**BroadCaster** is a service which allows user to broadcast messages to a group of users who have registered on a group.

**Functional Requirements (MVP)**

1) A client should be able to register to our system. This will give each user a unique user id.

2) A client should be able to create a group and give it a name. This should return a unique string to the client.

3) A client can register on a string (for mvp client can register on any group, post that permission request will be sent to creator).

4) A client can send messages on a string.

5) A client can view all the messages on a string for past 10 days.

**Extended Requirements**

1) System should be reliable. Messages post on a group should not get lost for at least 10 days.

2) System should be highly available. If a client is online and message is posted on a group to which he is subscribed, he should get the message with in 3 sec of coming online.

**Post MVP requirements**

1) Instead of passing unique string around, our system should provide search facility where users can search for existing groups based on keywords.

2) Instead of just text, user can post images and videos on group.

3) Platform will be extended to mobile also.

For MVP web will be the only platform.

**Use Cases**

1) New user registration

2) User signed In

3) User creating a new group

4) User Joining a group

5) User posting a message on a group

6) User pulling the messages from a group

**Exposed Api’s**

-1) errorCode register(username, email, passwordHash)

2) errorCode login(username, passwordHash)

3) errorCode createNewGroup(groupName, creationTime, creatorUserName, out groupUrl)

4) errorCode joinGroup(userName, groupUrl, joinTime)

5) errorCode postMessage(groupUrl, message, postTime, username)

6) errorCode getMessage(groupUrl, userName, lastSeenMessageTime = null, out messagesTrimmed)

**ErrorCode:**

NoError

UserName already exists

System error

UserName doesn’t exist

Wrong password

GroupName already exists

GroupLimit exceeds

GroupUrl doesn’t exists

GroupMember limits exceeds

Message Length limit exceeds

Not a member of Group

All the APIs will be exposed as a rest endpoint.

**Database Schema (will keep on changing)**