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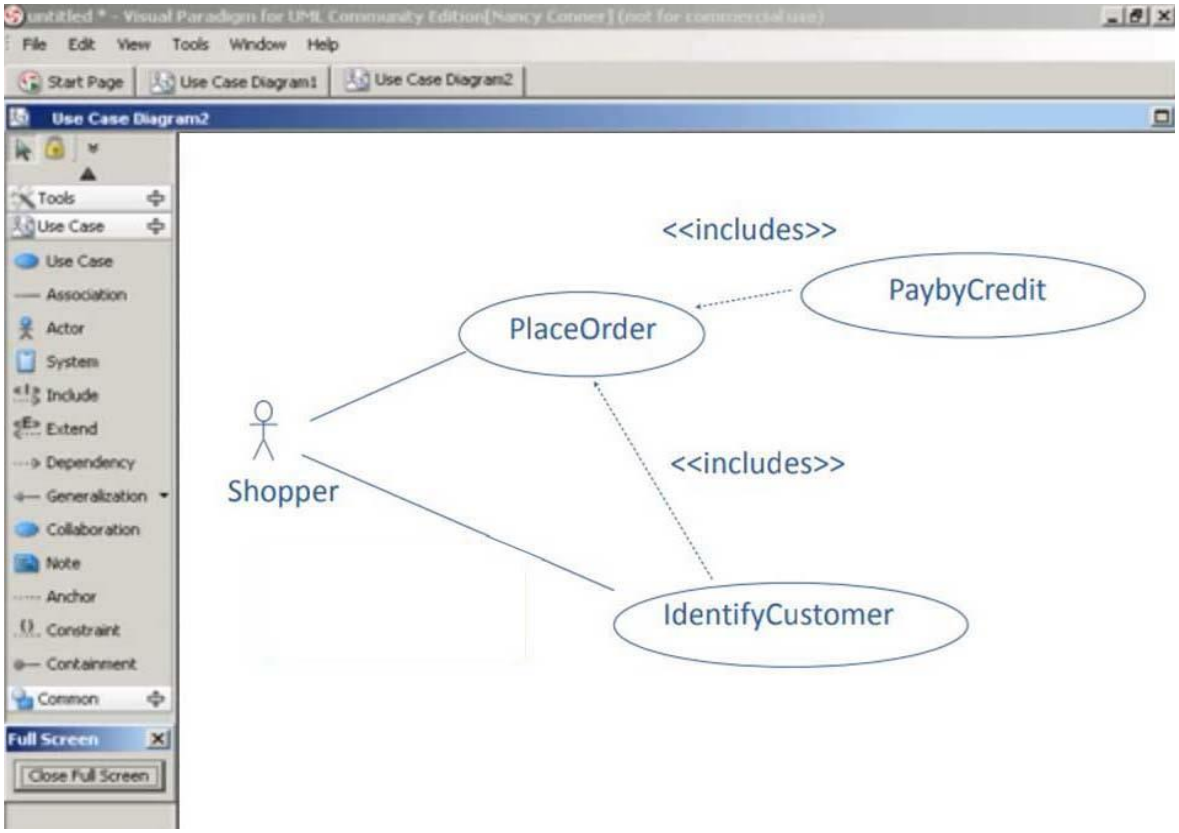
CLASS: BS (SE) 4th
SECTION: B
SUB: SOFTWARE ENGINEERING

ANS NO 1. use case diagram of online pizza ordering system.



USE CASE DIAGRAM:

A use case diagram show the relationship between actor and their instruction with a system.
it does not show the logic of those interactions.

DESCRIBING A USE CASE:

some organization have complex documentation standards for describing a use case.

- the name of the use case, which should summarize its purpose.
- the actor or actors.
- assumption about entry condition.

OUTLINE OF ONLINE PIZZA ORDERING SYSTEM:

- **Name of use case:** online pizza ordering system.
- **actor:** shopper.

FLOW OF EVENTS:

1: shopper connected to the online pizza ordering system.

2: shopper may check the placeOrder then they IdentifyCustomer.

3: customer order some pizza.

4: shopper want receive a payment by Credit because they have only one type of payment system and its PayByCredit.

RELATIONSHIP BETWEEN USE CASE:

<<includes>> : is used for use case that are in the flow of event of the main use case.

ANS NO 2:

Functional requirements describe the system what it will do.

Ex: inputs and outputs.

Non-functional requirements describe the expectations but it is not concerned with the system.

Ex: security.

While drawing up a system requirements specification, an engineer might keep track of the functional and non-functional requirements by ensuring the following:

- The requirements needed to design meets the requirements such as compatibility, portability etc.
- Design the system so that it ensures the safety and security.
- Implementing the system in an efficient manner.

It does not conflict with each other.

The first step is to make the Systems Requirement Document**.**

- The engineer needs to prepare the document depending on this; Non-functional requirements need the natural languag**e** and functional requirements need the structured language to understand better.
- It gives the matrix that shows each requirement related to each other.
- It is very difficult to manage because the functional and non-functional requirements put efforts with each other on track of relationships.
- Non-functional requirements linked with functional requirements to list, identify the system levels that have related each other.
- The engineer needs to prepare the way to link the functional to non-functional to implement it.

EXAMPLE:

The user needs to search for the candidate list for the interview.

It is a functional requirement.

That the search should return all the list of candidates who are attending the interview.

It is a non-functional requirement.

Therefore, it helps the engineer to avoid overlap and that relates to each other.
And it keeps track the relationships between functional and non-functional requirements.

