**CommJ Tutorial Outline**

# Objectives

I am planning to discuss the following activities/tasks in the tutorial. Objective is to help you people understand and implement the required programming tasks.

# CommJ Introduction (Slides)

* A little basics about the building blocks in *CommJ* architecture
* A little introduction about the conversations

# How to Setup *CommJ* in Eclipse IDE

* Download the CommJ.Library example
* Download the examples of CommJ and configure them
* How to setup CommJ library with java sample application
* How to run application by disabling CommJ aspects
* You can enable/disable the messages in the CommJ

# Some Important Instructions to Follow while implementing the CommJ application

* Use of Encoder Class
* Use of Message Class
  + Don’t use universe.Message
* Explain how the CommJ adds dynamic information to each message
  + Use of Initialization and when it is required in the CommJ

# CommJ Tutorial (Optional for AspectJ group members)

* A TCP CLIET/SERVER program which logs the send and receive time using OWS, OWR, RR and MS conversations
  + Observer that ConversationID’s are different for both the Client/Server
  + Observe that RR Conversation is same when the client sends the message and when it receives the message
  + For MS observe how we are defining the State Machines
* A TCP CLIENT/SERVER program which highlights the Initiator/Listener time connection times
  + Observer the conversation remains the same for Being and End in Initiator and Listener
* A UDP CLIET/SERVER program which logs the send and receive time using OWS, OWR, RR and MS conversations
* Few good practices I learned about programming CommJ for designing, coding and debugging
  + Explain why we are disabling the Logs related to the CommJ
  + Disable the RAL communication/connection aspects

# An Activity to Understand CommJ

* + Calculate the total time for TCP Translator using RR & MS conversations