requirements**

Performance

1. Response Time

* Ensure TeamChat offers quick response times for messaging and calls, aiming for real-time communication.

1. Scalability

* Design the system to handle a growing number of users and simultaneous connections efficiently.

Security

1. Data Protection

* Use state-of-the-art encryption for all communications and user data. Implement regular security audits.

1. Privacy Controls

* Provide users with robust privacy settings, including the ability to manage visibility and block users.

Compatibility

1. Device Compatibility

* Optimize for different screen sizes and resolutions, ensuring a seamless experience on phones, tablets, and computers.

Usability

1. Intuitive Design

* Create a user-friendly interface that caters to both casual and power users, with customizable themes and layouts.

1. Accessibility

* Incorporate accessibility features to support users with disabilities, ensuring inclusivity.

**Conclusion**

This TeamChat Requirements Document outlines the essential features and specifications needed to develop a dynamic and user-friendly communication platform. By adhering to these requirements, the TeamChat project will deliver a versatile and secure platform that enhances team collaboration and individual communication, aligning with the project's vision and user needs. This document will serve as a crucial foundation for all stages of design, development, and deployment.