# Stateflow Quiz 3

The respondent's email (**amlali98eg@gmail.com**) was recorded on submission of this form.

**1. What is Stateflow primarily designed for?** *

○ a) Modeling and simulating combinational logic only

● b) Modeling and simulating sequential decision logic

○ c) Modeling and simulating continuous-time systems

○ d) Modeling and simulating mechanical systems

**2. What are the key features of Stateflow?** *

○ a) Only supports hierarchy and events

● b) Deterministic execution with hierarchy, parallelism, temporal operators, and events

○ c) Limited to finite state machines only

○ d) No support for graphical components

3. **How can you identify the type of a Stateflow chart by its icon?** *

● a) No icon for different chart types

○ b) C charts have a specific icon

○ c) M charts have a specific icon

○ d) Both C and M charts share the same icon

4. **What is the purpose of configuring debug operations after creating a chart?** *

○ a) Enhance chart visualization

○ b) Configure the simulation speed

● c) Apply recommended settings for debugging

○ d) Adjust the chart colors

5. **How are Stateflow breakpoints set and cleared?** *

○ a) Breakpoints are set automatically

○ b) Breakpoints can only be set on transitions

● c) Right-click on the object to set breakpoints, and clear them the same way

○ d) Breakpoints can only be set on states

**6. What is the significance of an execution status badge in Stateflow?** *

○ a) Indicates the chart is in pause mode

○ b) Marks the beginning of a simulation

● c) Represents the active object when execution pauses

○ d) Indicates an error in the chart

**7. How does Stateflow handle watches during simulation?** *

○ a) Watches are not supported in Stateflow

○ b) Watches provide information about the current time step

● c) Watches monitor variables and data during simulation

○ d) Watches indicate the chart execution order

**8. What is the benefit of conditional breakpoints in Stateflow?** *

○ a) They make the simulation faster

○ b) They allow breakpoints to be activated or deactivated at will

● c) They provide a visual trigger on top of the chart

○ d) They remove the need for breakpoints altogether

**9. How are local events in Stateflow triggered?** *

○ a) Through input triggers like Function Call

○ b) By sending an event using the send function

● c) Automatically at every chart call

○ d) By setting breakpoints

**10. What is the syntax for broadcasting local events in Stateflow?** *

○ a) send(Event_Name, Destination_State)

○ b) send(Event_Name)

● c) broadcast(Event_Name)

○ d) activate(Event_Name)

**11. How can multiple input events be handled in Stateflow?** *

○ a) Create a separate chart for each event

● b) Use a multiplexer (MUX) to combine external events

○ c) Add more stateflow input events for each external event

○ d) Disable one of the input events

**12. What types of operators are available in Stateflow for creating conditions?** *

○ a) Arithmetic and Logical Operators only

○ b) Temporal and Comparison Operators only

○ c) Unary and Bitwise Operators only

● d) Arithmetic, Logical, Comparison, and Temporal Operators

**13. What is the purpose of a graphical function in Stateflow?** *

● a) Enhances chart visualization

○ b) Represents a stable state of the system

○ c) Helps reuse control-flow logic

○ d) Provides a visual trigger for debugging

**14. Where can a graphical function reside in Stateflow for maximum scope?** *

○ a) Only at the state level

○ b) Only at the chart level

● c) Anywhere in a chart, state, or subchart

○ d) Only at the subchart level

**15. What is the purpose of atomic boxes in Stateflow? ***

○ a) To limit the use of graphical functions

○ b) To restrict the presence of states

● c) To create modular, reusable logic

○ d) To enhance chart readability