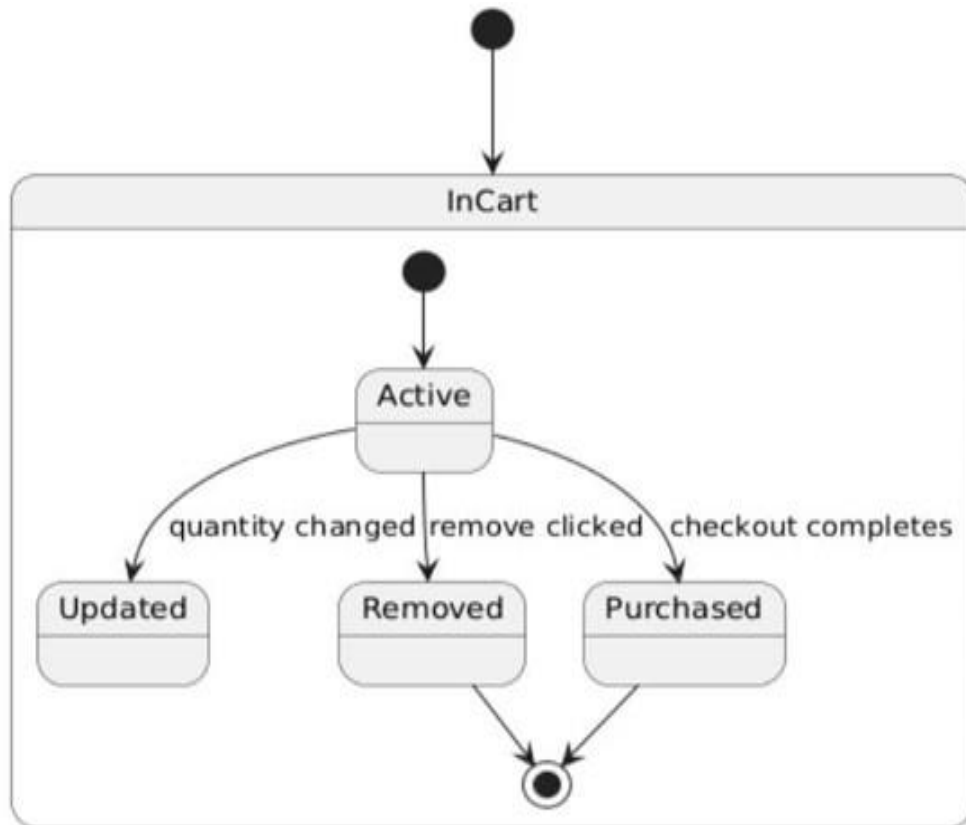## STATE MACHINE DIAGRAM

STATE MACHINE DIAGRAM DESCRIPTION

The State Machine Diagram represents the different states through which a cart item transitions during the shopping process. An item first enters the system when it is added to the cart, and may move into the 'Quantity Updated' state if the user increases or decreases the number of units. If the user removes the item, it transitions into the 'Removed' state. Finally, when checkout is completed, cart items enter a 'Purchased' or 'Order Completed' state and are cleared from the cart. This diagram helps visualize how the status of an item changes based on user actions.