DESIGN DOCUMENT

5.1 Introduction

A –software –design –document is a written –document of a software –product, that a software designer writes in order to give a software development team overall guidance to the architecture of the software –project. The report is on system designing which deals with planning the development of information systems through understanding & specifying in detail what a system should do & how the components of the system should be implemented & work together.

This report –covers five sections .Section 2 discusses –about the activity– diagram of the system .Section 3 illustrates about the class diagram of the system & sequence diagram is discussed in section 4.

5.2 Activity Diagram of Use Cases

The activity diagram shows the activities involved in a process or in data processing.

5.2.1 For Registration & Login

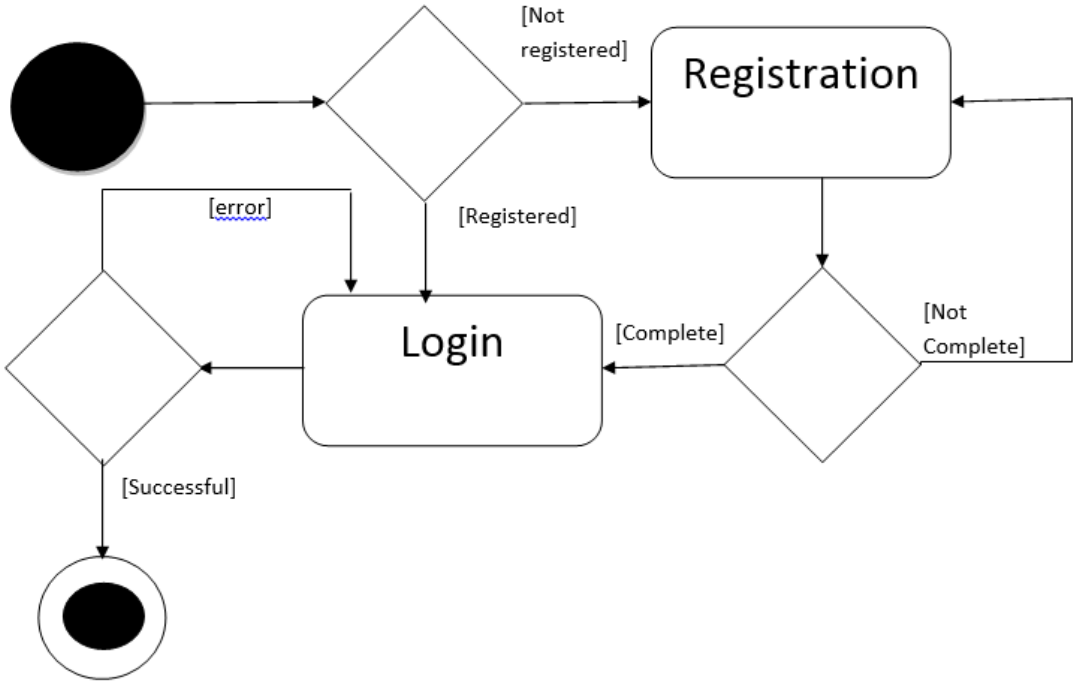

Fig 5.1:- Activity diagram for registration & login

5.2.2 For Viewing Information

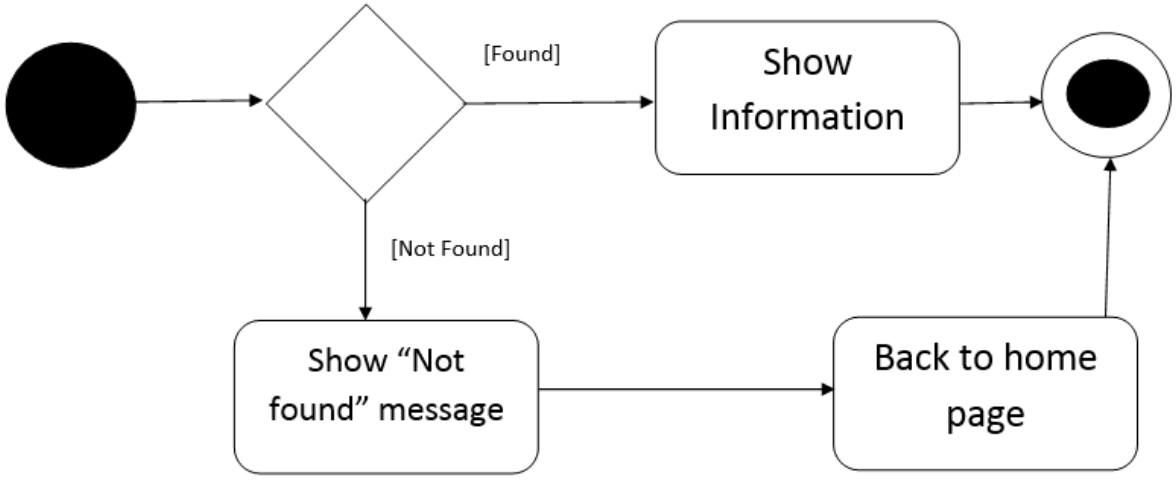

Fig 2: Activity diagram for viewing information

5.2.3For Inserting Information

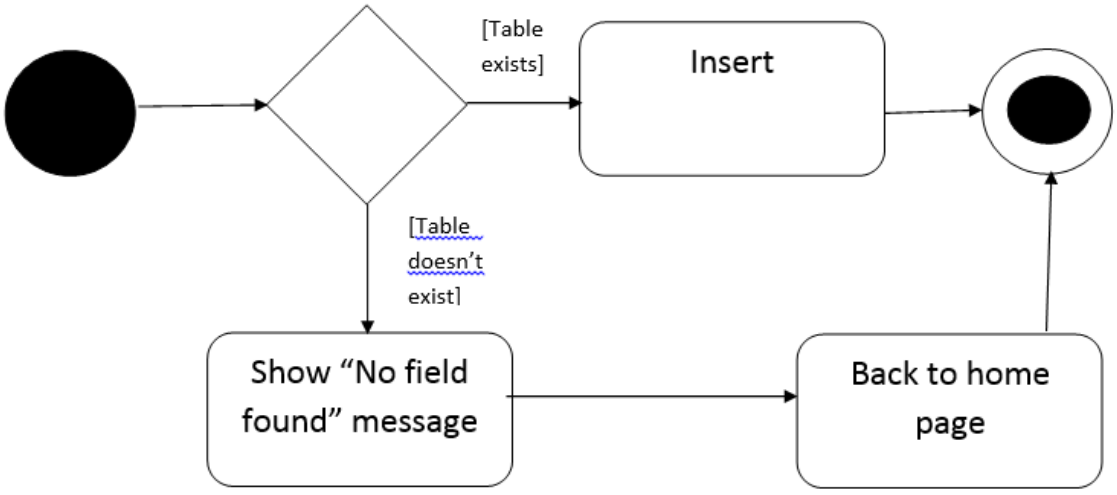

