

**Database Table: Chatrooms**

ID	Name
10	Global
11	Project1
12	Project2
13	CustomChannel1

**Database Table: Chat Subscriptions**

ID	ChatroomID	UserID	JoinTimestamp
1	10	100	1455757856
2	10	101	
3	10	102	
4	10	103	
5	11	100	

**Database Table: Users**

ID	Username
100	gwade
101	ferg
102	slip
103	juts

**Database Table: Chat Messages**

ID	Timestamp	FromID	ChannelID	Message
1000	1455754856	100	10	Greetings
1001	1455755856	101	10	Greetings to you sir
1002	1455756856	100	10	Fun Programming
1003	1455757856	101	10	Yes, very.

**Polling Structure**

Client sends username and time of last message received

server queries database for messages within subscribed channels

server's response contains all new messages, along with a current timestamp

**Interrupt Structure**

Message added to messages table

Server sends message to all client connections that are subscribed to that channel