

MAWLANA BHASHANI SCIENCE AND TECHNOLOGY
UNIVERSITY



DEPARTMENT OF ICT

Lab Report No : 03

Course Code : ICT-3210

Course Title : Software Engineering Lab

**Lab Report name : Sequence diagram of Online Credit Fee
Payment System Project**

Submitted by

Md. Faruk Hosen

ID : IT-17035

Session : 2016-2017

Year : 3rd Semester : 2nd

Submitted to

Mr. Tanvir Rahman

Lecturer,

Department of ICT, MBSTU

Santosh, Tangail-1902

Date of Submission : 31 October 2020

Sequence diagram :

A sequence diagram simply depicts interaction between objects in a sequential order i.e. the order in which these interactions take place. We can also use the terms event diagrams or event scenarios to refer to a sequence diagram. Sequence diagrams describe how and in what order the objects in a system function. These diagrams are widely used by businessmen and software developers to document and understand requirements for new and existing systems.

Sequence diagram is the most common kind of interaction diagram, which focuses on the message interchange between a number of lifelines.

The following nodes and edges are typically drawn in a UML sequence diagram: lifeline, execution specification, message, combined fragment, interaction use, state invariant, continuation, destruction occurrence.

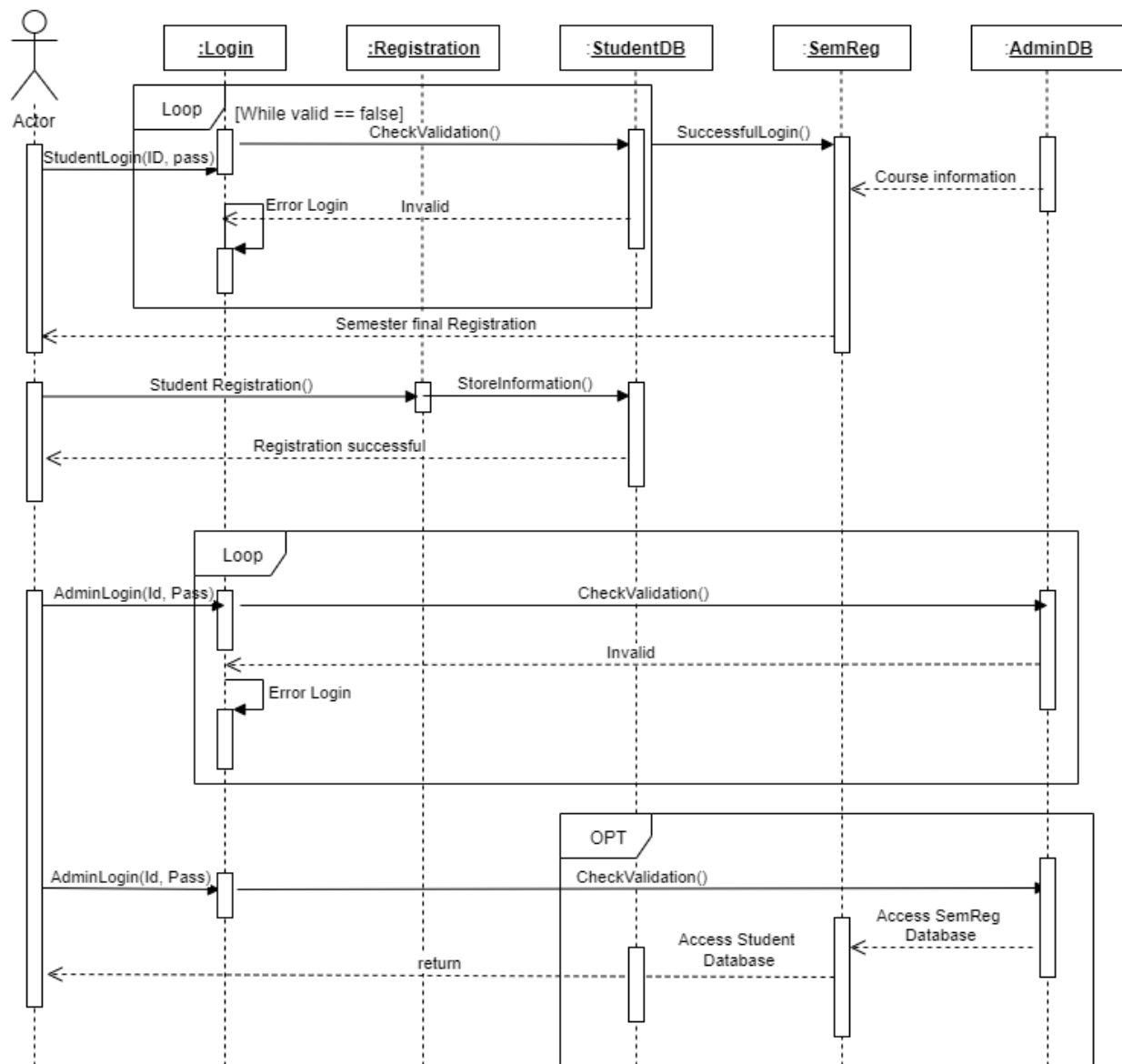
A sequence diagram is a good way to visualize and validate various runtime scenarios. These can help to predict how a system will behave and to discover responsibilities a class may need to have in the process of modeling a new system.

Uses of sequence diagrams :

- i. Used to model and visualise the logic behind a sophisticated function, operation or procedure
- ii. They are also used to show details of UML use case diagrams.
- iii. Used to understand the detailed functionality of current or future systems.
- iv. Visualise how messages and tasks move between objects or components in a system .

According to the story, the sequence diagram is shown below:

Sequence diagram :



Conclusion :

From this lab, I learn about sequence diagram. Sequence Diagram is an interaction diagram that details how operations are carried out -- what messages are sent and when. Sequence diagrams are organized according to time. If anyone see the sequence diagram, then he will easily understand the runtime scenarios. When I face problem, I solve these problem by discussing with the group members.