Fig 3: Activity diagram for inserting information

5.2.4For Deleting Required Information

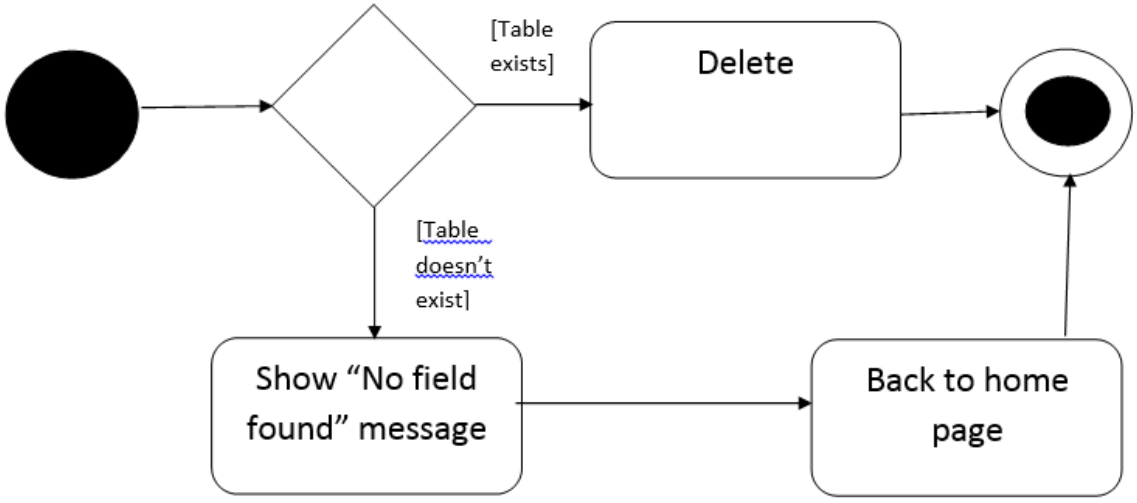

Fig 4: Activity diagram for deleting information

5.2.5 For Updating Required Information

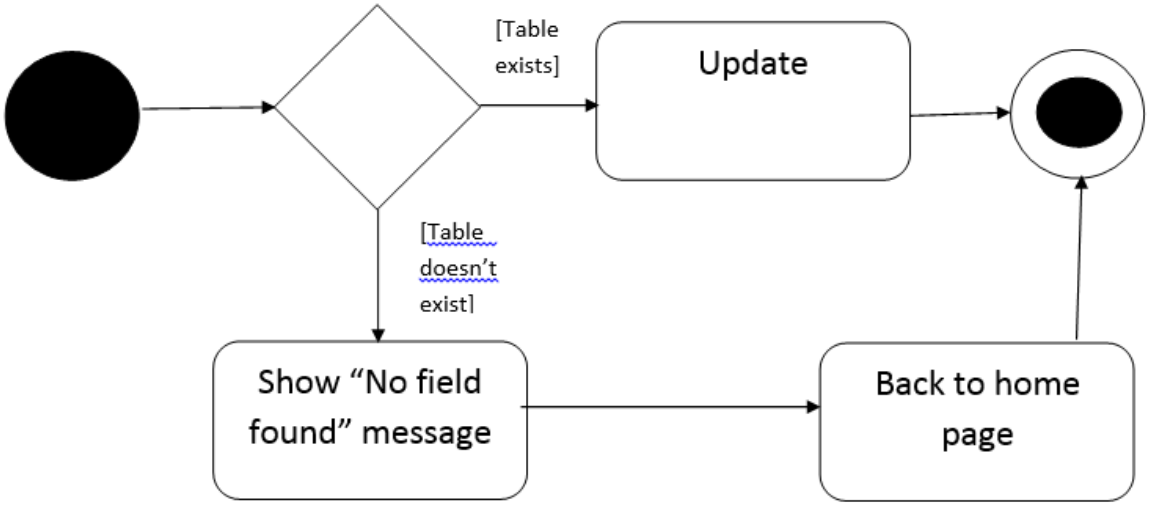

Fig 4: Activity diagram for updating required information

5.3 ER DIAGRAM

The E-R diagram is a logical structure of a database. The E-R data model employs three basic concepts: entity sets, relationship sets, and attributes. In the E-R model, a strong entity set is represented through a rectangle, the attribute of an entity set is represented by a an oval shape, the multivalued attribute is represented by the double oval shape, a weak entity set is represented by the double rectangle, a relationship set is represented by a diamond shape and a weak relationship set is represented by the double rectangle shape. In the above E-R diagram, we have Department,semester, Teachers'_info, financial_dealings,syllabus,class_routine & exam_routine etc. entity sets; 5 strong relationship sets (t_dept, dept_sem, s_dep_rtn, sem_syl & s_x_r) and a weak relationship set (fin_sem).

