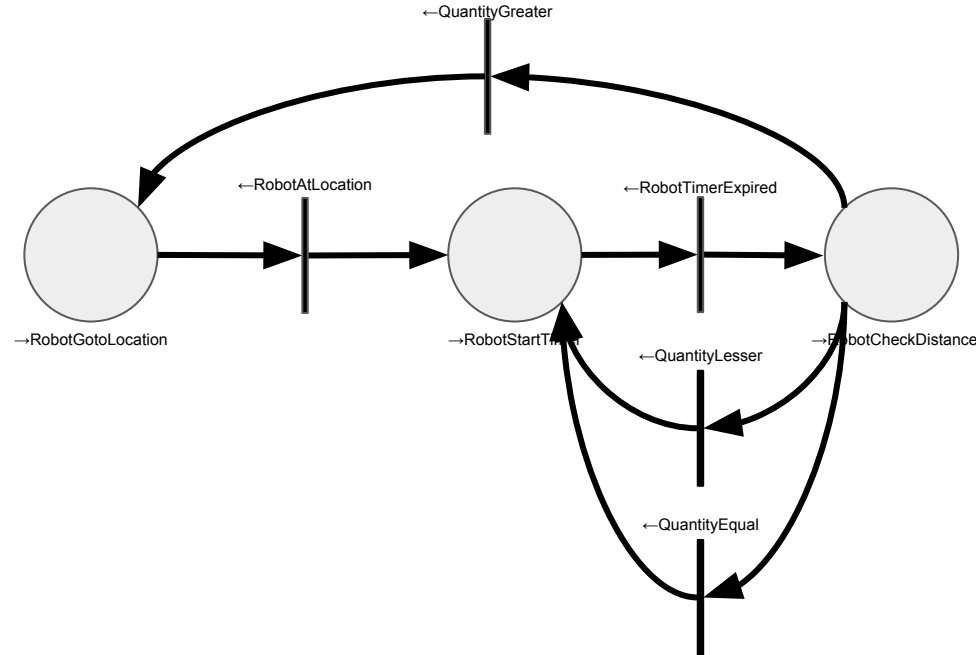


# Tokens

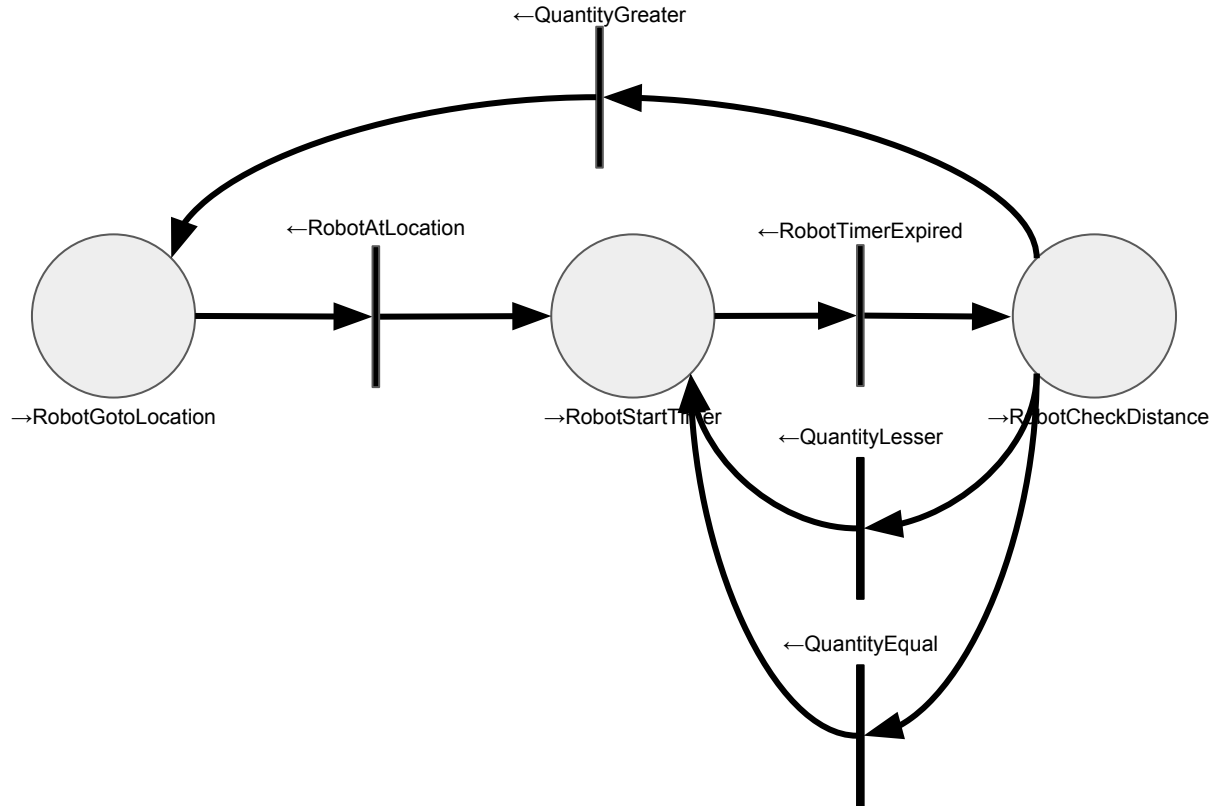
With the addition of **output events** we can send commands to the robot.

