



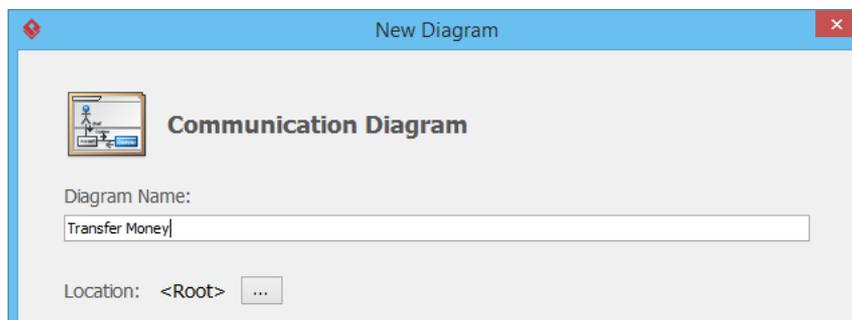
How to Draw UML Communication Diagram?

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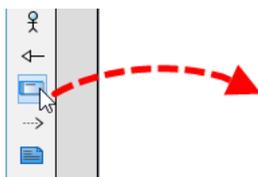
[Communication diagram](#) is a kind of [UML diagram](#) shows interactions between objects, parts or sub-system. UML communication diagram provides similar detail as [UML sequence diagram](#) without time information. This tutorial, we are going to model the money-transfer operation of an online banking system with [Visual Paradigm](#), to see how objects communicate with each others.

Drawing a Communication Diagram

1. Create a new project. Name it as *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 diagram name and click **OK** to confirm.

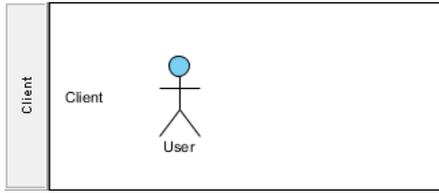


5. Add swimlanes to model the partitioning of system. Select **Swimlane** from diagram toolbar and click on the diagram to create it. Name it as *Client*.



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

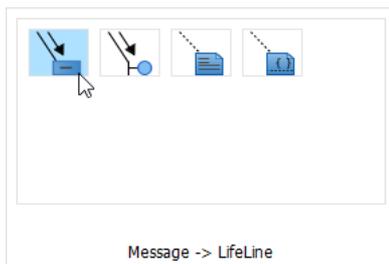
7. Start the story from the actor. Select **Actor** from the diagram toolbar. Click within the swimlane *Client* to create an actor, and name it as *User*.



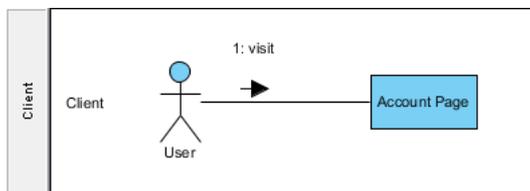
8. User will operate the system via the account page. To present this, we need to add a lifeline for *Account Page*, and link it up with the actor *User*. Move the mouse pointer over actor *User*. Drag out the **Resource Catalog** icon at top right.



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

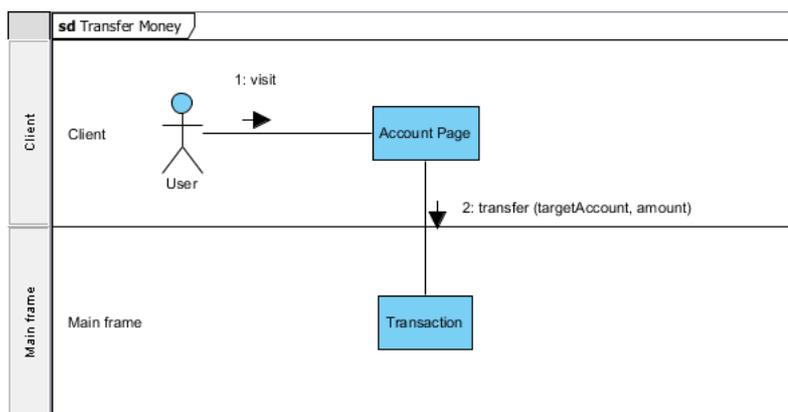


10. We want to model the message pass from user to account page. Double click on the arrow marked **1**, enter *visit*, then click on the background of diagram to confirm the change. Note that the number next to the message, **1** in this case, represent the order of message flow within the interaction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

