

CS 452

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Project Schema

- User - Store all user data. A userID has 0..* ChatRoomIDs (through MapUserToChatRoom table).
 - ID - Primary key, uniquely identifies users
 - Name - The user's screen name
 - Age - The user's age
 - Email - The user's email address
 - Phone - The user's phone number
 - Infractions - The number of times this user has had their messages auto sent
 - Created - When the user's account was created
- ChatRoom - Store all user created chat rooms. A chat room has multiple users (indirectly related through MapUserToChatRooms table) and multiple messages.
 - ID - Primary key, unique identifier for the Chat Room
 - Name - User given name for the Chatroom
 - Created - Date the chatroom was created
- MapUserToChatRoom- maps user to 0..* chat rooms.ID - Primary key, unique identifier for the UserID to ChatRoomID relationship
 - ChatRoomID - Foreign key, references ID on table ChatRoom
 - UserID - Foreign key, references ID on table User
- Message - Store all messages. Each message is related to one userID and ChatRoomID.
 - ID - Primary key, unique identifier for the message
 - UserID - Foreign key, references ID on User table
 - ChatRoomID - Foreign key, references ID on ChatRoom table
 - Content - The content of the message
 - Created - When the message was sent

This schema satisfies some aspects of normalization, including the following:

- 1NF (First Normal Form) Rules
 - Each table cell should contain a single value. - yes
 - Each record needs to be unique. - yes
- 2NF (Second Normal Form) Rules
 - Rule 1- Be in 1NF - yes
 - Rule 2- Single Column Primary Key - yes

- Each set of related data has its own table
- There are no repeating groups in individual tables