**JSRHandlerHSMS State Pseudo Code**

**Key:**

Capital Case used for variables and function names (Ed’s Convention)

/\* comments \*/

// place holder for code

Only code needed for lowest level state (During func)

Write Durings for everything, but comment out the function call if not needed

**Start JSRHandlerHSMS (CurrentEvent)**

 // Handle history or irregular entry here

If not history entry

 Current state = WaitingToStart;

 End

 /\* Call ENTRY function for JSRHandlerHSMS \*/

 RunJSRHandlerHSMS(CurrentEvent)

End Start

**Run JSRHandlerHSMS (CurrentEvent)**

 Init MakeTransition, NextState, EntryEventKind, ReturnEvent

 /\* React differently based on the state you’re in \*/

Switch (CurrentState)

 Case WaitingToStart

 /\* Execute During to respond to event \*/

 CurrentEvent = During WaitingToStart (CurrentEvent)

 /\* Handle all events relevant to WaitingToStart \*/

 If ES\_NO\_EVENT does not == CurrentEvent

 Switch (CurrentEvent)

 Case JSR\_NEW\_ROUND

 NextState = GamePlay;

 MakeTransition = True;

 EntryEventKind = EV\_ENTRY;

 ReturnEvent = currentEvent; Break

 End switch

 End if

 Break

Case GamePlay

 /\* Execute During to respond to event \*/

 CurrentEvent = During GamePlay (CurrentEvent)

 /\* Handle all events relevant to GamePlay \*/

 If ES\_NO\_EVENT does not == CurrentEvent

 Switch (CurrentEvent)

 Case JSR\_GAME\_OVER

 NextState = GameOver;

 MakeTransition = True;

 EntryEventKind = EV\_ENTRY;

 ReturnEvent = currentEvent; Break

 End switch

 End if

 Break

Case GameOver

 /\* Execute During to respond to event \*/

 CurrentEvent = During GameOver (CurrentEvent)

 // Final state – no transitions

 Break

 End switch

 /\* Handle transitions between states \*/

 If (MakeTransition)

 /\* Exit this state \*/

 CurrentEvent.EventType = ES\_EXIT

 Run JSRHandlerHSMS(CurrentEvent)

/\* Enter next state \*/

CurrentState = NextState; // Change to next state

CurrentEvent.EventType = EventEntryKind;

Run JSRHandlerHSMS(CurrentEvent)

 End if

Return ReturnEvent

End Run

**During GamePlay (CurrentEvent)**

 Init ReturnEvent

 If (EV\_ENTRY == CurrentEvent)

 // Execute Entry actions here

 /\* Start lower level SM(s) \*/

 StartJSRGamePlayHSMS(CurrentEvent)

 Else if (EV\_ExIt == CurrentEvent)

 /\* Exit lower level SM(s) \*/

 RunJSRGamePlayHSMS(CurrentEvent)

 // Execute Exit actions here

 Else

 /\* Pass event to lower level SM(s) \*/

 // ReturnEvent = RunJSRGamePlayHSMS (CurrentEvent)

 // Execute any internal event response here

 End if

 return ReturnEvent // or CurrentEvent to avoid event consumption

End During

**During WaitingToStart (CurrentEvent)**

 Init ReturnEvent

 If (EV\_ENTRY == CurrentEvent)

 // Execute Entry actions here

 /\* No lower level SM(s) \*/

 Else if (EV\_ExIt == CurrentEvent)

 /\* No lower level SM(s) \*/

 // Execute Exit actions here

 Else

 /\* No lower level SM(s) \*/

 // Execute any internal event response here

 End if

 return ReturnEvent // or CurrentEvent to avoid event consumption

End During

**During GameOver (CurrentEvent)**

 Init ReturnEvent

 If (EV\_ENTRY == CurrentEvent)

 // Execute Entry actions here

 /\* No lower level SM(s) \*/

 Else if (EV\_ExIt == CurrentEvent)

 /\* No lower level SM(s) \*/

 // Execute Exit actions here

 Else

 /\* No lower level SM(s) \*/

 // Execute any internal event response here

 End if

 return ReturnEvent // or CurrentEvent to avoid event consumption

End During