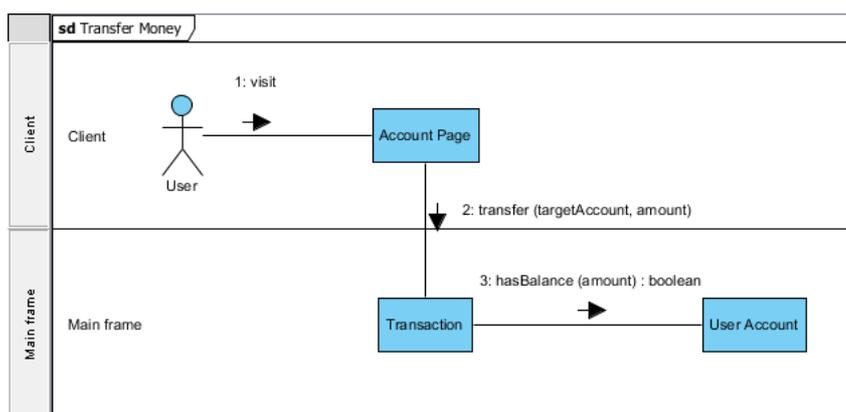


11. The account page will direct user's request of transferring money to the main frame for validation and execution. Again, move the mouse pointer over lifeline *Account Page* and make use of the Resource Catalog to create lifeline *Transaction* in swimlane *Main frame*.

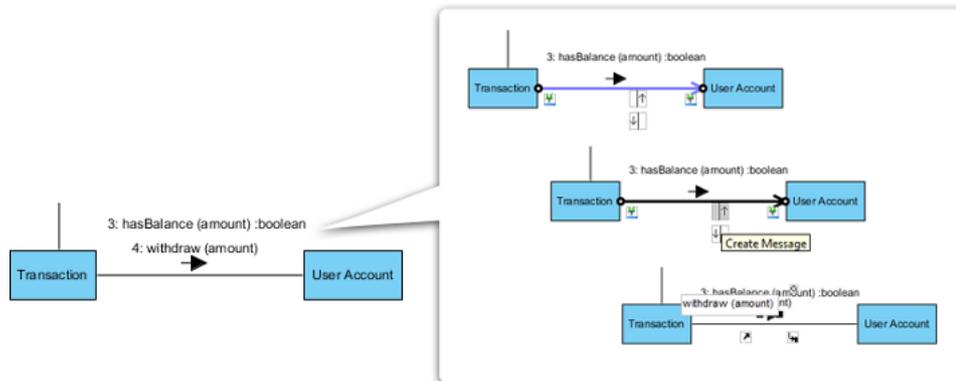
12. Name message **2** as *transfer (targetAccount, amount)*.



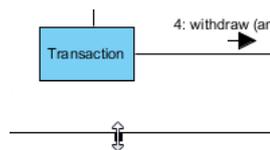
13. The money transferral process involve withdrawing money from user's account, and depositing money to target account. But before these, we need to make sure user's account has enough money to undergoing the transferral. Make use of the Resource Catalog to create a lifeline *User Account* from lifeline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



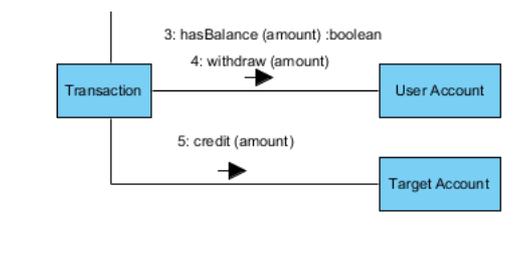
- Once the account balance is checked, we can withdraw money from user's account. To add the **4th** message between lifeline *Transaction* and *User Account*, move the mouse pointer over the link between *Transaction* and *User Account*, click on the resource icon **Create Message** and name the message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



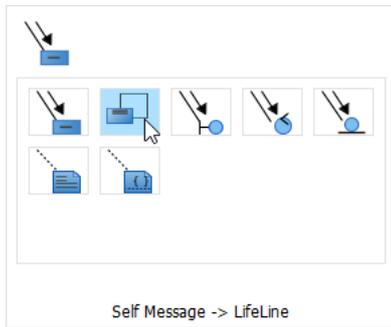
- Before we continue, expand the swimlane *Main frame* first. Select the header of swimlane *Main frame*, press on the resize handler at the bottom of swimlane and drag downwards.