With the addition of **input events** we can receive information from the robot.

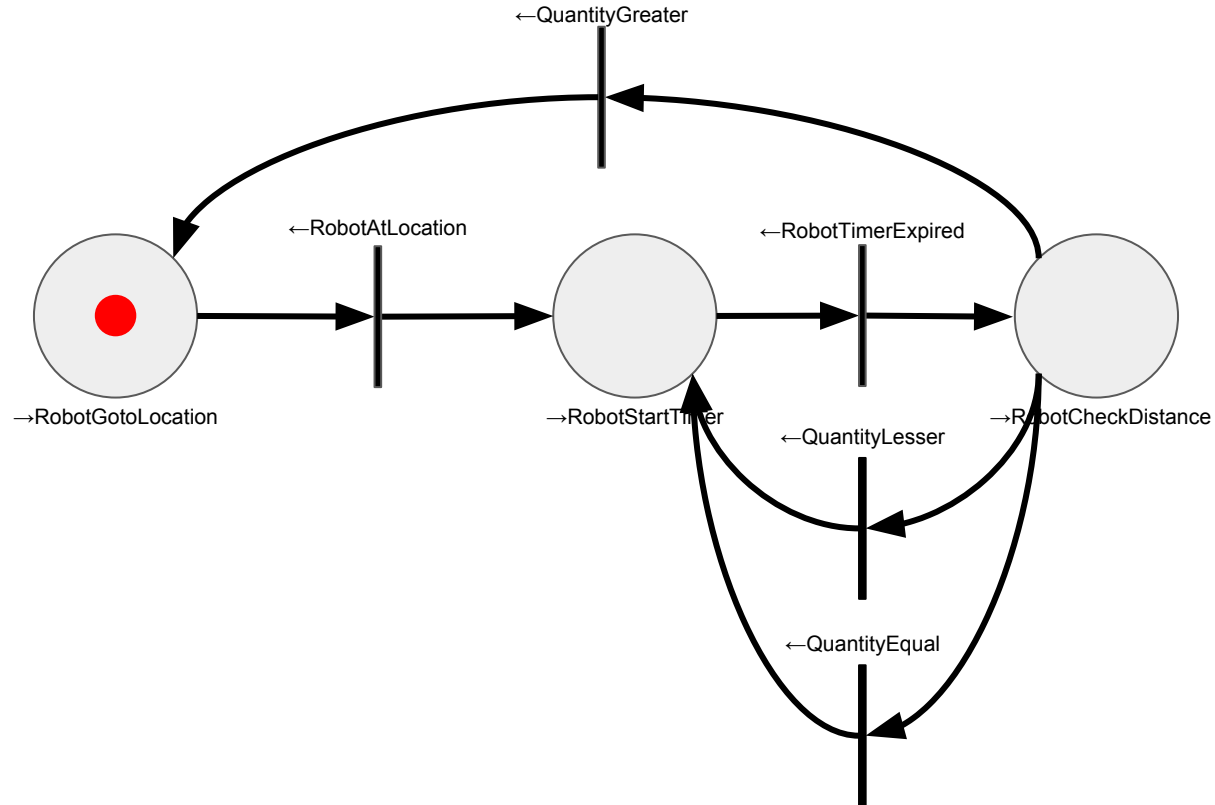
However, the current SPN doesn't have a way to represent the status of a particular robot. Is the robot going to its location, waiting on its timer, or checking its distance?



