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SWEN5232 - Software Construction

Assignment Number: **6**

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State Machine Diagram

Cookie Example

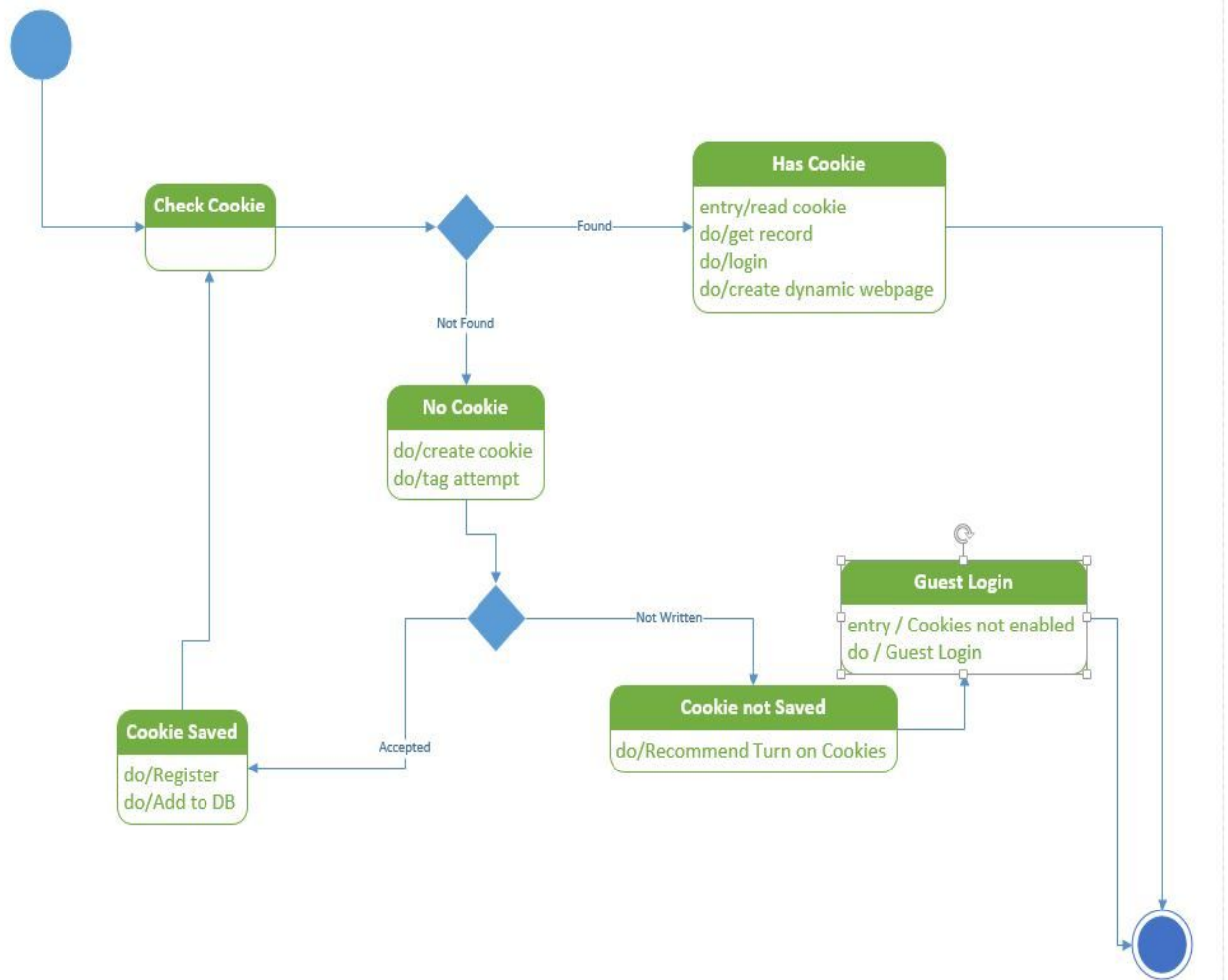


Figure 1: Cookie State Machine Diagram

Cafeteria Automation State Diagrams

Customer State Machine Diagram