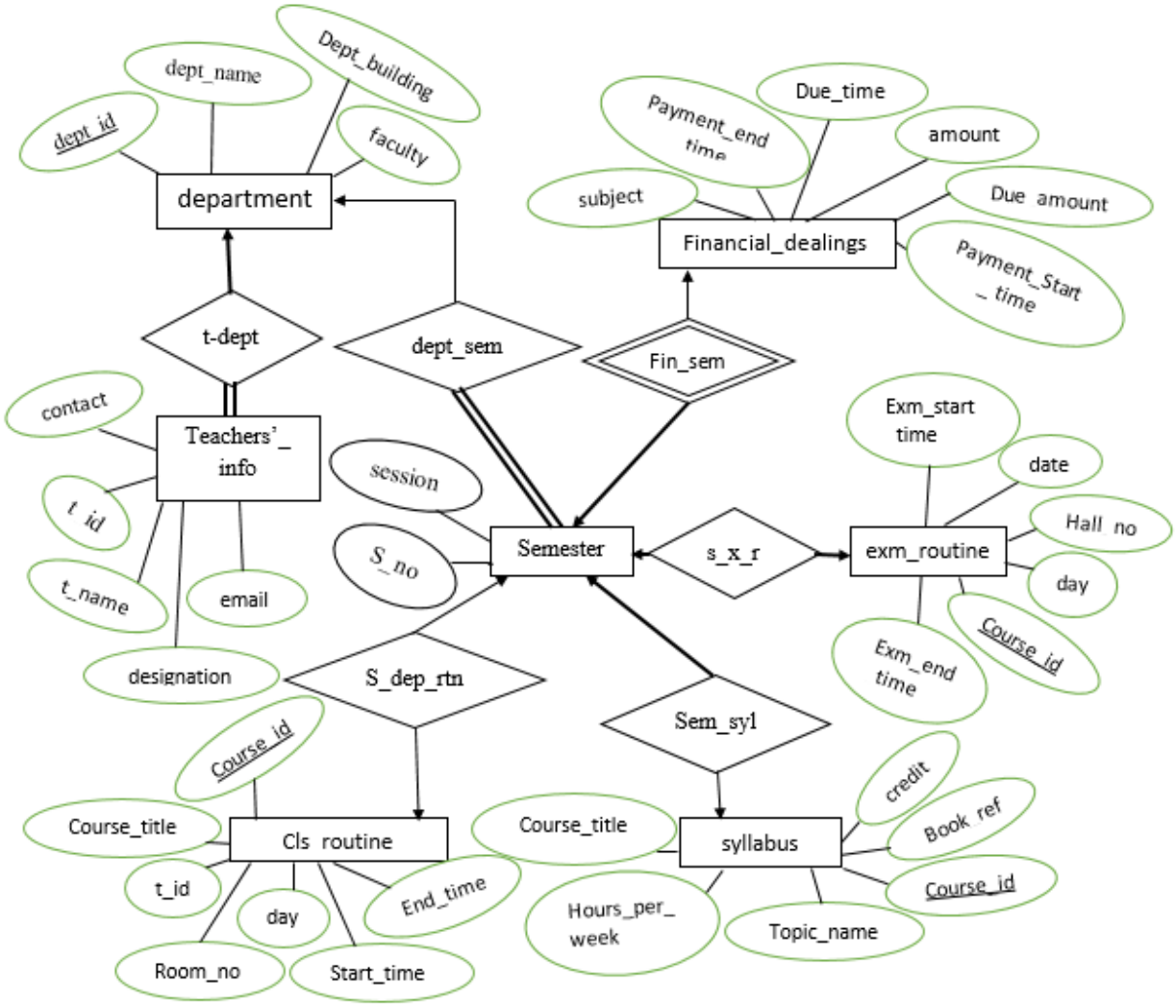

Fig 5-: Entity Relationship Diagram

5.4 System's Conceptual Class Diagram

Class Diagram shows a collection of classes, interfaces, associations, collaborations and constraints. Our system has four use cases- view information, insert data in the specific table, delete data in the specific table and update required data in the specific table.