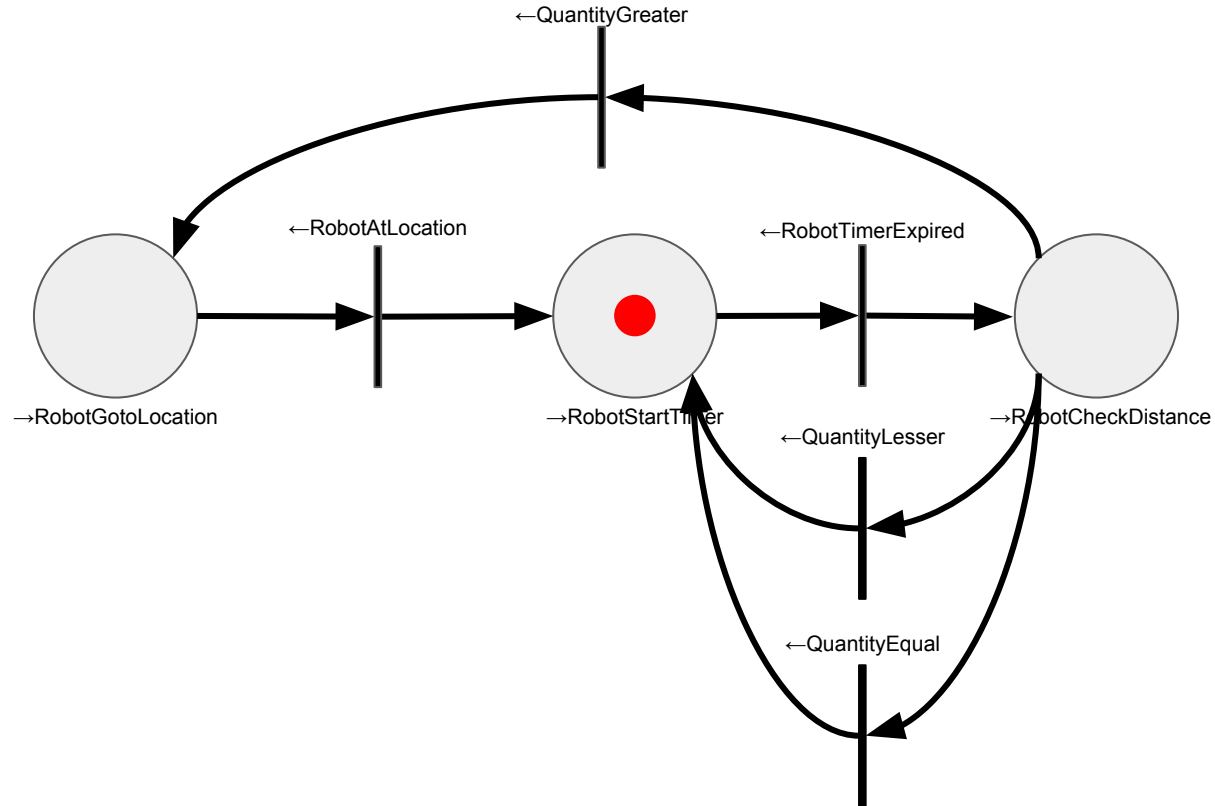
We will accomplish this using “tokens.” We will put a token in a place if the robot’s status corresponds to that place. Tokens only exist in places: not transitions or edges.