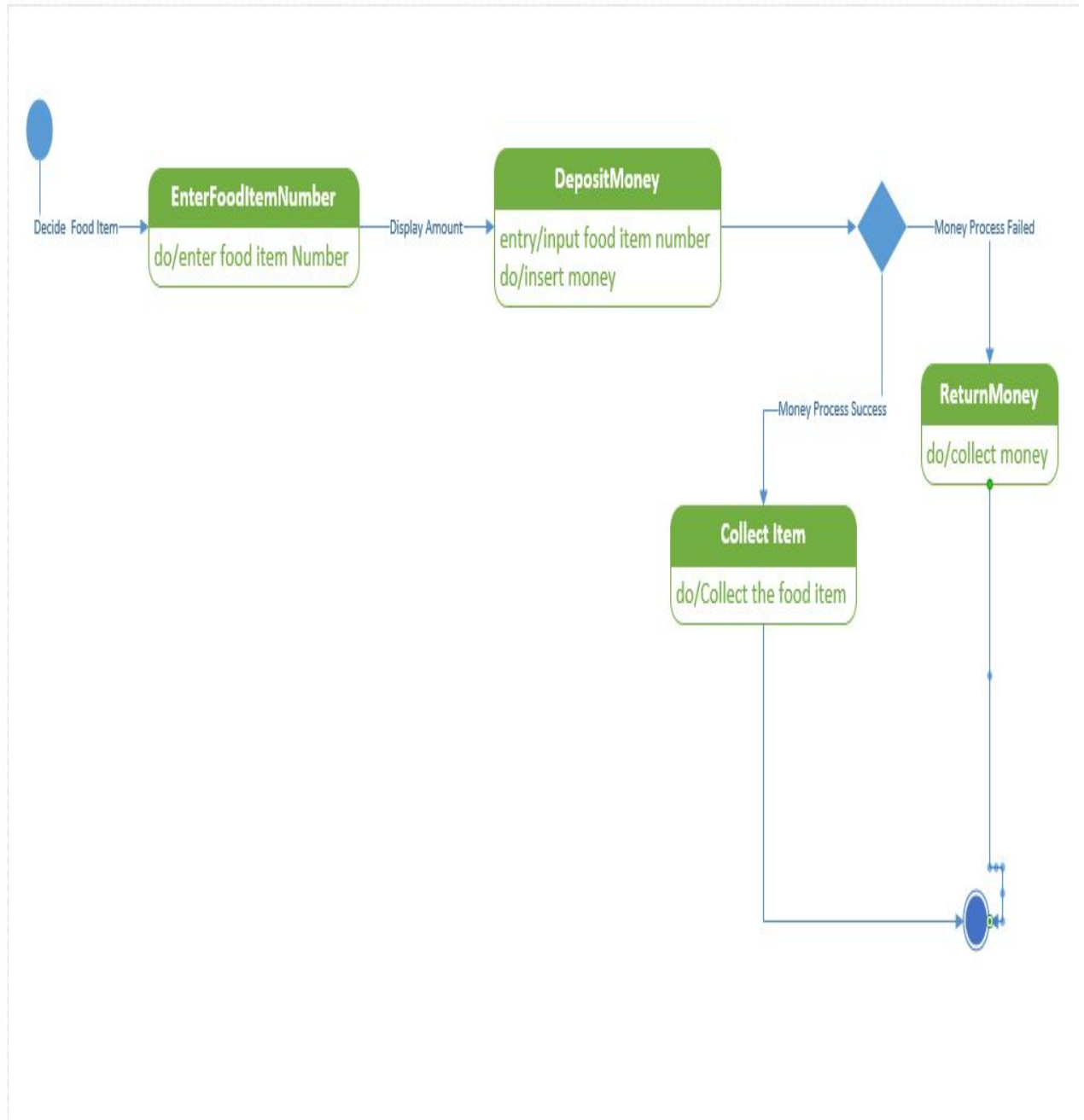


Figure 2: Customer State Machine Diagram

Kiosk State Machine Diagram

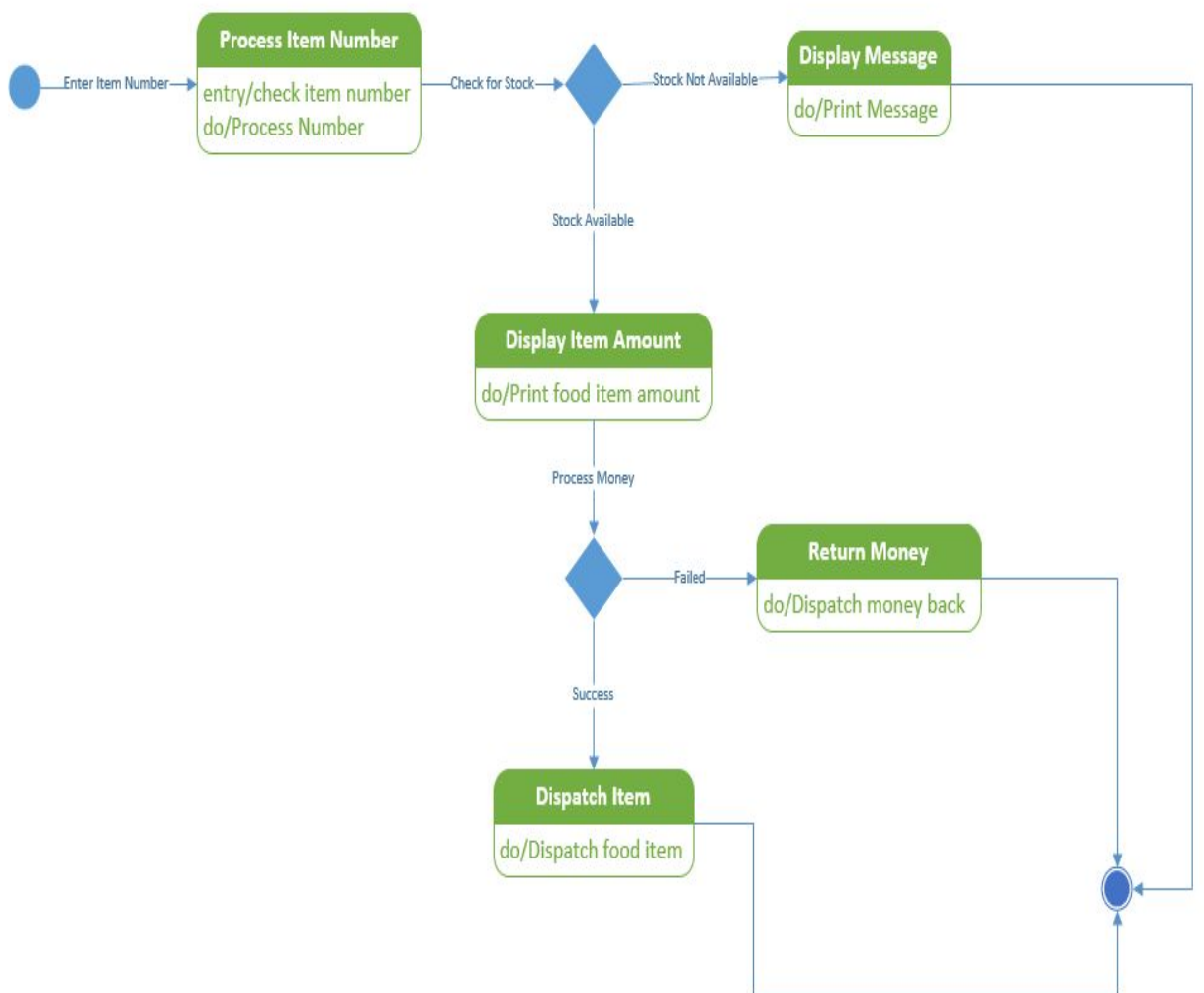


Figure 3: Kiosk State Machine Diagram

Order State Machine Diagram

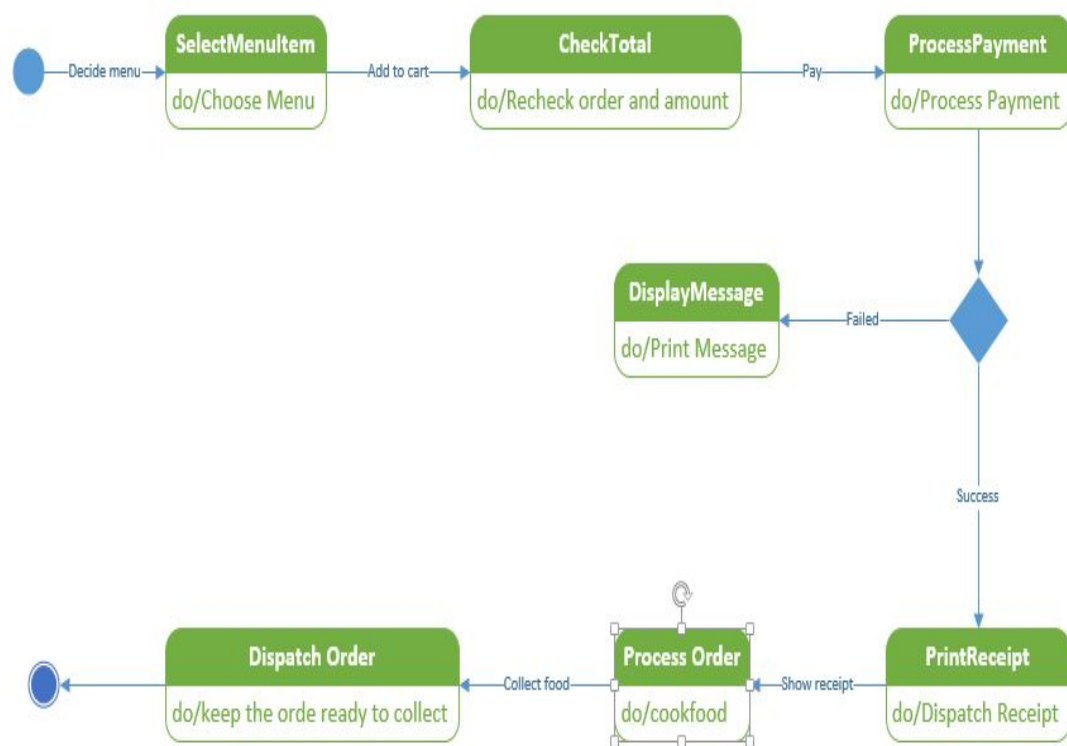


Figure 4: Order State Machine Diagram

MCQ

_____ creates a hierarchy of state classes to handle behavior of the states.

1. State pattern
2. State table
3. State subclass
4. Nested switch

Correct Answer: 1. State Pattern

With the state pattern, a state machine is implemented by implementing each individual state as a derived class, and implementing state transitions by using methods defined by the pattern's superclass.

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