5.4.1 View information

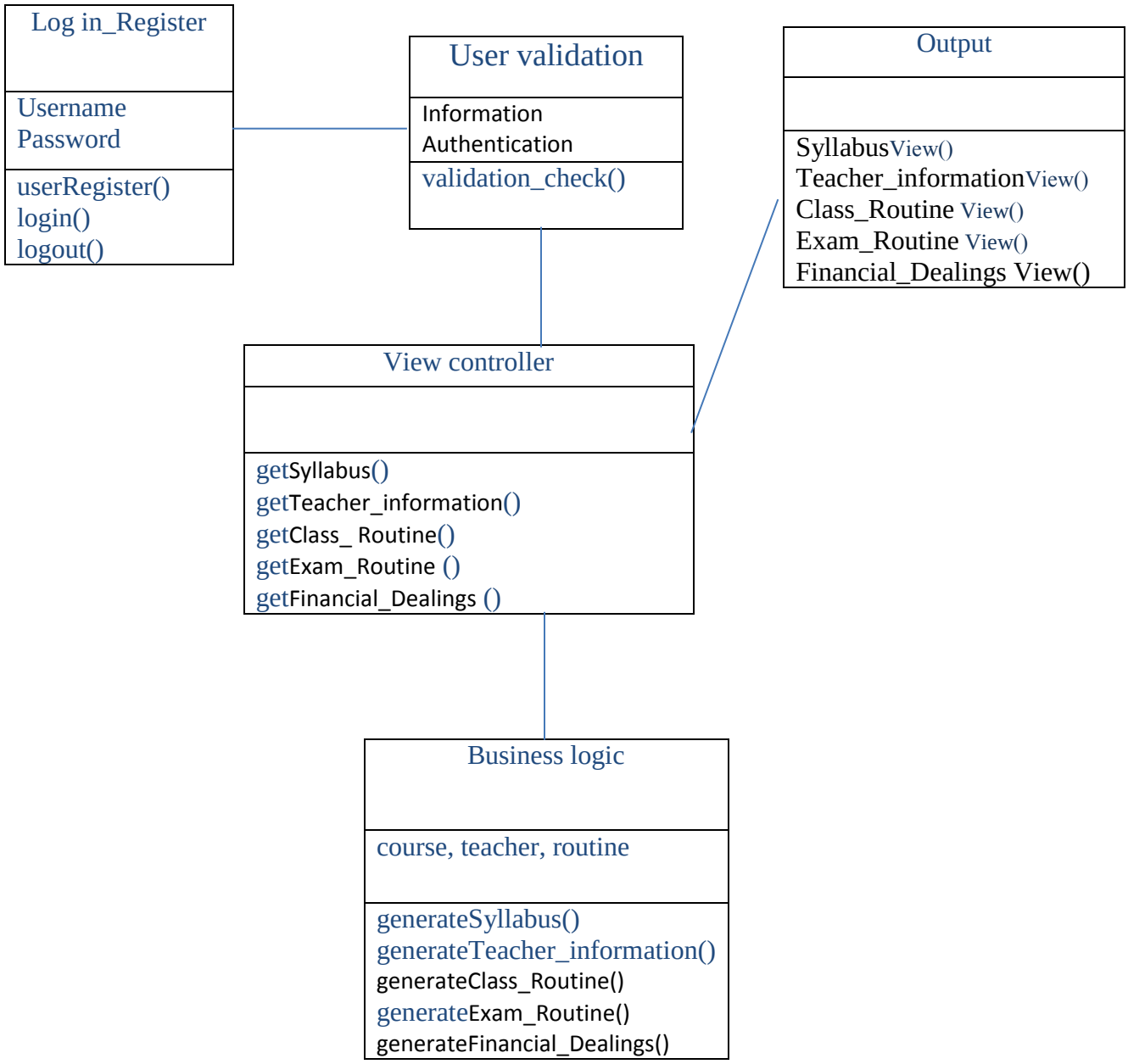

Fig 6: Class diagram for viewing information

5.4.2 Insert data in the specific table:

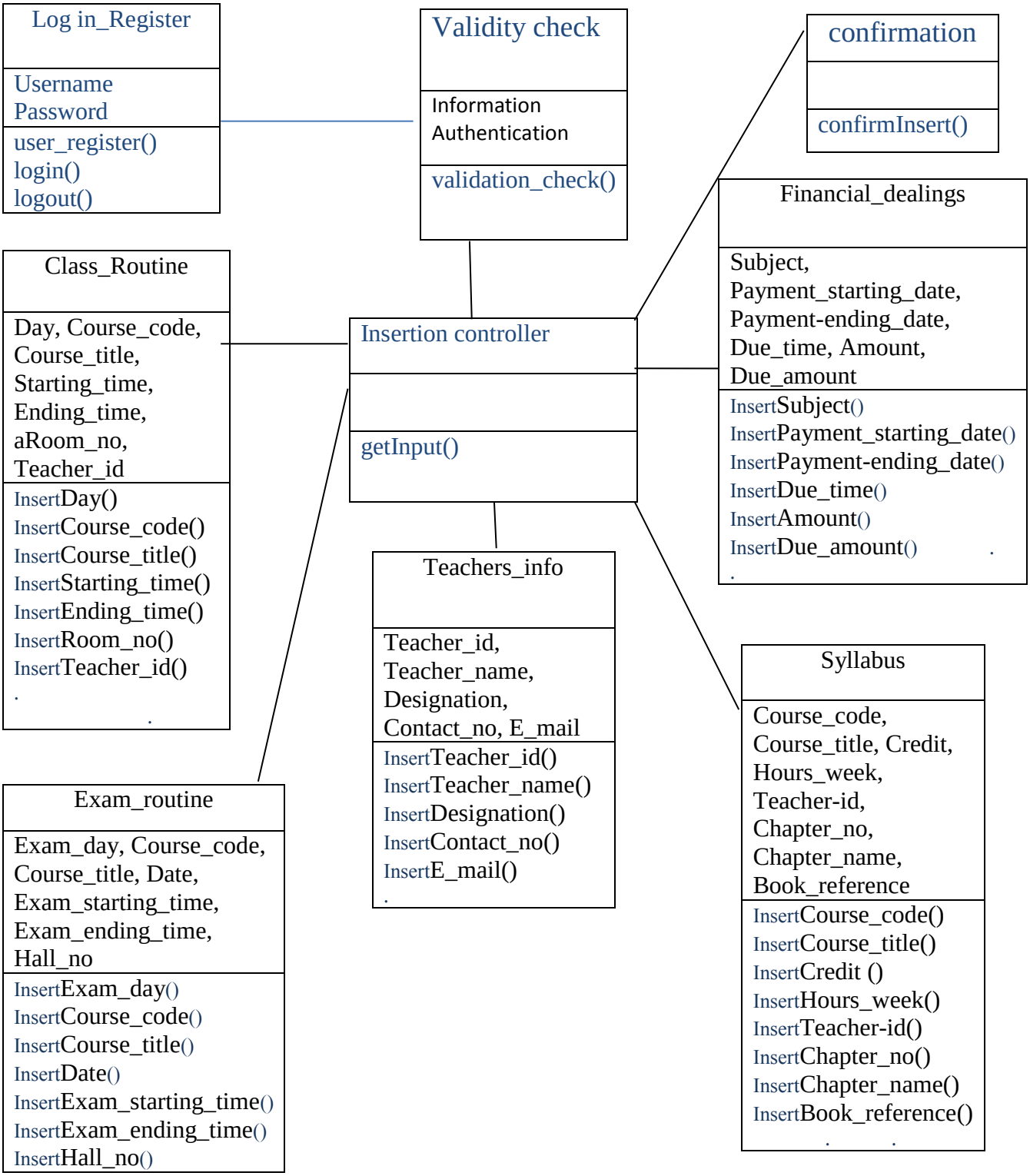

Fig 7: Class diagram for inserting data

5.4.3 Update data in the specific table:

