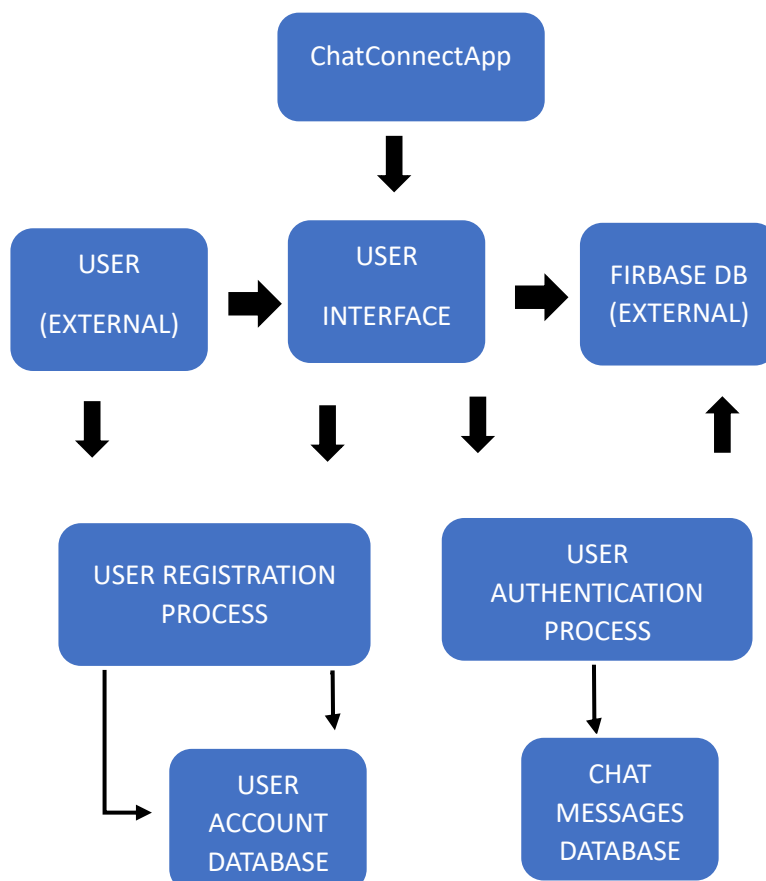


**Project Design Phase II**  
**Data Flow Diagram & User Stories**

Date	23-10-2023
Team ID	Team-591094
Project Name	ChatConnect App
Max Marks	4 marks

