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## *Activity Diagram Exercise – Sample Answer*

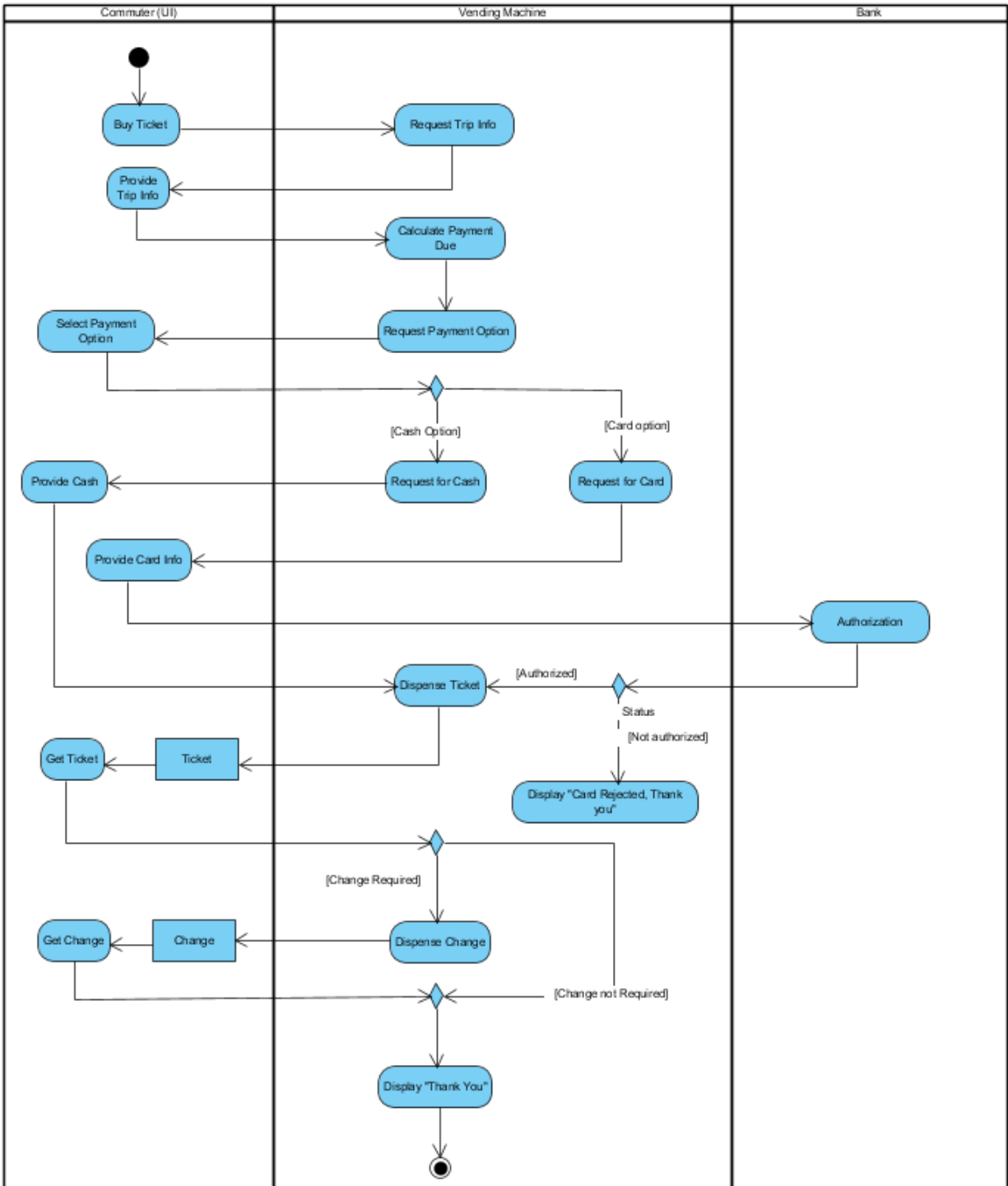
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### **Case 1 – London Tube Commuter**

Activity is started by Commuter who needs to buy a ticket. Ticket vending machine will request trip information from Commuter. This information will include number and type of tickets, e.g. whether it is a monthly pass, one way or round ticket, route number, destination or zone number, etc.

Based on the provided trip info ticket vending machine will calculate payment due and request payment options. Those options include payment by cash, or by credit or debit card. If payment by card was selected by Commuter, another actor, Bank will participate in the activity by authorizing the payment.