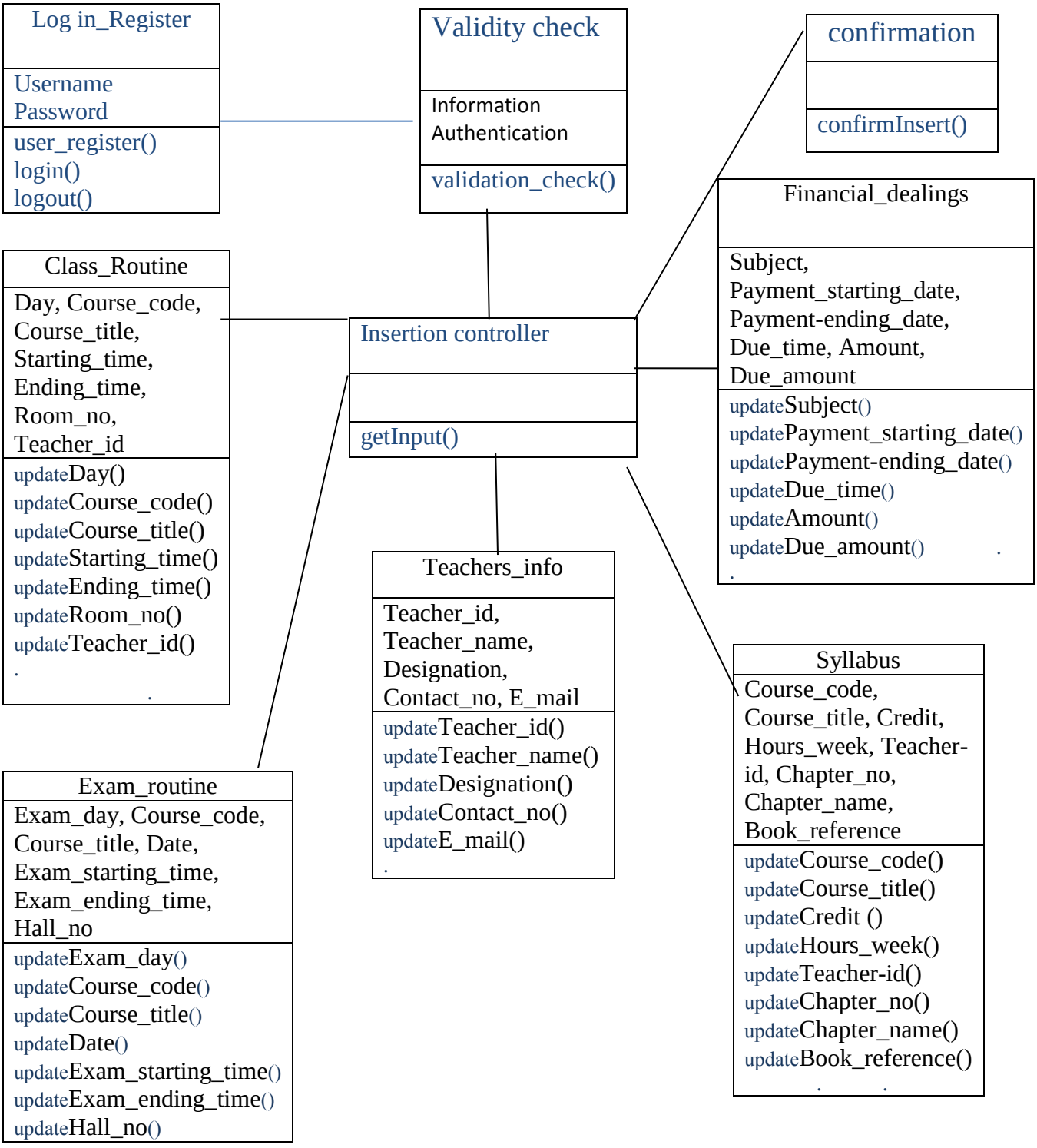

Fig 8: Class diagram for updating information

5.4.4 Delete data in the specific table:

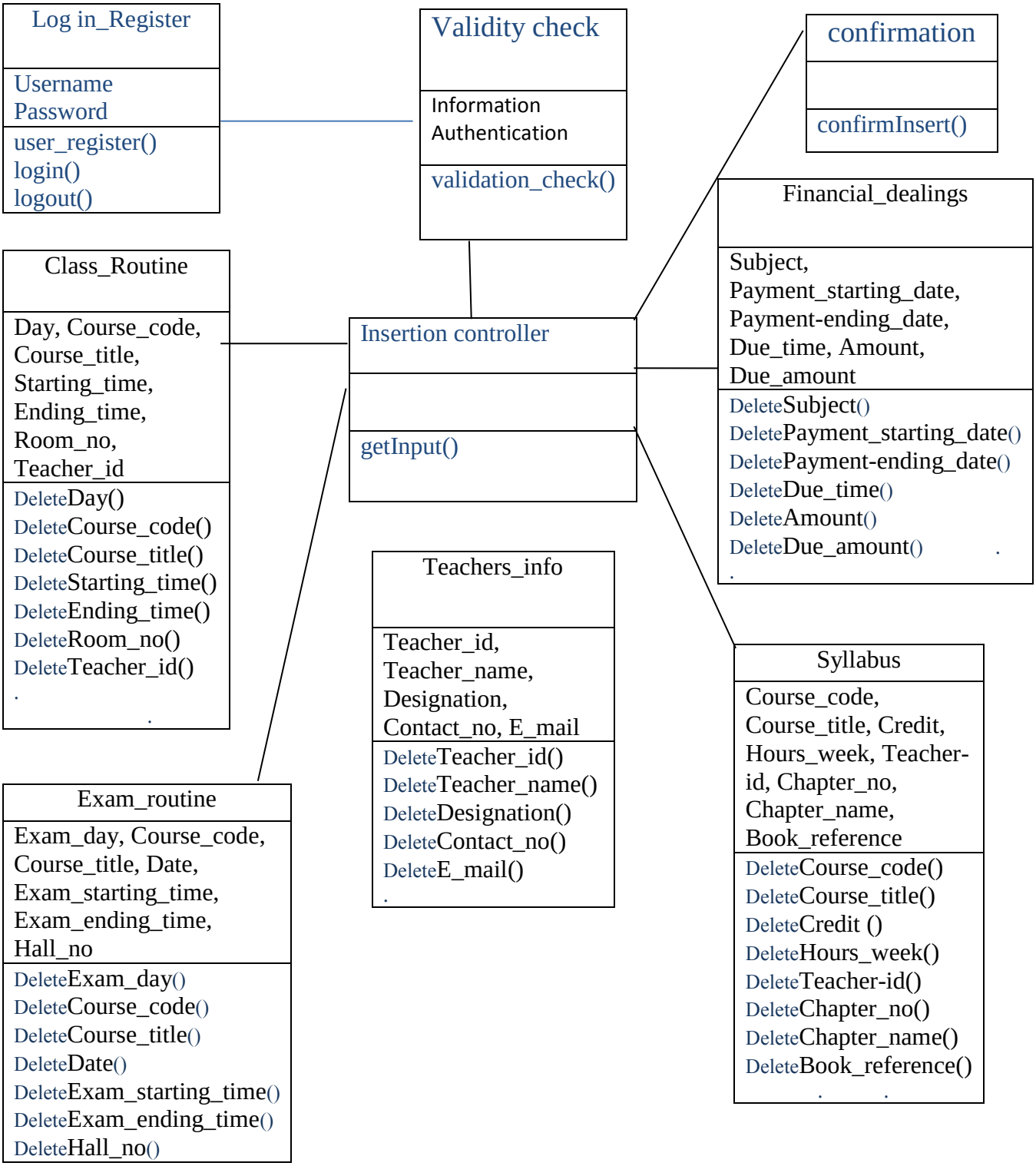

Fig 9: Class diagram for deleting data

5.5 Sequence Diagram

Sequence diagrams are typically associated with use case realizations in the Logical