

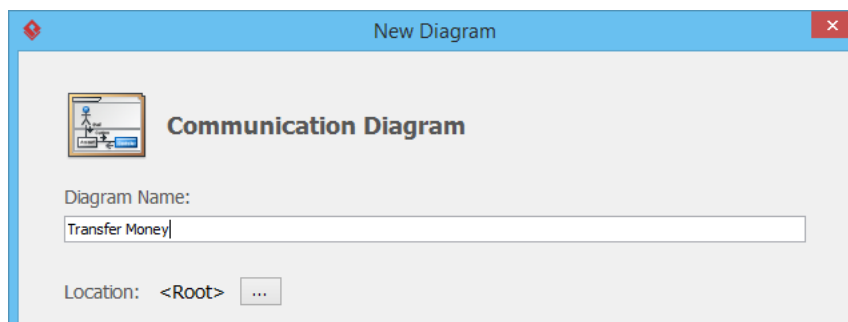


How to Draw UML Communication Diagram?

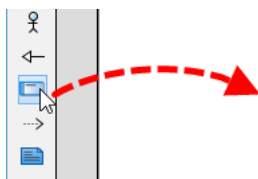
Written Date : March 24, 2010

Drawing a Communication Diagram

1. Create a new project. Name it *Online Banking*.
2. To create a Communication Diagram, select **Diagram > New** from the toolbar.
3. In the **New Diagram** window, select **Communication Diagram** and click **Next**.
4. Enter *Transfer Money* as the diagram name and click **OK** to confirm.

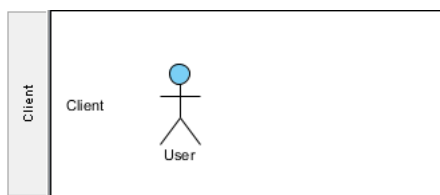


5. Add swimlanes to model the partitioning of the system. Select **Swimlane** from the diagram toolbar and click on the diagram to create it. Name it *Client*.

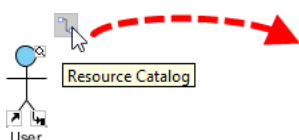


6. Repeat the previous step to create another swimlane, *Main frame*, below swimlane *Client*.

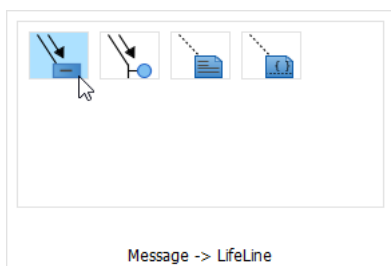
7. Start the story from the actor. Select **Actor** from the diagram toolbar. Click within the swimlane *Client* to create an actor, and name it *User*.



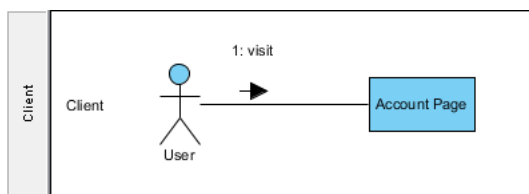
8. The user will operate the system via the account page. To present this, we need to add a lifeline for *Account Page* and link it up with the actor *User*. Move the mouse pointer over actor *User*. Drag out the **Resource Catalog** icon at the top right.



9. Select **Message -> Lifeline** from the Resource Catalog. Name the lifeline *Account Page*.

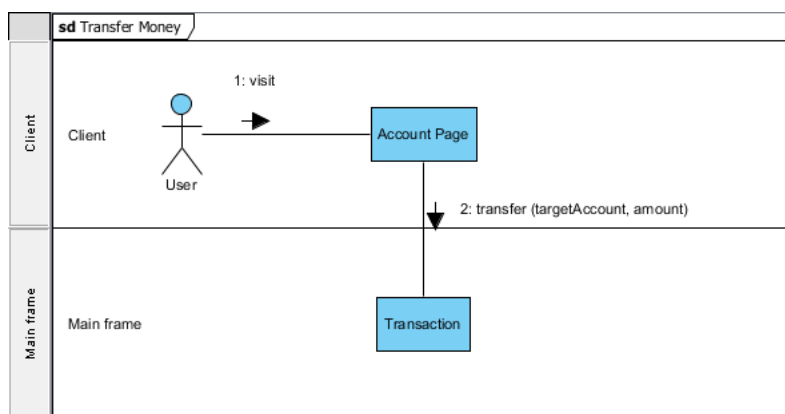


10. We want to model the message passing from user to account page. Double-click on the arrow marked **1**, enter *visit*, then click on the background of the diagram to confirm the change. Note that the number next to the message, **1** in this case, represents the order of message flow within the interaction being modeled.

