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software engineering project

Discord Application

Submitted by:

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Introduction:

Discord it's communication App that developed specific for gaming communities, but you still can create any community server and find people like you .

Discord was started to solve a big problem which is how to communicate with friends in different countries while playing games online.

Discord was invented by Jason Citron and was launched in 2015 and is widely used for video games. You can easily chat and play with friends .

Live broadcasting (Stream) Solve our problem and allows screen sharing for more than 50 people, and there is no application that allows sharing games other than Discord

The most convenient model that might use in Discord Application is Agile modeling because its easy to take feedback and we can test each stage

 Plane: Agile is a method of managing projects in an iterative manner rather than using a specific plan from the beginning of the project. Agile leaves room for changes throughout.

Development: It focuses on creating quick work programs, cooperating with clients, and the ability to adapt to changes. Agile is useful for complex projects

Testing: testing is everyone's responsibility in agile, so agile workers need to work together, and communication and cooperation are essential in agile.

Deployment: Developers divide tasks into sub-tasks and prepare estimates. When we complete the tasks, developers publish new features and test the quality of these features.

Maintenance: It is the rapid response to changes, also focusing on the customer's need and focusing on repetition and rapid delivery in order to better respond to requirements.
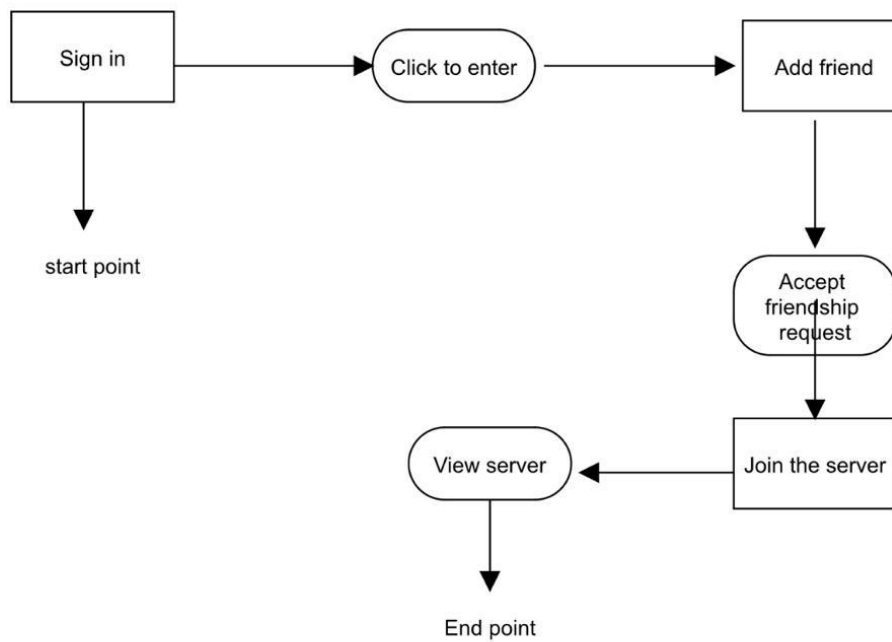
The function requirement:

- **User sign up :** To complete registration, users must create a password and validate the procedure via their phone or email

- **profile setting and personalisation :** The ability to choose the name that will appear to users and provide identifying information for the user

- **Push Notifications :** To log in, a confirmation notification will appear from the email

- **In-App Chat/Calling:** Exchanging messages and the ability to make calls between users

- **Send Friend Request/Follow Request :** When a follow-up request is sent, this request is tracked

- **Content Sharing :** The ability to share content for any purpose, such as studying, reading, watching movies, etc

- **Video/Audio Streaming :** Providing live audio and video broadcast between users

- **Create threads:** make a temporary text channel

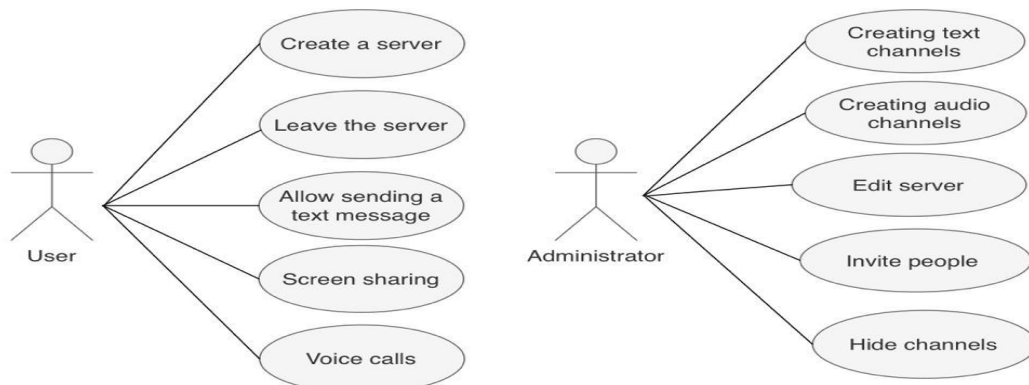## The Non-function requirement:

- Security : Users info should be secure
- Response : The System must be response to user in less than 1 second
- the performance: Answer time will be good
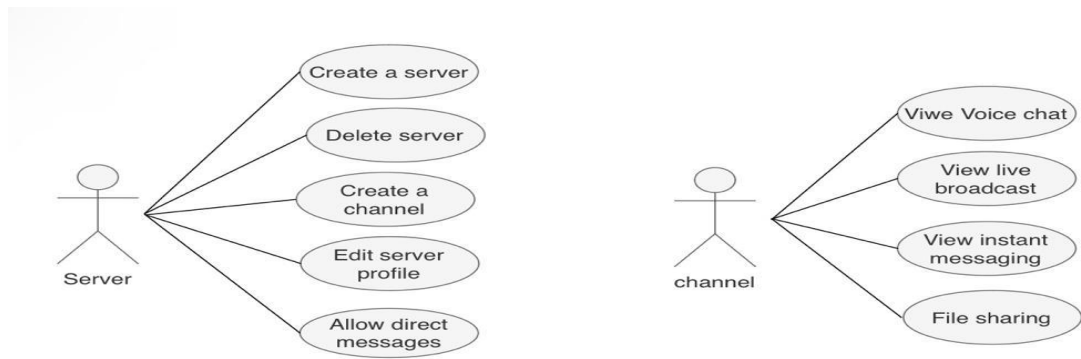- Interface: Ease of use of the interface

Activity diagram:

Use case diagram:

- Actors: Users- Administrator-Server - Channels
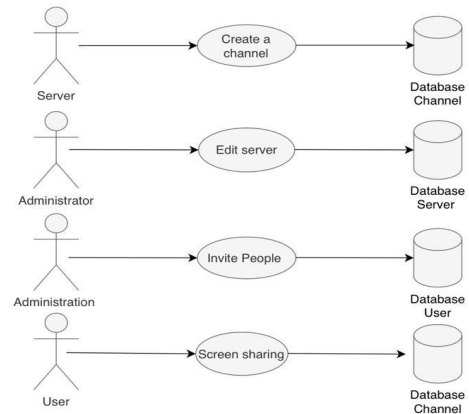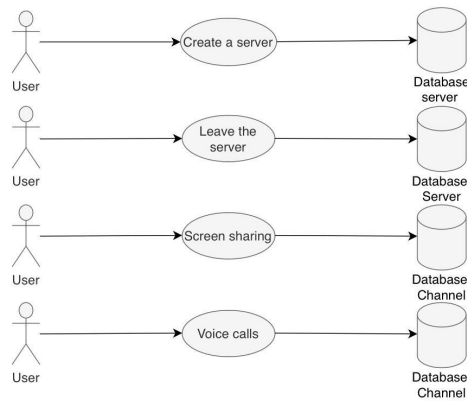
- Use cases &its related use cases

Table 1:
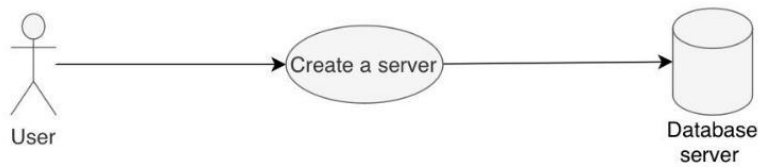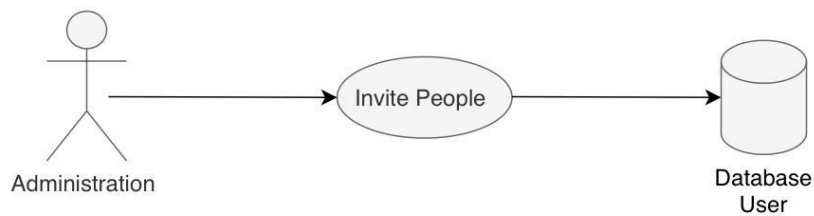

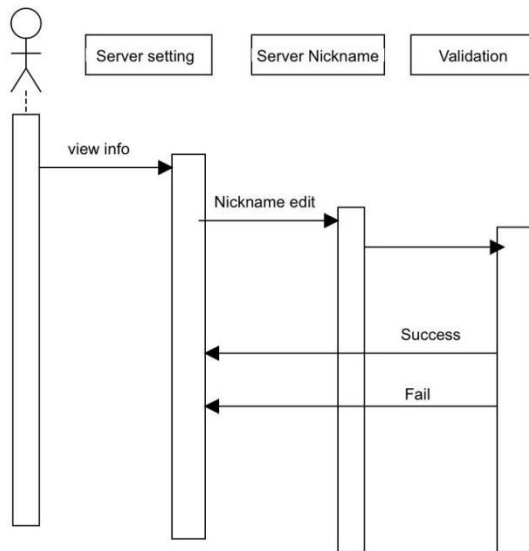| User: create a server	
Actors	Users and database of server.
Description	The user clicks on Add Server at the far left of the Discord screen, and then it allows you to create a server easily. All you have to do is answer some questions about the purpose of the server, and then give it a name, and here you have created a server.
Data	Username and ID number.
Stimulus	The user wants to communicate via voice or text chat while playing, studying, or with friends.
Response	Server information (server name, server link). The meaning of the server name is that it is intended for play, for friends, or for school.
Comment	When you create the server, the news you are interested in will be sent automatically.

Table 2:

| Administration | | Invite People | | Database User |

Administrator:invite people	
Actors	Administrator and database of user.
Description	The administrator sends an invitation to people via Discord via the link. This link allows anyone who has it to join the server. It also allows friends to be invited directly by clicking on the right button to add others to the channel list on the left of the server screen and select Invite People.
Data	Username, ID number and server link.
Stimulus	The administrator joins users so that they can communicate while playing, studying, or with friends.
Response	User information (ID number, server name). The result is that the administrator has joined the user to the server he wants.
Comment	When users join the server, they are assigned roles by the administrator.

Sequence diagram:

Edit server profile

Class diagram:

- Class : Server-User-Channel-bot-Role