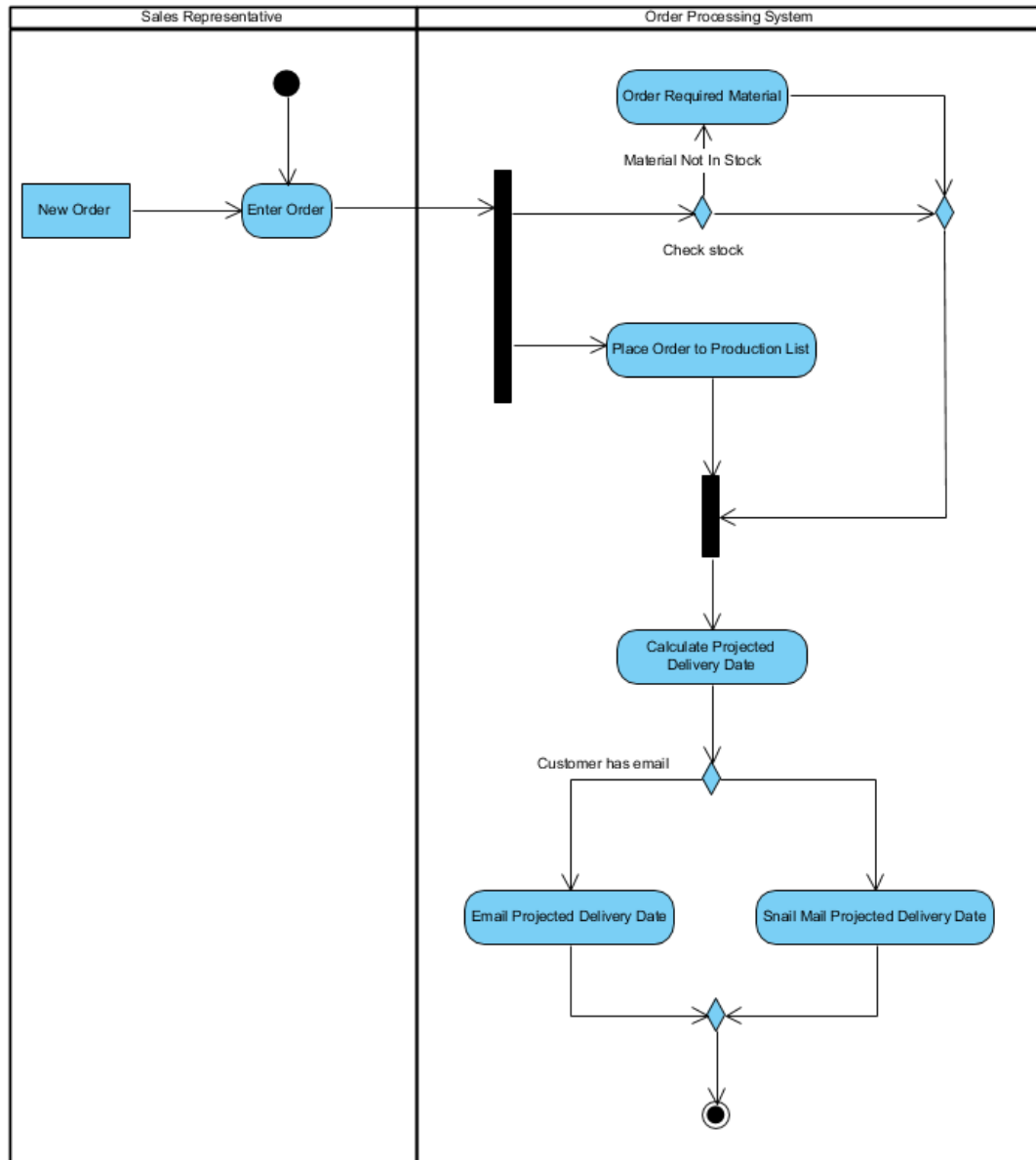
After payment is complete, ticket is dispensed to the Commuter. Cash payment might result in some change due, so the change is dispensed to the Commuter in this case. Ticket vending machine will show some "Thank You" screen at the end of the activity.



