

Assignment 6

Title:

Prepare And Implement Sequence Model.

Problem Statement:

- Prepare Sequence Model Identify at least 5 major scenarios (sequence flow) for your system.
- Draw Sequence Diagram for every scenario by using advanced notations using UML2.0 Implement these scenarios by taking reference of design model implementation using suitable object-oriented language.

Objective:

- To study and use of communication.
- Draw sequence diagram
- To implement sequence diagram.

Theory:

Sequence Diagrams:

A sequence diagram is a Unified Modeling Language (UML) diagram that illustrates the sequence of messages between objects in an interaction. a sequence diagram consists of a group of objects that are represented by lifelines, and the messages that they exchange over time during the interaction. A sequence diagram shows the sequence of messages passed between objects. Sequence diagrams can also show the control structures between objects.

For example, lifelines in a sequence diagram for a banking scenario can represent a customer, bank teller, or bank manager. The communication between the customer, teller, and manager are represented by messages passed between them. The sequence diagram shows the objects and the messages between the objects.

The sequence diagram consists of following elements:

- Interaction frames

In sequence diagrams and communication diagrams, an interaction frame provides a context or boundary to the diagram in which you create diagram elements, such as lifelines or messages, and in which you observe behavior.

- Lifelines in UML diagrams

In UML diagrams, such as sequence or communication diagrams, lifelines represent the objects that participate in an interaction. For example, in a banking scenario, lifelines can represent objects such as a bank system or customer. Each instance in an interaction is represented by a lifeline.

- Messages in UML diagrams

A message is an element in a Unified Modeling Language (UML) diagram that defines a specific kind of communication between instances in an interaction. A message conveys information from one instance, which is represented by a lifeline, to another instance in an interaction.

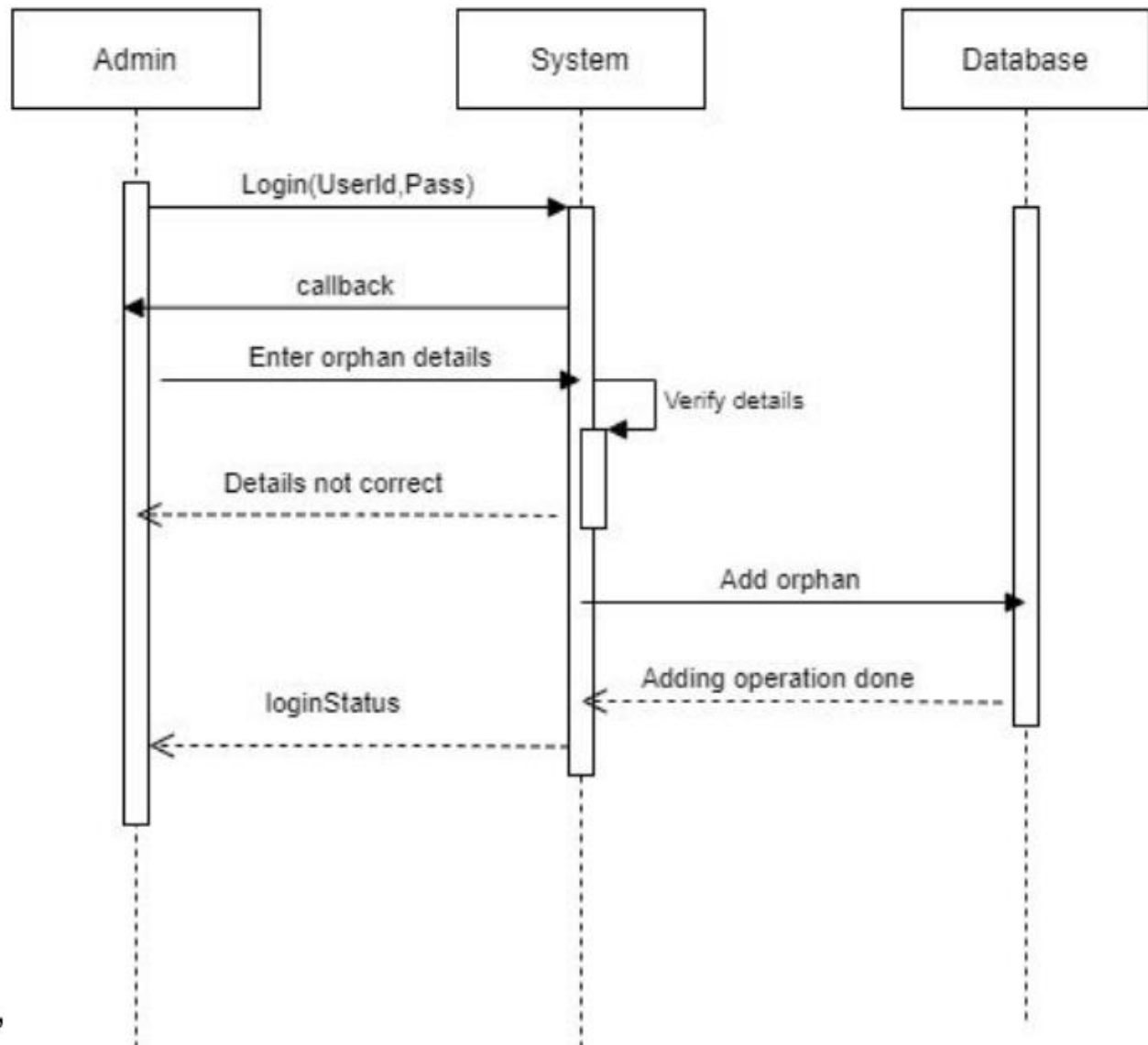
- Combined fragments in sequence diagrams