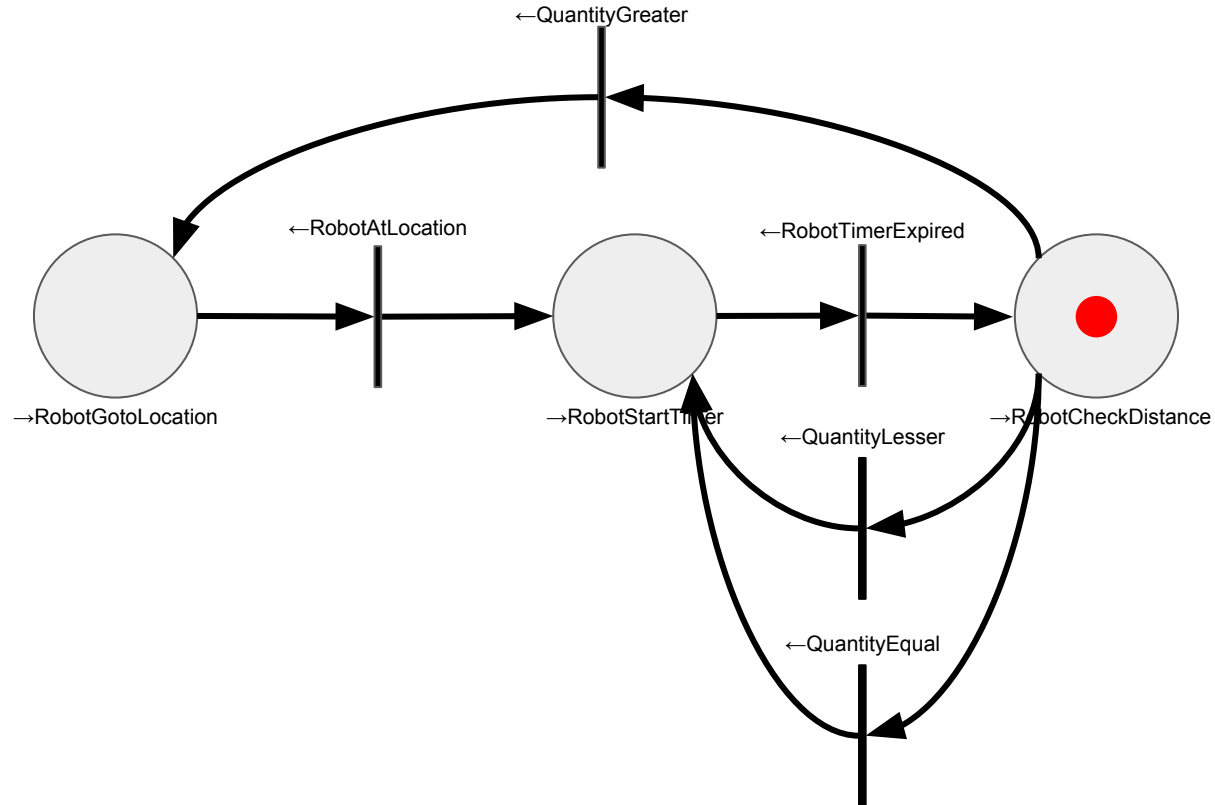
Here the token tells us that the robot is currently moving to its station keeping location.



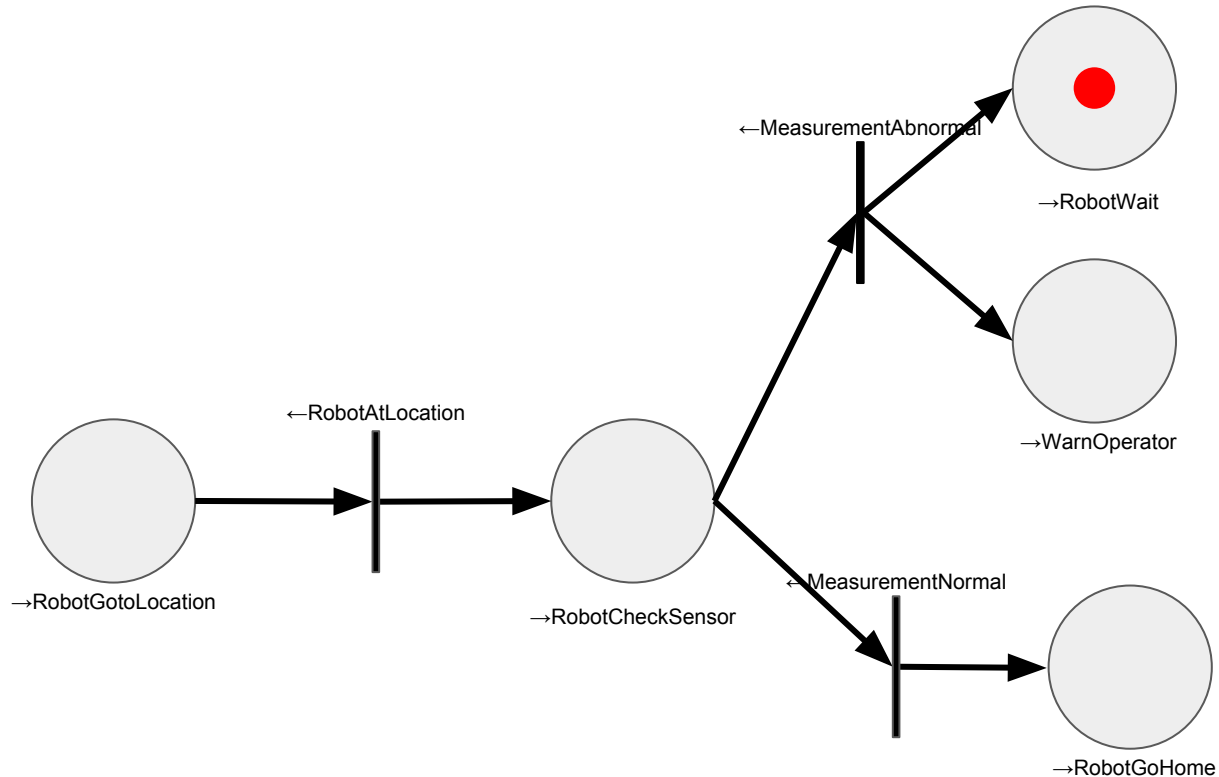
Here the token tells us that the robot is waiting.