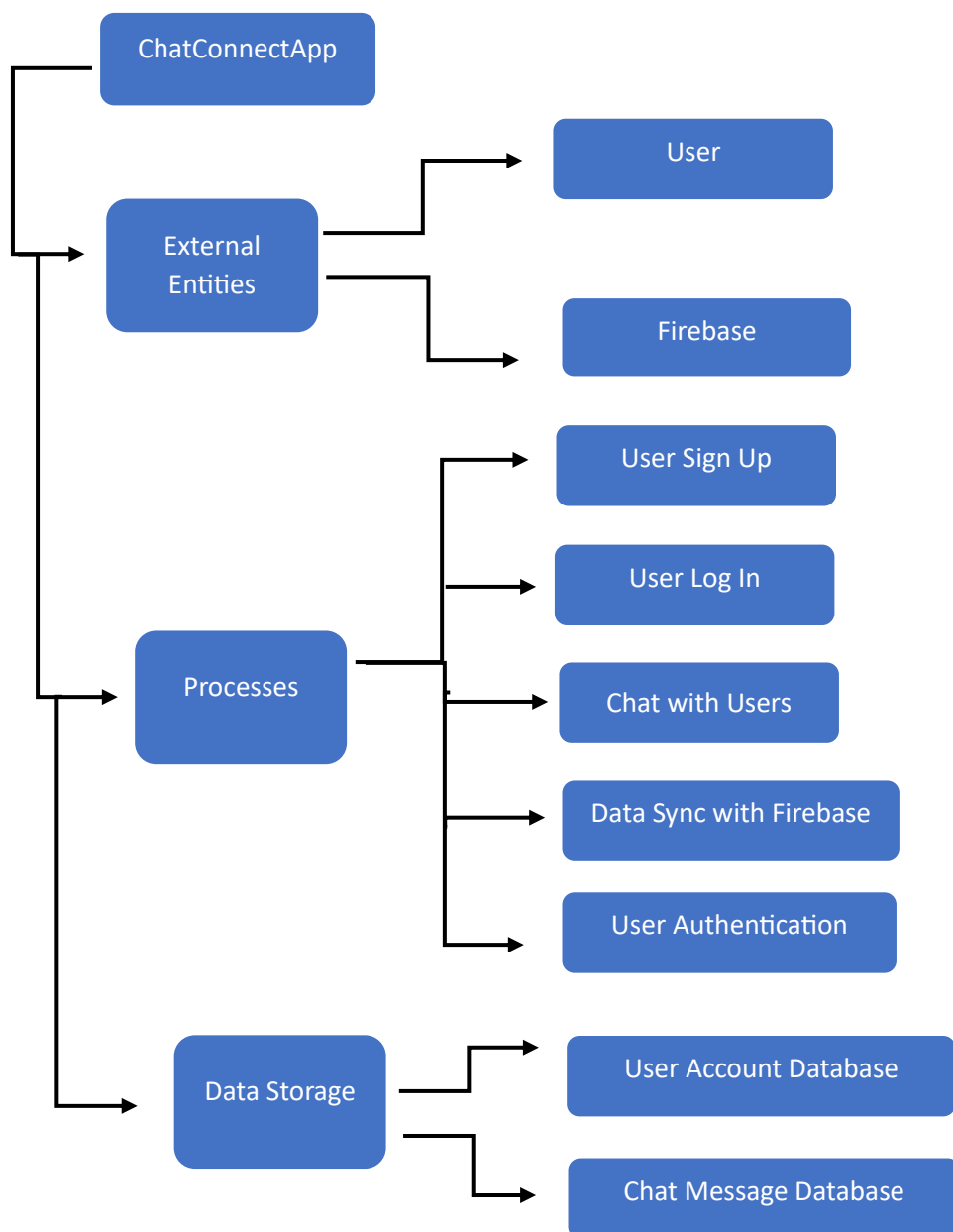
**Level 0 Data Flow Diagram (DFD):**

- The ChatConnect app, which users interact with, communicates with external entities and processes, including the User and Firebase (an external data source).
- The User entity represents the individuals using the ChatConnect app, while Firebase is responsible for user authentication and storing chat data.
- Internal processes include User Registration, User Login, and User Authentication, which handle user account creation, login, and user authentication with the User Account Database.
- The User Interface allows users to interact with the app and includes the Chat Interface, where users engage in real-time chats and send/receive messages, interacting with the Chat Message Database.
- Data flows represent the exchange of data between these components, such as user registration and login data, chat message data, and data synchronization with Firebase for user authentication and chat message storage.



## Level 1 Data Flow Diagram (DFD):

1. <b>External Entities:</b>
<ul style="list-style-type: none"><li>• <b>User:</b> Represents the individuals using the ChatConnect app.</li><li>• <b>Firebase:</b> External data source responsible for user authentication and real-time chat data storage.</li></ul>
2. <b>Processes:</b>
<ul style="list-style-type: none"><li>• <b>User Registration:</b> The process where a user creates an account by providing necessary information. It communicates with the User Account Database to store user details.</li><li>• <b>User Login:</b> The process where an existing user logs in by providing their credentials. It communicates with the User Account Database to verify user identity.</li><li>• <b>Chat Interface:</b> Represents the user interface where users engage in real-time chats.</li><li>• <b>Send/Receive Messages:</b> The process through which users send and receive chat messages. It interacts with the Chat Message Database.</li><li>• <b>Data Synchronization:</b> This process handles the synchronization of user data and chat messages with Firebase. It involves User Authentication and interaction with Firebase databases.</li></ul>
3. <b>Data Stores:</b>
<ul style="list-style-type: none"><li>• <b>User Account Database:</b> Stores user account information, including username, email, and encrypted passwords.</li><li>• <b>Chat Message Database:</b> Stores the chat messages sent between users.</li></ul>



User type	Functional Requirement (Epic)	User Story Number	User Story	Acceptance Criteria	Priority	Release
Customer (Mobile User)	Registration	USN-1	As a mobile user, I want to register for the ChatConnect app by entering my email, password, and confirming my password so that I can access my account and start using the app.	User can provide their email, password, and password confirmation. - Upon successful registration, the user is directed to the app's dashboard.	High	Sprint-1
	Log In	USN-2	As a mobile user, I want to log in to the ChatConnect app using my email and password to access my account and start using the app.	User can provide their email and password. - Upon successful login, the user is directed to the app's dashboard.	High	Sprint-1
	Dashboard	USN-3	As a mobile user, I want to access my account dashboard in the ChatConnect app, which should display my chat history and options for starting new chats.	User can view their chat history. - User can start new chats with other users.	High	Sprint-1
Customer (Web User)						
Customer Care Executive	Dashboard	USN-4	As a Customer Care Executive, I want to access a specialized dashboard that provides an overview of customer interactions, support tickets, and chat logs, allowing me to efficiently respond to customer inquiries.	- Dashboard displays customer inquiries. - Ticket management features are accessible. - Chat logs are available for review and response.	High	Sprint-2
	Customer Interaction	USN-5	As a Customer Care Executive, I want to view and respond to customer messages and support tickets efficiently through the specialized dashboard, ensuring timely and effective customer support.	Messages and support tickets are displayed. - I can respond to messages and resolve support tickets.	High	Sprint-2
Administrator	User Management	USN-6	As an Administrator, I want to have access to user management tools to oversee and manage user accounts, including the ability to block or suspend users if necessary.	- Access to user management features. - Ability to view user accounts. - Ability to block or suspend user accounts if needed.	High	Sprint-3
	Reporting and Analytics	USN-7	As an Administrator, I want access to reporting and analytics tools that provide insights into app usage, user engagement, and performance, allowing me to make data-driven decisions and improvements	- Access to reporting and analytics features. - Data and insights related to app usage and performance are available.	High	Sprint-3