In sequence diagrams, combined fragments are logical groupings, represented by a rectangle, which contain the conditional structures that affect the flow of messages. A combined fragment contains interaction operands and is defined by the interaction operator.

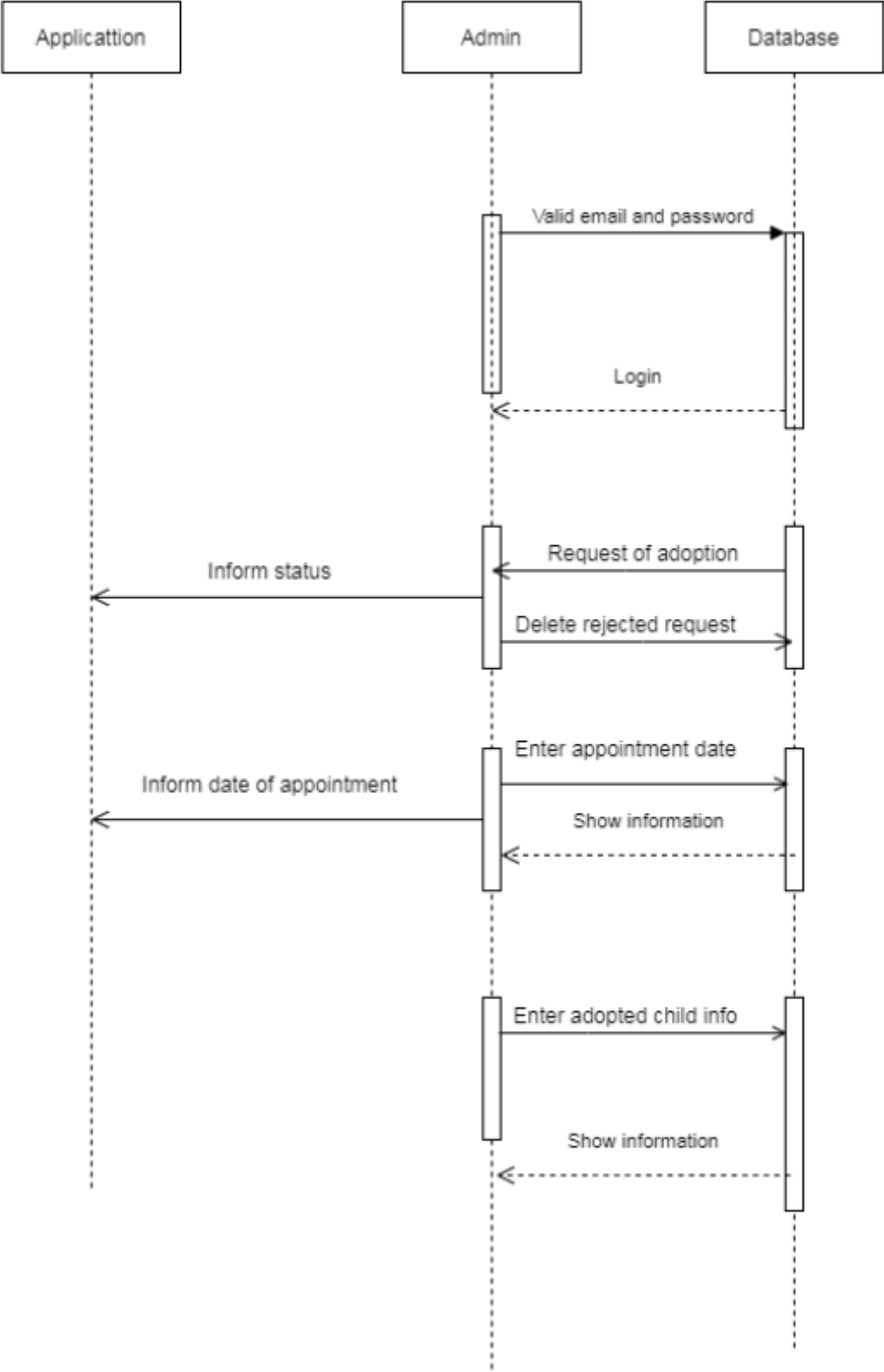
- Interaction uses in sequence diagrams

In sequence diagrams, interaction uses enable you to reference other existing interactions. You can construct a complete and complex sequence from smaller simpler interactions.

