

EXPERIMENT–6

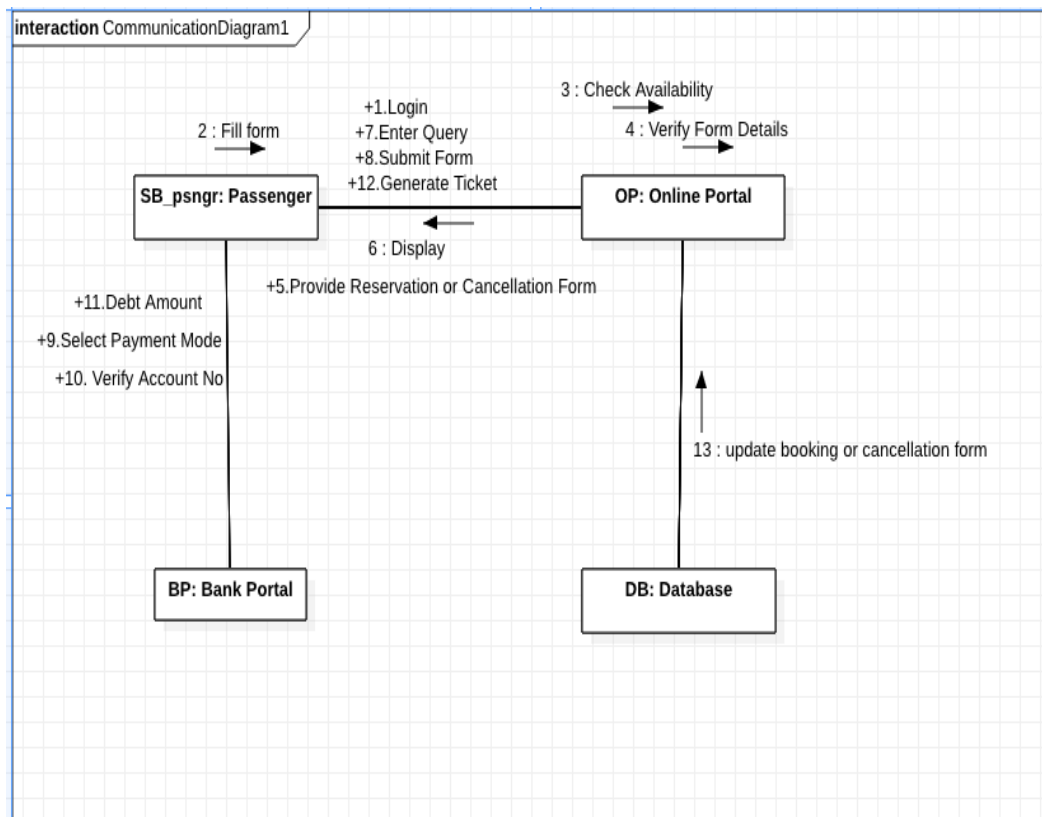
Objective: To create collaboration diagram for railway management system

Hardware/Software Requirements: Star UML

Theory: A collaboration diagram, also called a communication diagram or interaction diagram, is an illustration of the relationships and interactions among software objects in the Unified Modeling Language (UML). The concept is more than a decade old although it has been refined as modeling paradigms have evolved. A collaboration diagram resembles a flowchart that portrays the roles, functionality and behavior of individual objects as well as the overall operation of the system in real time. Objects are shown as rectangles with naming labels inside. These labels are preceded by colons and may be underlined. The relationships between the objects are shown as lines connecting the rectangles. The messages between objects are shown as arrows connecting the relevant rectangles along with labels that define the message sequencing. Collaboration diagrams are best suited to the portrayal of simple interactions among relatively small numbers of objects. As the number of objects and messages grows, a collaboration diagram can become difficult to read.

A. Railway Management System

Diagram:



Description:

1. Passenger and Online Portal

- i. The passenger logs into the online portal.
- ii. The passenger fills form.
- iii. The passenger submits the form.
- iv. The online portal checks the availability of the train.
- v. The online portal verifies the form details of the passenger.
- vi. The passenger enters the query.
- vii. The online portal provides reservation or cancellation form.
- viii. The online portal generates ticket.
- ix. The online portal displays it to the passenger.

2. Passenger and Bank Portal

- i. The passenger selects the payment mode.
- ii. The bank portal debits the amount to be paid.
- iii. The bank portal verifies the account no.

3. Online Portal and Database

- i. The database updates booking or cancellation form.