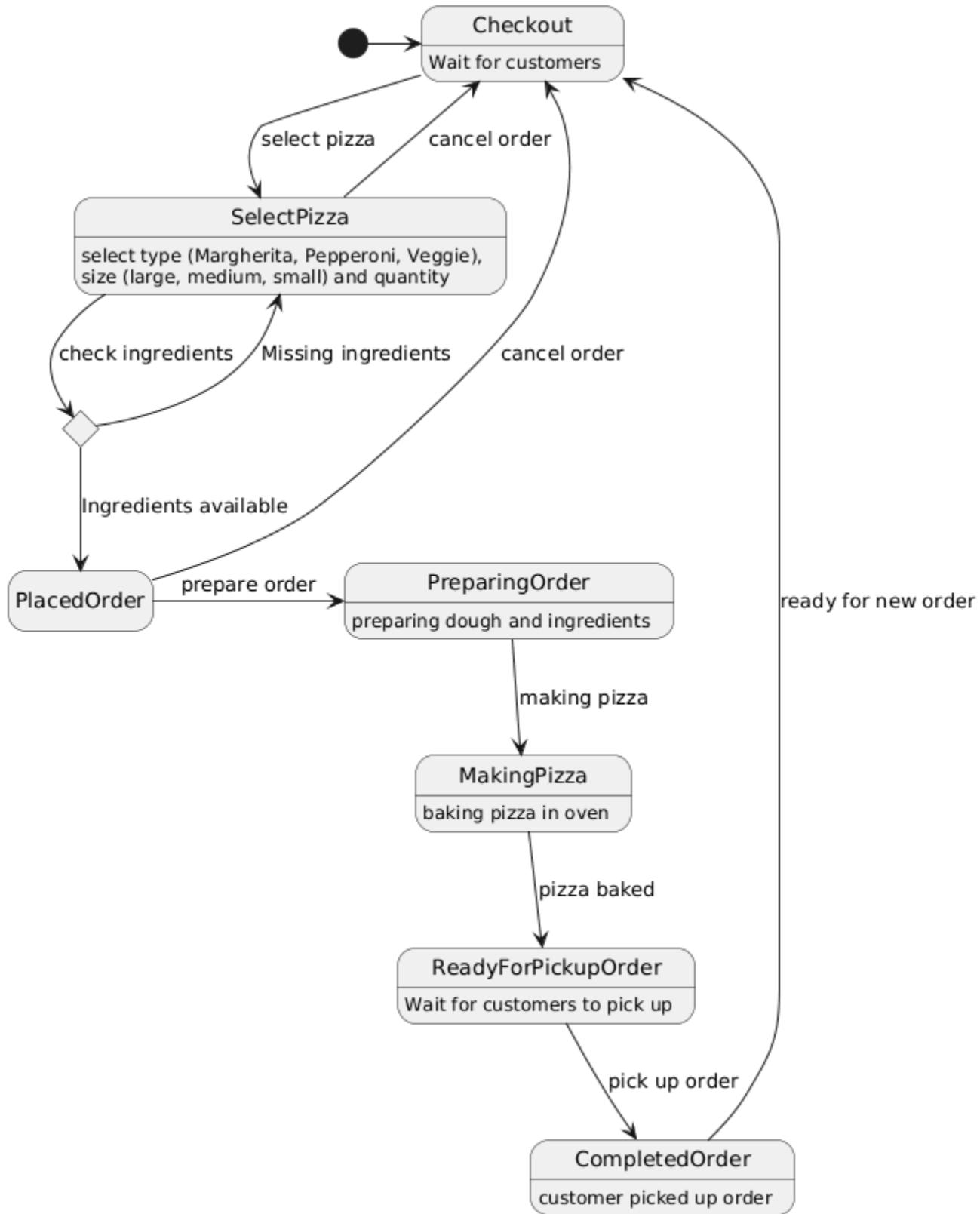


Question 1:

Design and implement a pizza ordering application using the State Machine pattern. The ordering process is shown in the following state machine diagram.



Instead of defining your own state classes, you will use the "state_machine module" introduced in the lecture class. Begin by creating a class named "OrderProcess" to encapsulate the states and transitions that will define the pizza order state machine. Subsequently, create an PizzaStore class. To test your classes, create a main function with a menu to test your classes.

Here's a summary of steps:

1. Create a class named "OrderProcess" that encapsulates the states and transitions defining the pizza order state machine.
2. Create a class named PizzaStore class to incorporate the state_machine module and the OrderProcess class. Besides it should implement a simple inventory system, e.g.
inventory = {Margherita: 10 lbs, Pepperoni: 4 lbs, Veggie: 2 lb}
Recipe size required = {large: 2 lb, medium: 1 lb, small: 0.5 lb}
3. To simulate the probability of baking pizza well, use a randome
4. Create a main function for testing all your implemented classes.