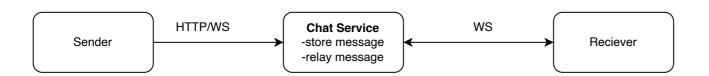
# **Chat System**

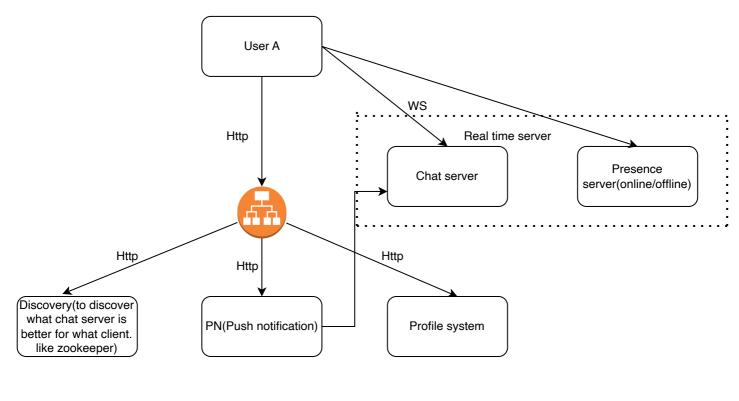
## Requirements

- 1:1 /group chat
- online/offline status show
- text message
- mobile/web app
- 100 member limit group
- 1000000 chars message size limit
- chat history to be saved forever
- multiple device support(1 person can login and chat from different device)Push notification(for offline user).

### HLD-1

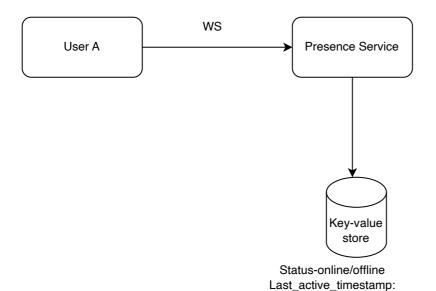


#### HLD-2

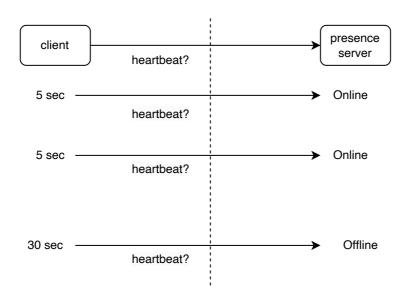


KV Store **KV** Store KV Store

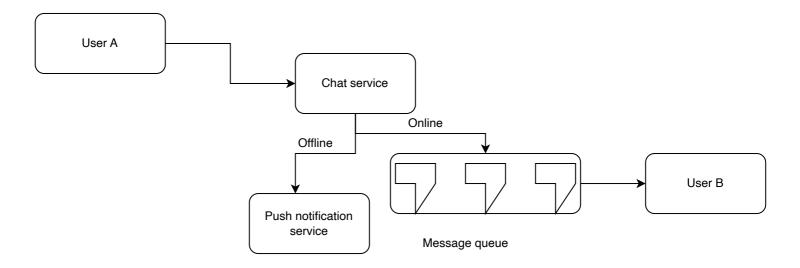
### **HLD-3(Presence service)**



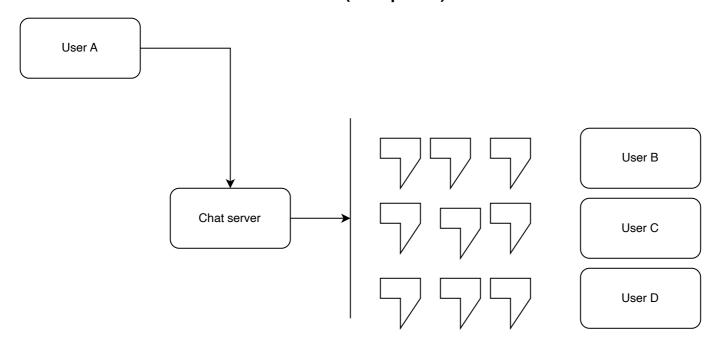
#### -Heartbeat mechanism



HLD-4(1:1 chat)



## HLD-5(Group chat)



Message queues for each user