ANS NO 3:

The difficulties that this new policy might cause are : There would definitely be communication gap among the team members . There are numerous benefits which are obtained through agile methods. But because of this arrangement it would be nullified. Error detection and evaluation benefits through pair programming would be completely lost. Since there are sudden changes in the teams, the project development would be slowed down. and if the company decided to close down a number of offices that were specialized in using agile methods they may face a multitude of difficulties. When a company is driven by a close team and is divided they will be unable to have daily meetings, which can cause issues with communication, programming in pairs would not be possible, a communication gab would be created, productivity will slow down due to communication issues, and detecting errors would be quite difficult. These problems can be avoided by creating merging offices together so pair programming and daily communication can be established. If that is not possible, a communication platform consisting of webcams, desktop viewing software, and microphones should be created to allow better communication.

ANS NO 4:

- **Can a customer buy several tickets for the same destination together or must they be bought on at a time?**
- **can customer cancel a request if a mistake has been made?**
- **how should the system respond if an invalid card is input?**
- **what happens when customers try to put their in before selecting destination (as they would an ATM machines)?**

- must the user press the start button again if they wish to buy another ticket to a different destination?

FUNCTION:

- Give customer a rail ticket, and charge credit account accordingly.

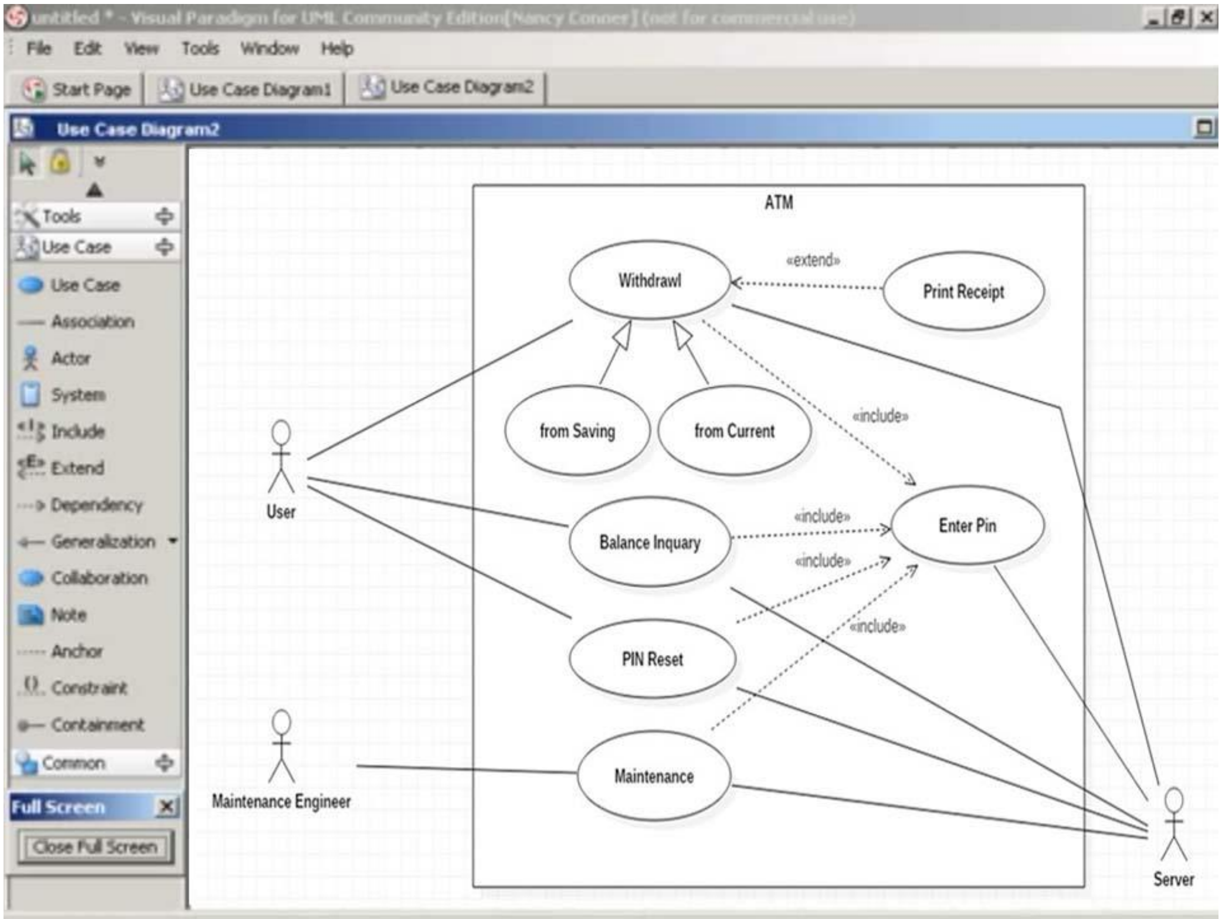
DESCRIPTION:

- Determine customer, destination, calculate, the charge for the trip, and charge the customer the appropriate amount if charge is complete, print the ticket, otherwise, print no ticket, and report error to customer.

OR

- if a user to buy multiple tickets, user doesn't have option.
- if user want to cancel tickets, User doesn't have option.
- User cannot buy tickets with cash.
- there was ambiguity in how potential destinations is activated.

ANS NO 5: ATM Use case diagram.



OUTLINE OF ATM USE CASE:

- **Name of use case:** ATM
- **Actors:** User, Maintenance Engineer, Server.

FLOW EVENT

1.User connected to Bank server.

2. Bank server checks whether User is already authenticated and runs authentication process if necessary.

3.User select a option from list of options.

RELATIONSHIP BETWEEN USE CASE:

<<includes>> : is used for use case that are in the flow of event of the main use case.

<<extends>> : is use for exceptional condition, especially those that can occur at any time.

$ THE END $
$ THANKS $