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Division B

SE LAB

Assignment 5

Online Library Management System

**Behavioural Model for Target System
Draw a Sequence diagram.**

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SE Lab Assignment: 5

5. To Develop a Behavioural Model For Target System Draw a Sequence Diagram.

* Online Library Management System

UML Sequence Diagram are interaction diagram that detail how operations are carried out. They capture the interaction between objects in context of a Collaboration.

Model high level interaction between active objects in a system.

Model the interaction b/w object instances within a collaboration that realizes a use case.

* Sequence Diagram Notation

1) Actor



A type of role played by an entity that interacts with the subject.
Represents roles played by human users, external hardware or other subjects.

2 Lifeline

Lifeline

A lifeline represents an individual participant in the interaction.

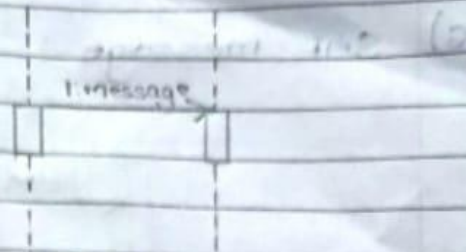
3) Activations

Lifeline

A thin rectangle on lifeline represents the period during which an element is performing an operation.

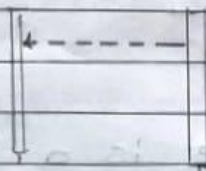
The top & the bottom of the rectangle are aligned with the initiation & the completion time respectively.

4) Call Message



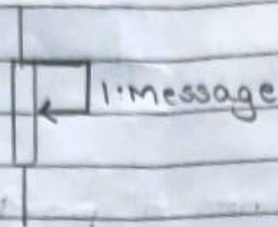
- A message defines a particular communication between lifelines of an interaction.
- Call Message is a kind of message that represents an invocation of operation of target lifeline.

5) Return Message



Return message is a kind of message that represents the pass of information back to the caller of a corresponded former message.

6) SELF message :



SELF Message is a kind of message that represents the invocation of message of the same lifeline.

7) Recursive message

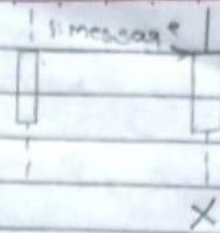


Recursive message is a kind of message that represents the invocation of message of the same timeline. It's target point to an activation on top of the activation where the message was invoked from.

8) Create message

Create message is a kind of message that represent the initiation of lifeline.

9 Destroy message



Destroy Message is a kind of message that represent the request or destroying the lifecycle of target lifeline

10 Duration message

→ Duration message shows the distance between two time instants for a message invocation.

Conclusion :

The ~~library~~ library management system allows user to enquire about a particular book or login/register their details, and updating the database. The sequence diagram for the target system is drawn.

Sequence diagram :