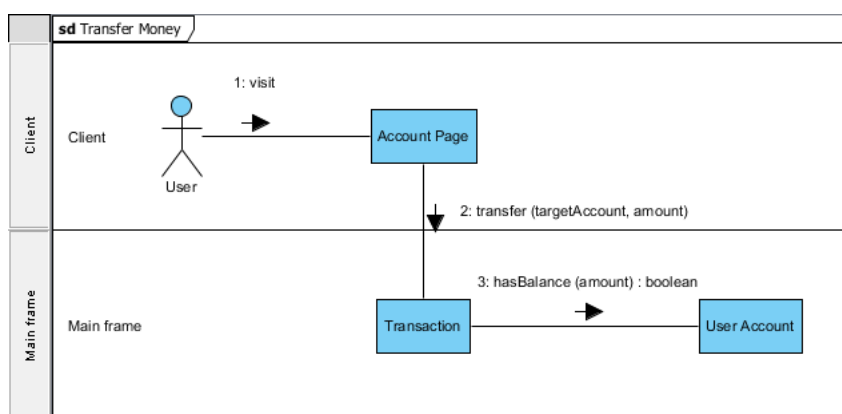


11. The account page will direct the user's request of transferring money to the main frame for validation and execution. Again, move the mouse pointer over lifeline *Account Page* and make use of the Resource Catalog to create lifeline *Transaction* in swimlane *Main frame*.

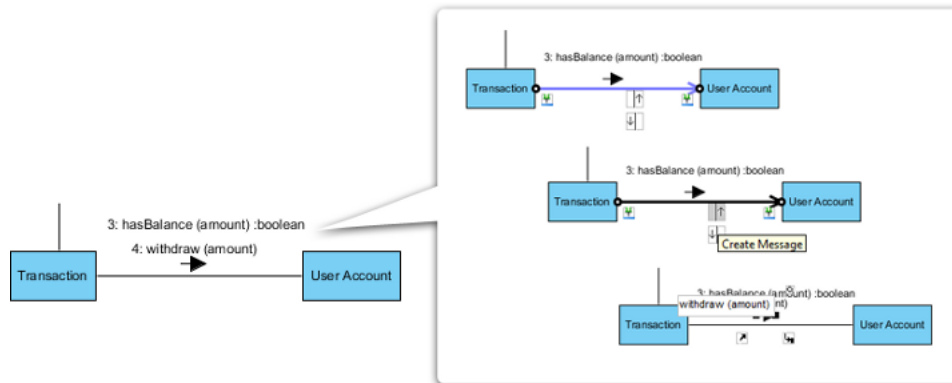
12. Name message **2** as *transfer (targetAccount, amount)*.



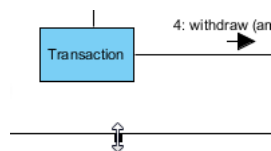
13. The money transfer process involves withdrawing money from the user's account and depositing money into the target account. But before these, we need to make sure the user's account has enough money to undergo the transfer. Make use of the Resource Catalog to create a lifeline *User Account* from lifeline *Transaction*. Name message **3** as *hasBalance (amount) : boolean*.



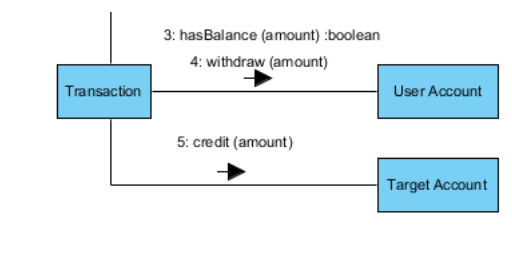
- Once the account balance is checked, we can withdraw money from the user's account. To add the **4th** message between lifeline *Transaction* and *User Account*, move the mouse pointer over the link between *Transaction* and *User Account*, click on the resource icon **Create Message** and name the message as *withdraw (amount)*.