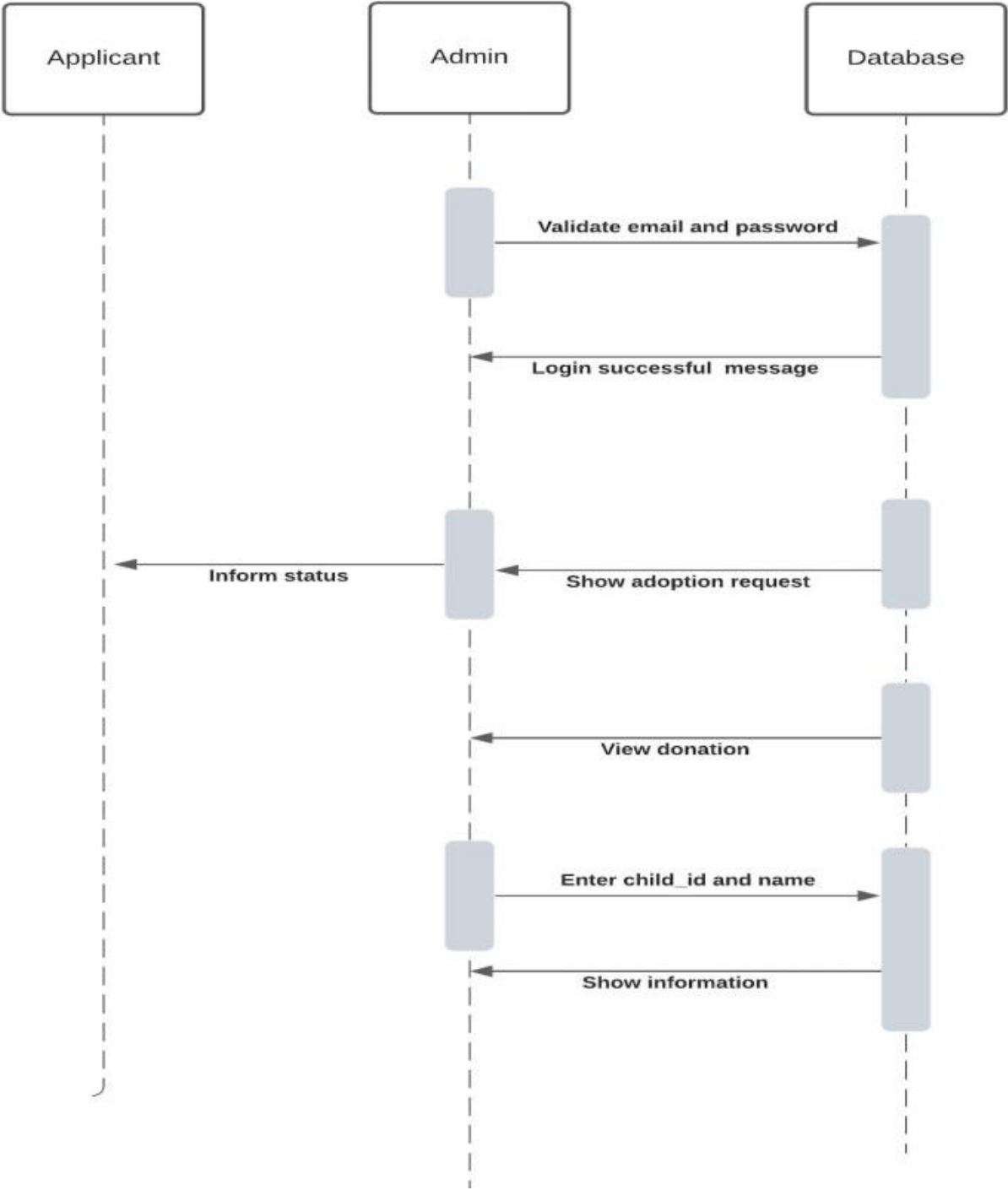
1. Register a new child



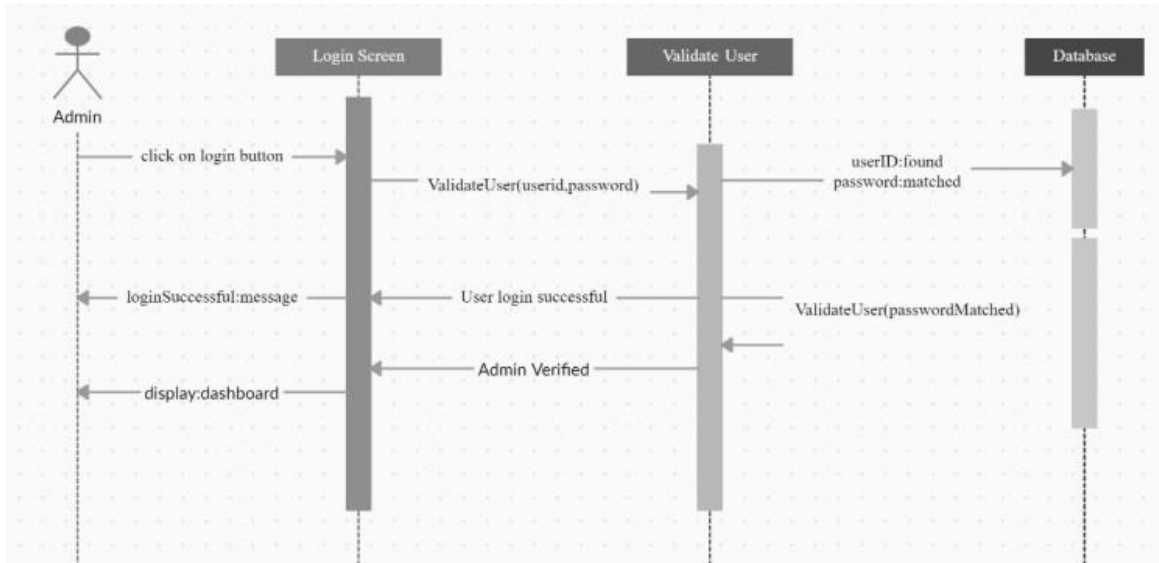
2. Adoption