View of the system under development. Here is the sequence diagram of the required system which depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario:

5.5.1 for viewing:

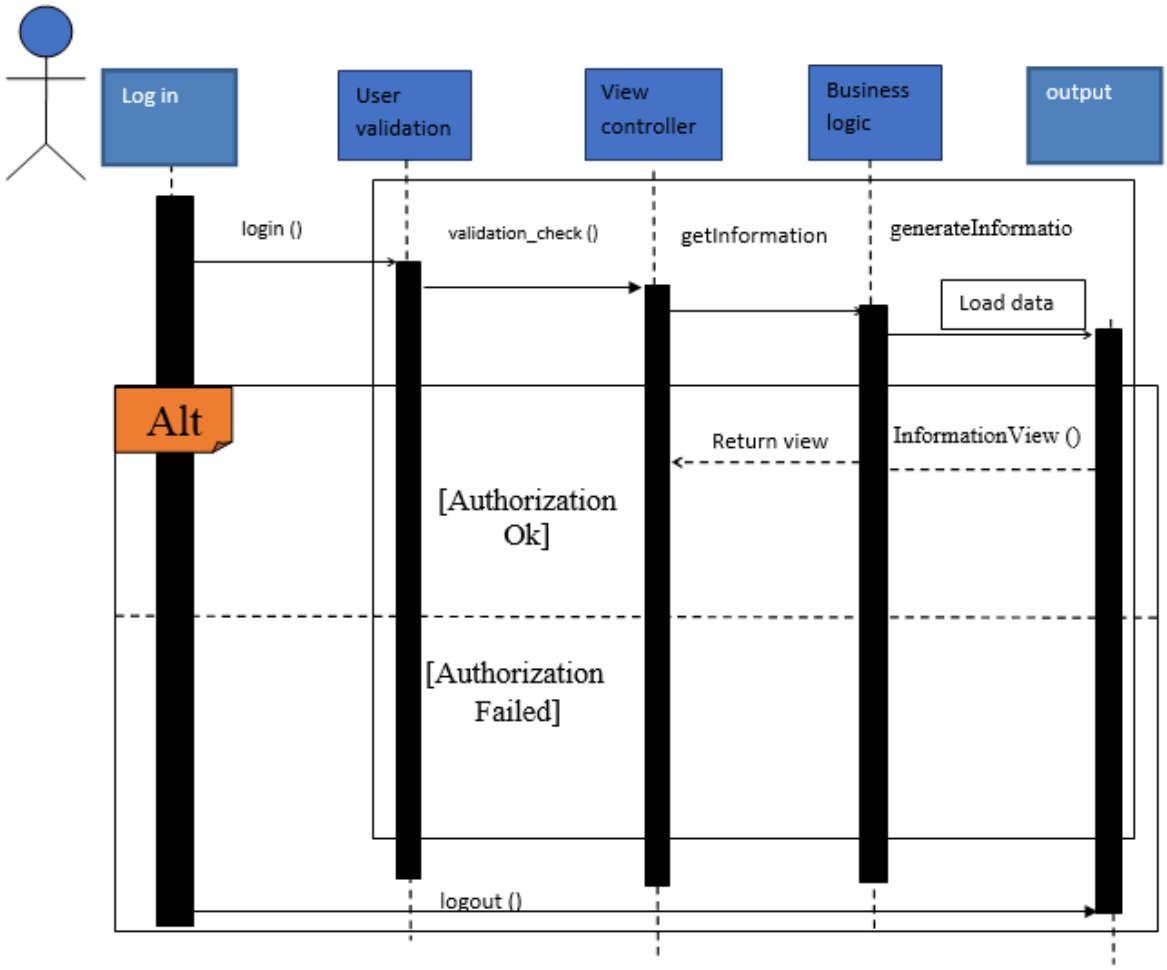

Fig 10: sequence diagram for viewing information

5.5.2 for inserting :