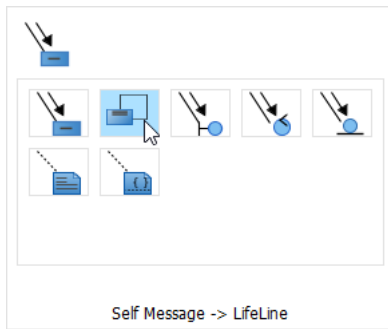
- Before we continue, expand the swimlane *Main frame* first. Select the header of swimlane *Main frame*, click on the resize handler at the bottom of the swimlane, and drag downwards.



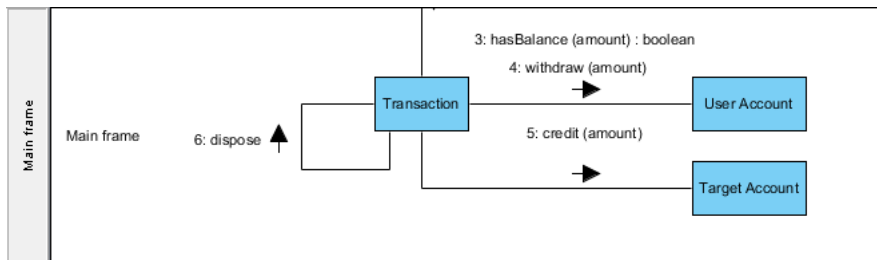
- Create a lifeline *Target Account* from lifeline *Transaction*. Name the **5th** message as *credit (amount)*.



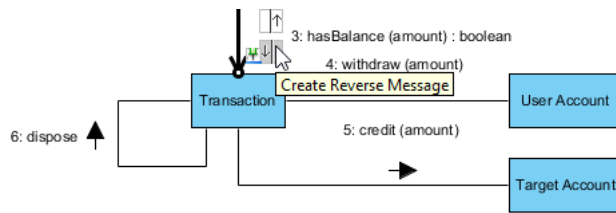
- The transaction is complete. Let's make the lifeline *Transaction* dispose itself. This time, move the mouse pointer over the lifeline *Transaction*, then click once on the **Resource Catalog** icon. Select **Self Message -> Lifeline** from the Resource Catalog.



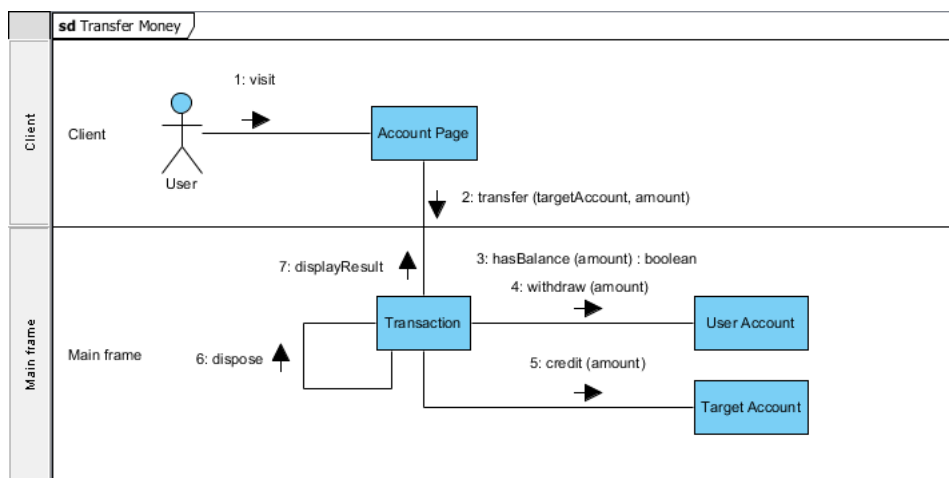
- Name the **6th** message as *dispose()*.



19. Finally, we shall display a message on screen, telling the user that the transaction is complete. Move the mouse pointer over the link between lifeline *Account Page* and *Transaction*. Click on the resource icon **Create Reverse Message**. Name the **7th** message as *displayResult()*.



Finally, the diagram should look like this:



20. Save the project by selecting **Project > Save** from the toolbar. This is the end of the tutorial.

Related Links

- [Full set of UML tools and UML diagrams](#)



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