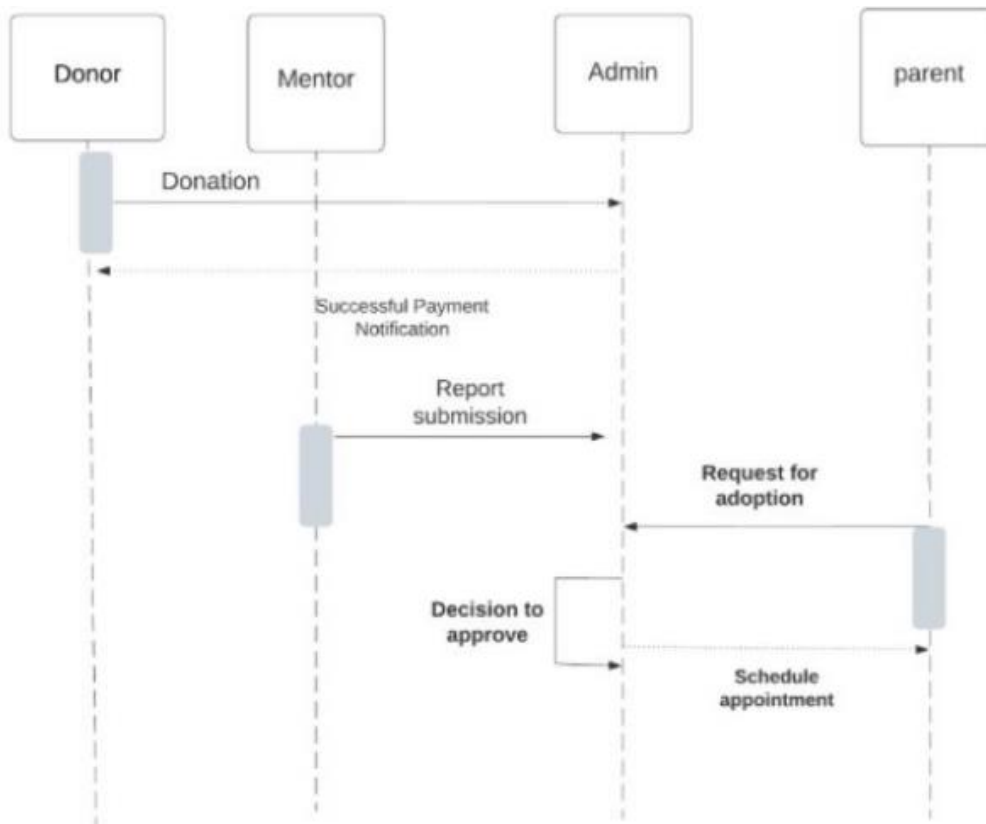
3. Admin :



4. Login



5. System :



Conclusion:

Thus we have studied and implemented sequence model.