Here the token tells us that the robot is checking its distance from the station keep location.



# Quiz 4-1: Identify the status of the robot

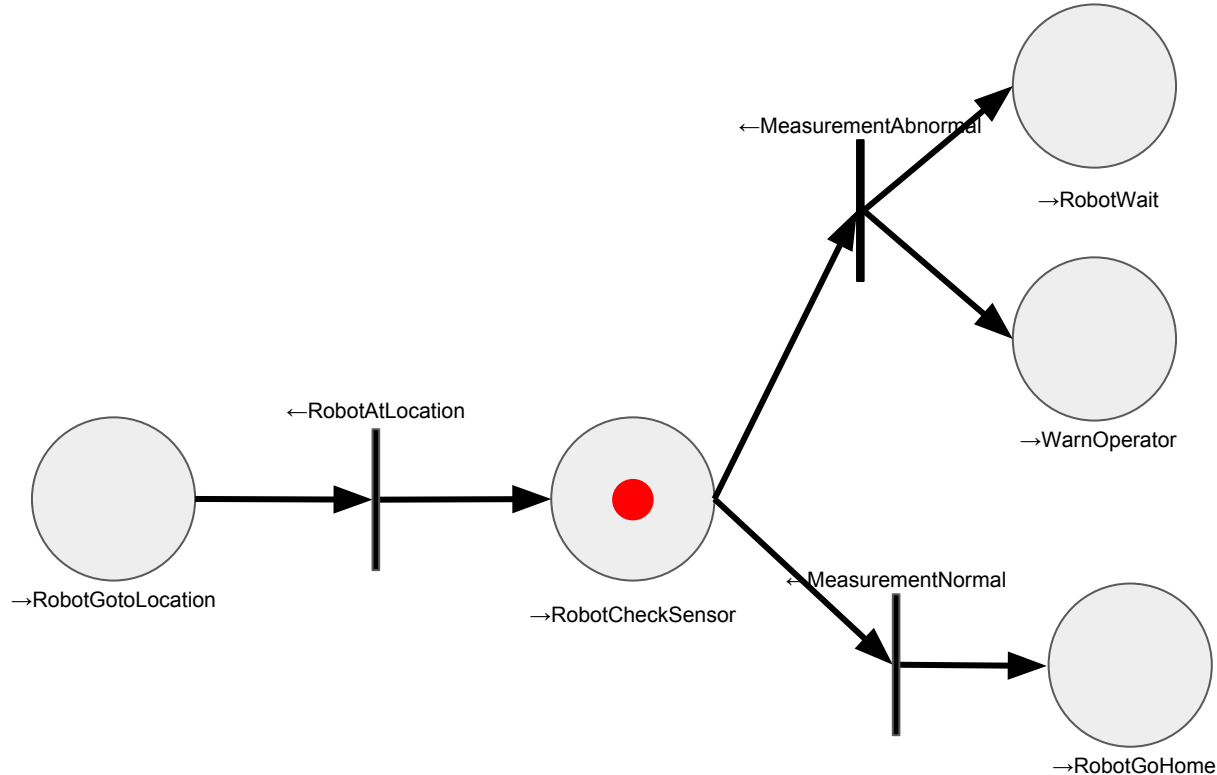


# Quiz 4-1 Solution

Robot is waiting



## Quiz 4-2: Identify the status of the robot



# Quiz 4-2 Solution

Robot is checking sensor  
measurement

With the addition of **output events** we can send commands to the robot.

With the addition of **input events** we can receive information from the robot.

With the addition of **tokens** we can represent the status of the robot.

However, we don't have a method for moving the robot's token between places as its status changes.