

### **CIS 505 - Project 3 - Distributed Chat Server**

Milestone 1 : Due March 28th, 2016.

Group Name : UPenn\_EMBS

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### **Division of Tasks**

<b>Karthik Anantha Ram</b>	<b>Sanjeet Phatak</b>	<b>Sarath Vadakkepat</b>
Client joins the chat group	Handling command line arguments	Leader Election Protocol
Handle scenarios when the sequencer crashes	Messages sent by sequencer to clients	Handling the internal communication between the sequencer and clients
Handle scenarios when one of the client crashes	Messages sent by clients to the sequencer	Fair Queuing
Centralized total ordering	Manage data structure containing Ip address and port number of all the clients	Traffic Control
Message Priority	Encrypted chat messages	GUI
Client leaving the group	Chandy Lamport Snapshot Algorithm	Message Recovery on client failure / crash / delayed reception.
Decentralized total ordering	Test cases	Test Cases

## Timeline/Schedule of Tasks

Due Date	Activity
03/27/16	Completion of the design phase
03/29/16	Completion of the basic mechanism of joining and leaving the chat
04/05/16	Completing the second milestone's requirements
04/06/16	Testing of Phase 1(check all scenarios and if needed rethink the design)
04/10/16	Extra Credit Phase 1-Traffic Control/Fair Queuing
04/11/16	Submission of Milestone 2
04/12/16	Testing of Phase 2 (checking if newly added features function according to spec)
04/17/16	Extra Credit Phase 2-Message Priority/ Encrypted chat messages, decentralized total ordering
04/21/16	Extra Credit Phase 3- Chandy Lamport Algorithm/GUI
04/23/16	Testing/improving the application
04/24/16	Final Submission :)