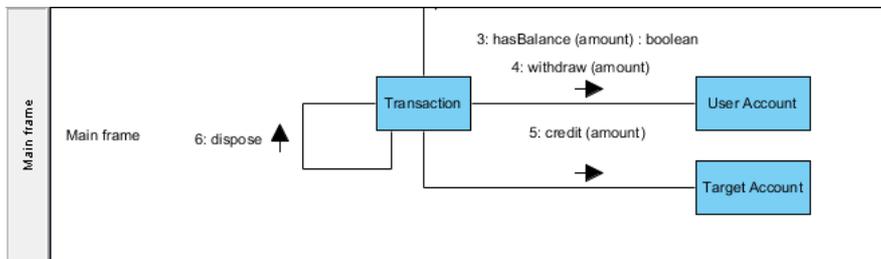
- Create a lifeline *Target Account* from lifeline *Transaction*. Name the **5th** message as *credit (amount)*.



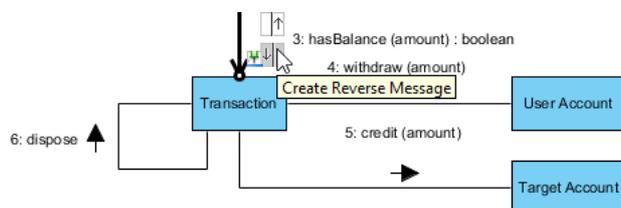
- The transaction is complete. Let's make the lifeline *Transaction* dispose itself. This time, move the mouse pointer over the lifeline *Transaction*, then click once on the **Resource Catalog** icon. Select **Self Message -> LifeLine** from the Resource Catalog.



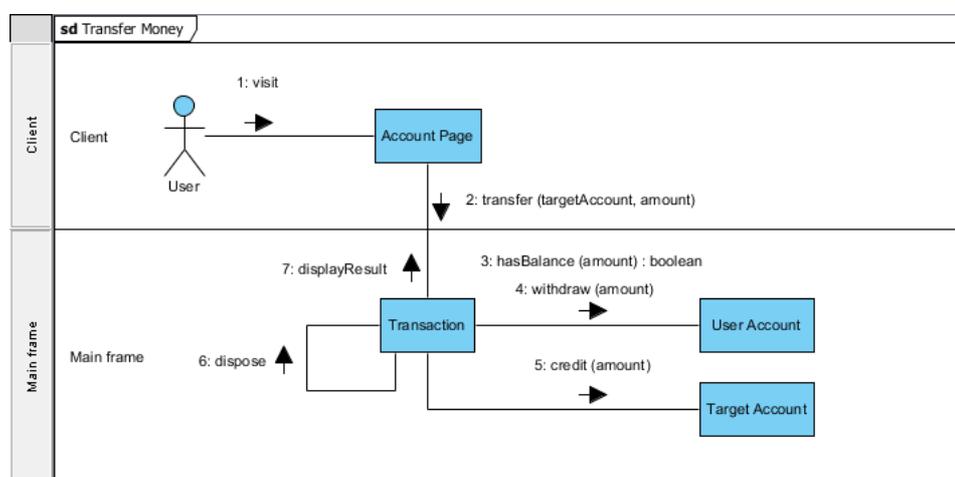
- Name the **6th** message as *dispose()*.



19. Finally, we shall display a message on screen, telling user that 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](#)



[Visual Paradigm home page](https://www.visual-paradigm.com/)
(<https://www.visual-paradigm.com/>)

[Visual Paradigm tutorials](https://www.visual-paradigm.com/tutorials/)
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