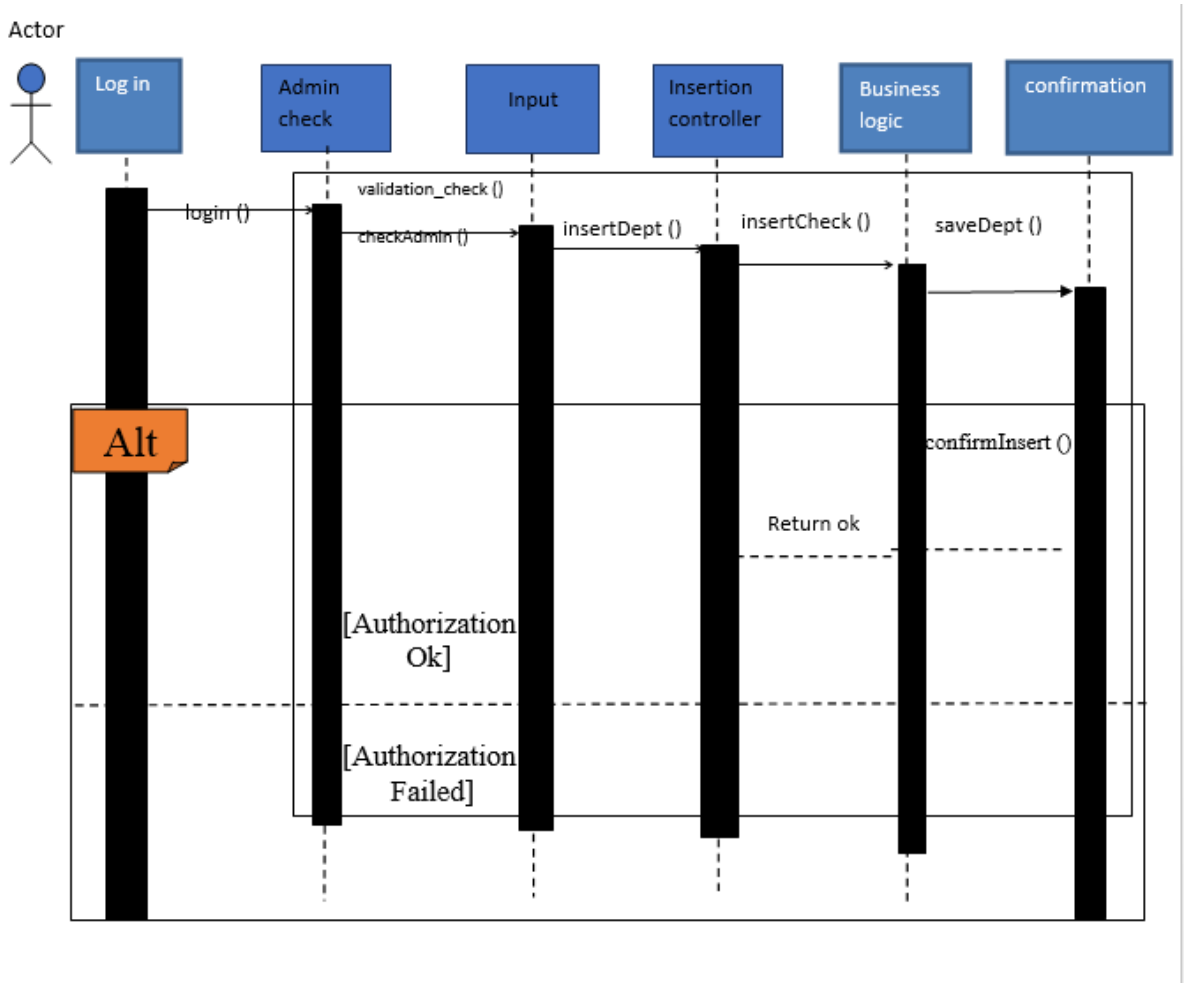

Fig 11 : sequence diagram for inserting data

5.5.3 for deleting:

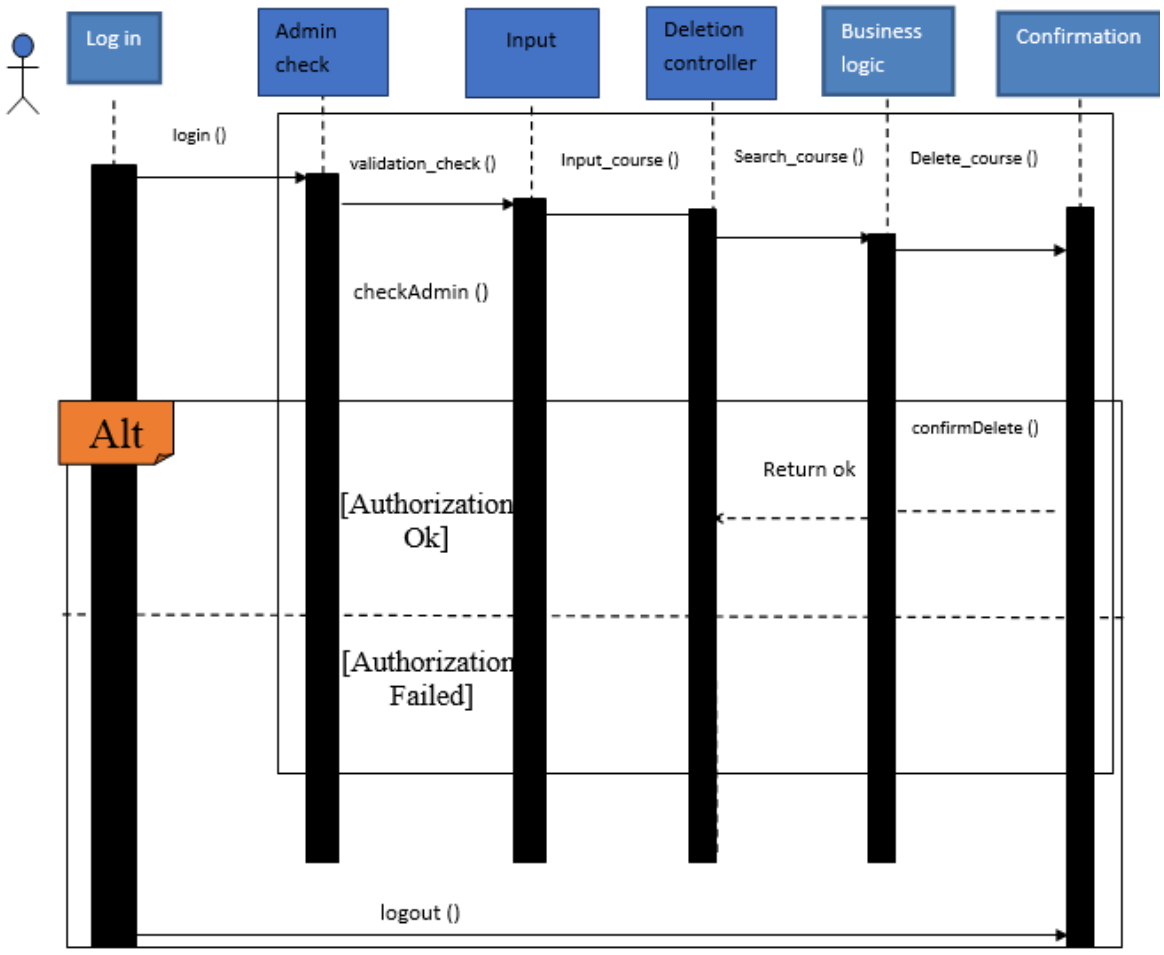

Fig 12 : sequence diagram for deleting data

5.5.4 for updating required information:

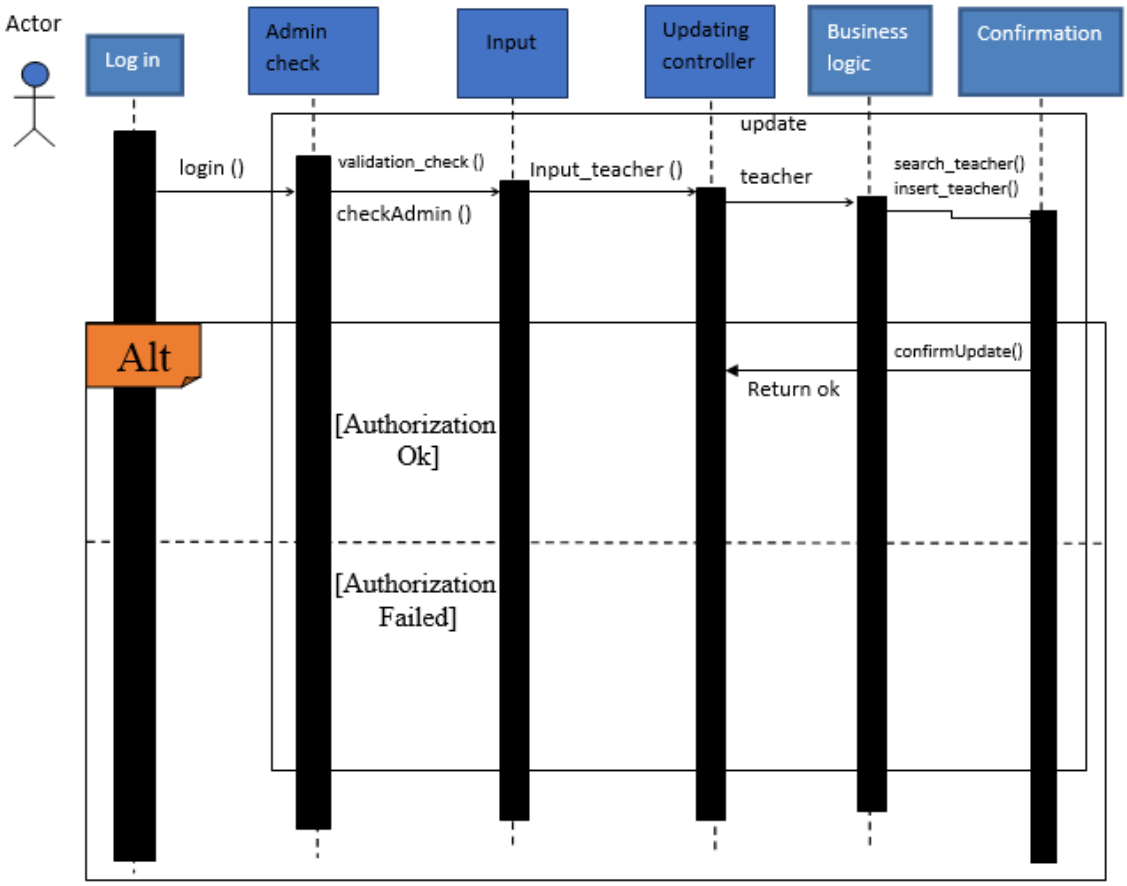

Fig 13: sequence diagram for updating required information

5.6 CONCLUSION

The document provides different activity diagram, class diagram, sequence diagram that are needed for the developing system. We hope that, this document will help the customer to have an abstract idea of the model of the proposed system. So, the system design document is an unavoidable deliverable for developing successful system.