## Case 2 – Sales Order

Sales representative enters details of new order. After the sales representative complete entering the order, the system check to ensure that the material for producing the items are in stock. The system will place order on the required material from supplier. In the meantime while the system is checking the

available material and placing order, the system must place order to production list to schedule for production. After that, the system has to notify the customer about the projected delivery date. If customer has e-mail address, e-mail customer giving projected delivery date otherwise generate letter to customer giving projected delivery date.

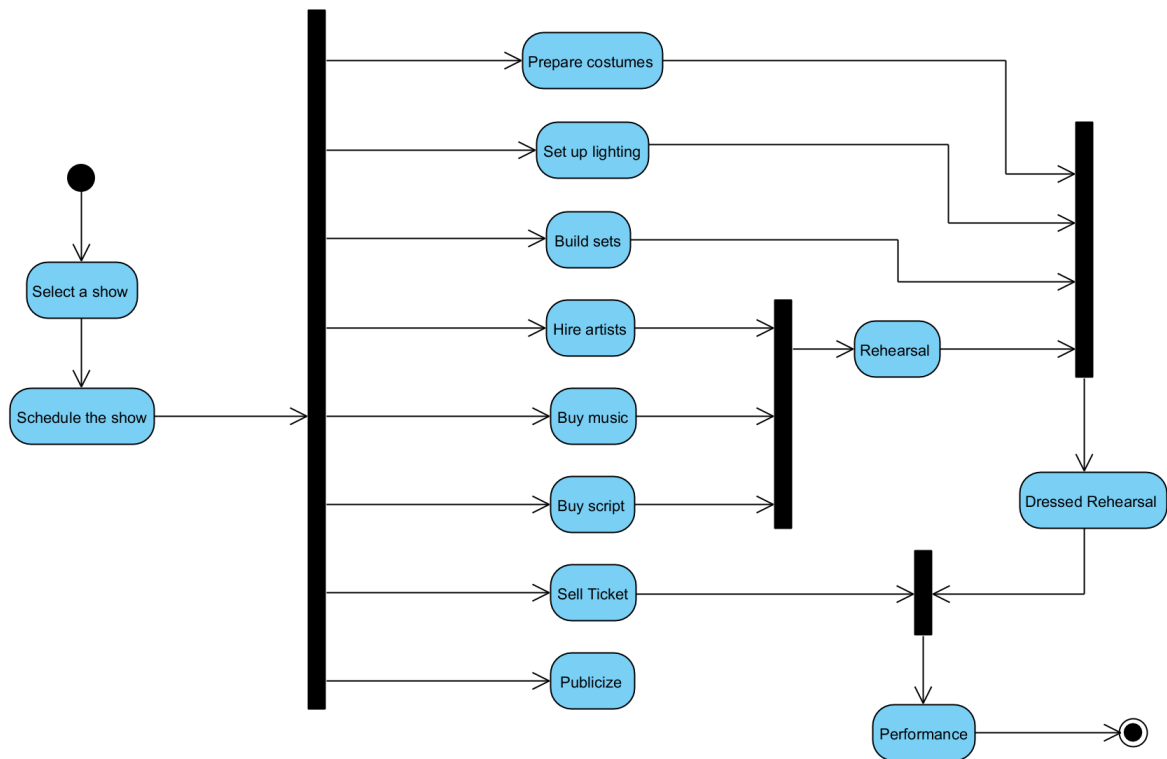


### Case 3 – Planning a Show

For a show to successfully perform, the theatre office plans it carefully following the below activities.

The personnel first select a show to be performed. Next, they will schedule the show. After the show is scheduled, the theatre can begin to publicize it and start to sell the ticket. While the marketing and sale office is publicizing and selling the ticket, other personnel preparing the show concurrently. They buy

scripts, buy music, hire artists, build sets, set up lighting, and prepare costumes. Rehearsal can be taken place after they have the scripts, music, and artists. They also need to perform dressed rehearsal, but it can be done only after they have rehearsed, built sets, set up lighting, and prepared costumes. Finally, they will do the performance after they sold the ticket and done the dressed rehearsal.



#### Case 4 – Article Submission

An author when he wants to submit an article for publication, he has to go through a moderation process. First, the author will upload an article to a system. Next, a moderator will moderate the article, then he will decide to approve or disapprove the article base on the following: -

1. Article in correct format?
2. Author is a registered member?
3. More than 5 articles with similar topic has already been approved within this year?

If any of the above conditions not met, the moderator will disapprove the article. When all conditions are met, only the article is approved. The moderator then will update the article as moderated article. Otherwise, a rejection notification will be sent to the author.

