

Stimuli	Response	Response Time
Open with key	Transition from (Down) state to (Under maintenance) state.	<5 seconds
Close with key	Transition from (Under maintenance) state to (Down) state.	<5 seconds
Turn on	Transition from (Down) state to (Idle) state Action: display “Hello”, display balance, display available ingredients. Turn on water heater.	<1 second
Turn off	Transition from any state to (Down) state. Action: display “Thank you Goodbye :)”	<2 seconds
Insert money	Transition from (Idle) state to (Validating money) state.	<3 seconds
Money authenticated	Transition from (Checking money condition) sub-state to (Checking money value) sub-state.	<5 seconds
Money valid	Transition from (Validating money) state to (Idle) state. Action: display balance, display available ingredients, accumulate balance.	<2 seconds
Money invalid	Transition from (Validating money) state to (Idle) state. Action: display balance, display “Bad money condition”, display available ingredients, return money.	<3 seconds
Initiate selection	Transition from (Idle) state to (Waiting for selection) state.	<2 seconds
Cancel order	Transition from (Waiting for selection) state to (Idle) state. Action: display balance, display available ingredients, return money.	<5 seconds
Select type	Transition from (Waiting for selection) state to (Waiting for selection) state. Activity: display selections.	<1 second
Select size	Transition from (Waiting for selection) state to (Waiting for selection) state. Activity: display selections.	<1 second
Select sugar	Transition from (Waiting for selection) state to (Waiting for selection) state. Activity: display selections.	<1 second

Click start [balance<price, coffee type is not selected, ingredients selected are not sufficient]	Transition from (Waiting for selection) state to (Waiting for selection) state.	<1 second
Click start [balance>=price, coffee type is selected, ingredients selected are sufficient]	Transition from (Waiting for selection) state to (Preparing coffee) state. Action: display “Wait for your drink” Activity: retrieving cup.	<1 second
Cup retrieved	Transition from (Retrieve cup) sub-state to (Retrieve coffee) sub-state. Activity: retrieving coffee.	<1 second
Coffee retrieved	Transition from (Retrieve coffee) sub-state to (Retrieve sugar) sub-state. Activity: retrieving sugar.	<1 second
Sugar retrieved	Transition from (Retrieve sugar) sub-state to (Retrieve water) sub-state. Activity: retrieving water.	<1 second
Order components retrieved	Transition from (Extract needs) sub-state to (Mixing ingredients) sub-state. Activity: mix ingredients.	<3 seconds
Ingredients mixed	Transition from (Mixing ingredients) sub-state to (Pouring coffee) state. Activity: pouring coffee.	<2 seconds
Pouring finished	Transition from (Pouring) state to (Idle) state. Action: return change (if any), extract drink, display balance, display available ingredients.	<5 seconds
Sensor detects temperature below threshold	Transition from (Not heating) state to (Heating) state. Activity: heat water tank.	<2 minutes
Sensor detects temperature above threshold	Transition from (Heating) state to (Not heating) state. Action: stop heating.	<2 minutes