Pseudo Code for GameService

**Psuedo Code for GameService**

**RunGameServiceSM**

Start by setting the make transition variable to false

Set next state to current state

Set the entry event kind ES\_Entry

Set the return event as the current event

Switch between the current state

Case: Waiting4Campaign

Execute the DuringWaiting4Campaign function

Switch between the current event

If the current event is ES\_StartCampaign

Set next state to Campaigning\_StopAtCity

Consume the event

EndCase

Case: Campaigning\_StopAtCity

Execute the During Campaigning\_StopAtCity function

If the current event is ES\_AtCity

Post to master to stop the motors

Switch next state to Campaigning\_CapturingCity

Post ES\_StartCaptureCity to this service and then in next state post it to CaptureCity service

Else if the current event is ES\_GameOver

Set next state to Waiting4Campaign

Consume the event

EndCase

Case: Campaigning\_CapturingCity

Execute the DuringCampaigning\_CapturingCity function

If the current event is ES\_StartCaptureCity

Post the same event to capture city service

Else if the current event is ES\_GameOver

Set next state to Waiting4Campaign

Consume the event

Else if the current event is ES\_IgnoreCity

Set the next state to Campaigning\_DontStopAtCity

Else if the current event is a timeout for the MakeSureNotStuckTimer

Set the next state Campaigning\_DontStopAtCity

Else if the current event is ES\_BallShot

Set the next state to ShootingInCampaign

Else if the current event is ES\_AtCity

Post ES\_StartCaptureCity to Capture City Service

EndCase

Case: ShootingInCampaign

If the current event is ES\_WireFollow

Set the Campaign Timer for 1 second

Else if the current event is a timeout for the campaign timer

Set the next state to Campaigning\_DontStopAtCity

Else if the current event is ES\_GameOver

Set the next state to Waiting4Camapaign

Consume the event

End Case

Case: Campaigning\_DontStopAtCity

Execute the DuringCampaigning\_NotStoppping function

If the current event is a campaign timer timeout

Set the next state to Campaigning\_StopAtCity

Else if the current event is ES\_GameOver

Set the next state to Waiting4Camapaign

Consume the event

End Case

End RunGameServiceSM

**StartGameServiceSM**

Call the RunGameServiceSM function with the current event as ES\_Entry

End StartGameServiceSM

**DuringWaiting4Campaign**

Set the return event as the event passed in the argument

If the event is an ES\_Entry

Set the InCampaign variable to false

Post ES\_Celebrate to LEDService

Request the game status

Start the GameStatus timer for 200ms

Post ES\_StopMotors to MasterSM

Else if the event is an ES\_Exit

Start by posting wirefollow to MasterSM

Post ES\_StopCelebration to LED Service

Else

If this event is a game status timer timeout

If the game has started (Check SS3)

Post ES\_StartCampaign to MasterSM

Else

Request the game status (SS3)

Start the GameStatus Timer for 200 ms

Return the return event

End DuringWaiting4Campaign

**DuringCampaigning\_StoppingAtCity**

Return the return event

End DuringCampaigning\_StoppingAtCity

**DuringCampaigning\_CapturingCity**

Set the return event as the event passed in the argument

If the event is an ES\_Entry

Start the MakeSureNotStuckTimer for 4 seconds

Else if the event is an ES\_Exit

Stop the MakeSureNotStuckTimer

Else

Do nothing

Return the return event

End DuringCampaigning\_CapturingCity

**DuringCampaigning\_NotStopping**

Set the return event as the event passed in the argument

If the event is an ES\_Entry

Start the Campaign timer for 1.5 seconds

Post ES\_WireFollow to MasterSM

Else if the event is an ES\_Exit

Do nothing

Else

Do nothing

Return the return event

End DuringCampaigning\_NotStopping

**DuringShootingInCampaign**

Set the return event as the event passed in the argument

If the event is an ES\_Entry

//Do nothing

Else if the event is an ES\_Exit

Do nothing

Else

Do nothing

Return the return event

End DuringShootingInCampaign