OOP design diagrams

Basic diagrams that we are gonna discuss here is
- use case diagram
- sequence diagram
- activity diagram
- communication diagram
- object diagram
- communication diagram
- class diagram

Sequence diagrams

The type of diagrams that describe the interaction between system objects as a SEQUENCE of messages passed between the objects. It describes in what order a group of objects work together.

The focus is less on messages themselves and more on the order in which messages occur; nevertheless, most sequence diagrams will communicate what messages are sent between a system's objects as well as the order in which they occur.

One of the primary uses of sequence diagrams is in the transition from requirements expressed as use cases to the next and more formal level of refinement.Use cases are often refined into one or more sequence diagrams.

Messages - message that is being sent to the receiving object represents an operation/method that the receiving object's class implements. Sender wants the receiver to do some action
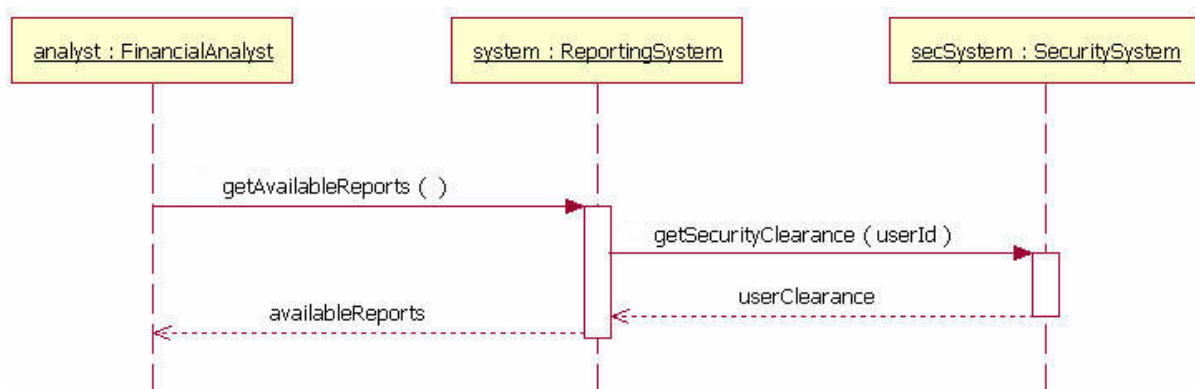
This example shows two synchronous messages (getAvailableReports() and getSecurityClearance()) and two return messages (availableReports and userClearance).
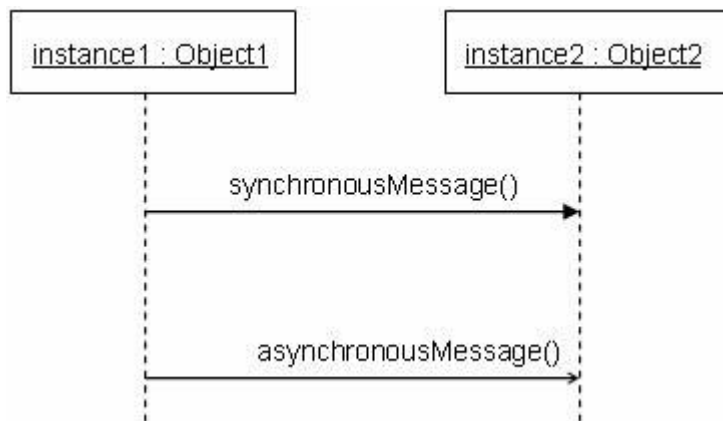
This example show us the difference between sync and async messages

References
- **https://developer.ibm.com/articles/the-sequence-diagram/**
- https://www.youtube.com/watch?v=WnMQ8HlmeXc
- https://www.youtube.com/watch?v=m8Icp_Cid5o