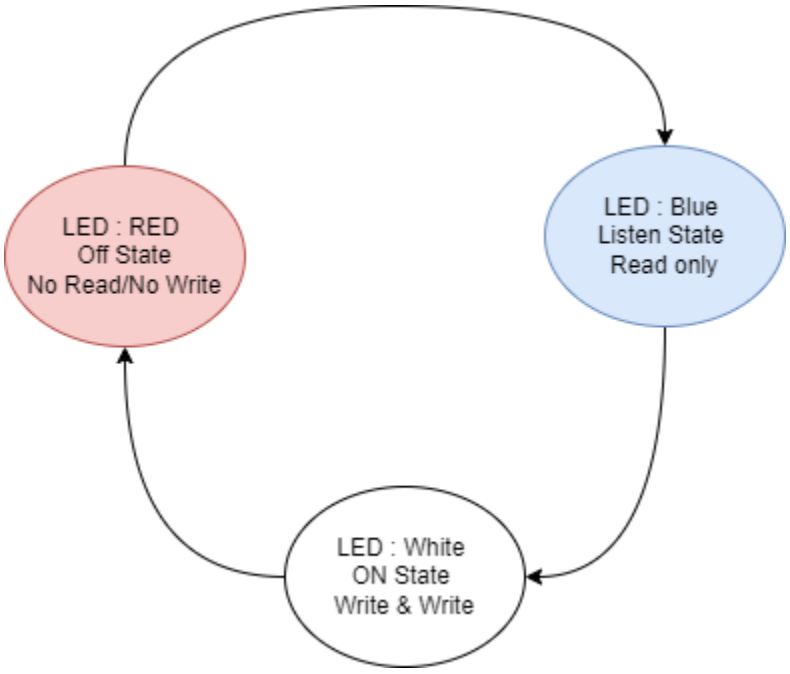
Introduction

In this project you are asked to design and implement a chat system that consists of 2 microcontrollers and 2 PCs, and some communication protocols. It consists of two Tiva C boards. Each has the same state machine. **The communication can be from Tiva A to Tiva B or from Tiva B to Tiva A**.

Objectives

3 States State Machine:

The goal of this project is to design a communication system between 2 Tiva Cs. The system simply contains two Tiva Cs. Messages should go back and forth between the two. Each Tiva has 3 state machines.



Offline State:

In the Off state, the ECUs do not listen to any messages nor send any messages. If a message is sent, the ECU ignores the message.

Listen State:

In the Listen State, the ECUs only read messages and show them on the PC, but the ECU in listen state cannot send messages.

Online State:

In the online state, the ECUs send and receive normally. While sending messages data from PC to Tiva, the message is sent from the Tiva to the other Tiva after the user presses the **ENTER** key or reaches a maximum value of **200** characters.

You will be asked to show the state machine inside your code while presenting the outcome on the project Demo itself.