**Project Title**

DISCORD



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**Introduction:**

Discord is a voice, video, and text chat tool that tens of millions of users use to communicate and socialize with friends and groups. For those searching for an easy to use low-resource voice chat software that can do almost anything, this is the ideal option. Everyone may feel like they belong in Discord, in a manner. While offering a wide variety of information, most social media platforms have a certain focus. Instagram is all about fashion trends, Discord was all about gaming, and Twitter is all about politics and pop culture. Discord now offers a server for anything, including intellectual stuff as well as games, movies, art, and memes.

**Objective:**

Discord aims to provide smooth real-time conversation, support community development via modifiable servers, and facilitate efficient content exchange. With the help of the platform, users should be able to engage in lively communities that share media material, have discussions, and have similar interests in real-time.

**Problem Description:**

The primary goal of Discord's creation was to address a major problem: the challenge of facilitating online gaming conversations with friends everywhere. At the time, all the tools built for this job were slow, unreliable, and complex. Discord made it easy to genuinely communicate with friends, going beyond casual talking. Friends were staying in touch with their different communities. Discord made it simple to engage in discussion by allowing users to switch between text, audio, and video chat.

The initiative can improve communication and coordination across professional teams, educational institutions, and gaming communities, enabling real-time communication and information sharing.

By providing a centralized, user-friendly platform, the main objective is to improve community development, communication, and cooperation. Discord effortlessly combines text, voice, and video channels into a single platform, revolutionizing real-time communication.

Discord's real-time features facilitate rapid and easy communication, whether you're catching up with friends, working on a project together, or planning strategy during a gaming session.

**Features:**

* Integration with other apps
* User status and Presence
* Cross-platform Support
* Accessibility feature
* Nitro Subscription
* Server templates
* User roles and permissions
* Share screens
* Community engagements
* Customizable profiles
* Server Boosts

**Users:**

* General Users
* Content creators
* Administrators and Moderators
* Bot developers
* Business or Educational Users
* Bot Users
* Server Admins

**Requirements:**

1. **Login:** 
   1. Account registration
   2. Recovery and email verification
2. **Direct messages:**
3. End-to-end encrypted
4. Send and receive messages
5. Message reactions
6. **File sharing:**

Users can send and share files to one another

1. **Server creation:**
2. Text and voice channels
3. User roles and permissions
4. **User status:**
5. User is Online
6. User is Offline
7. **Notifications:**

Users can receive alert messages

1. **Share Screen:**
2. Reliability
3. Selecting Application\Screen
4. **Search Navigation:**

Streamline search and navigation

1. **Modify profiles**
2. Users can customize their profiles
3. Users can apply themes to their profiles
4. **Activity feed:**
5. Joining and Leaving servers
6. Security
7. **User blocking:**
8. Mute Users
9. Block and kick users
10. **Community Rules**

Communities can conduct guidelines according to their requirements

1. **Performance:**
2. Response time of functions
3. Load handling
4. **Scalability**
5. Queue management and elasticity
6. Database scaling
7. **Usability**
8. Easy to use
9. Understandable GUI
10. **Availability**

Continuous access and uptime

1. **Stakeholder constraints**

Maintaining various user groups' demands and preferences

1. **Security Constraints:**

Adherence to industry encryption and secure communication standards

1. **Resource constraints:**

Resources for servers and hosting to meet demand and user growth.

1. **Content moderation:**

To provide a secure workplace, use both automatic and manual moderation techniques to identify and manage unwanted material.

1. **Real time communication:**
2. Facilitate real-time text and voice communication
3. Make sure that voice chat and text messaging have low latency

**References:**

1. <https://discord.com/safety/360044149331-what-is-discord>

2. <https://blog.hootsuite.com/what-is-discord/>

**Functional Requirements Description:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Functional Req. ID #** | **Function Name** | **Function Requirement Description** | **Software Requirement** |
| FR1 | Login | Registration and authentication | 1a |
| FR2 | Direct messages | User can send and receive messages | 2b |
| FR3 | File sharing | Users can share and receive files | 3 |
| FR4 | Server Creation | Users can create servers and customize them | 4a |
| FR5 | User Status | User can set their status to online status | 5 |
| FR6 | Notifications | Users can receive instant alert messages | 6 |
| FR7 | Share Screen | Users can share their screens with one another | 7b |
| FR8 | Search Navigation | Streamline search and navigation | 8 |
| FR9 | Modify profiles | Users can customize their profiles | 9 |
| FR10 | Activity feed | Check the users activity in servers | 10a |
| FR11 | User blocking | Admins can block and mute users | 11b |
| FR12 | Community Rules | Community conduct guidelines | 12 |

**Non-functional Requirements Description**

|  |  |  |  |
| --- | --- | --- | --- |
| **Non-Functional Req. ID #** | **Function Name** | **Non-Function Requirement Description** | **Software Requirement** |
| NFR1 | Performance | How the system handles the Load | 13b |
| NFR2 | Scalability | Efficiently scales with Load | 14 |
| NFR3 | Security | Chats and data is end-to-end encrypted | 2a |
| NFR4 | Reliability | System performance is consistent on high load | 7a |
| NFR5 | Usability | GUI is easy to understand | 15b |
| NFR6 | Availability | Continuous access and uptime | 16 |

**Constraint Requirements Description**

|  |  |  |  |
| --- | --- | --- | --- |
| **Constraint Req. ID #** | **Function Name** | **Constraints Requirement Description** | **Software Requirement** |
| CON1 | Stakeholder constraints | Maintains the user demands | 17 |
| CON2 | Security constraints | Encrypt data & secure communication | 18 |
| CON3 | Resources constraints | Satisfying users for Servers & hosting | 19 |

**Domain Requirements Description**

|  |  |  |  |
| --- | --- | --- | --- |
| **Domain Req. ID #** | **Function Name** | **Domain Requirement Description** | **Software Requirement** |
| DOM1 | Content moderation | Manages unwanted materials | 20 |
| DOM2 | Real time chats | Ensure real time chats have low latency | 21b |