

STUDENTS' AUDITORIUM MANAGEMENT SOFTWARE



STRUCTURED ANALYSIS AND STRUCTURED DESIGN
(SA/ SD) DOCUMENT

NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

SOFTWARE ENGINEERING LAB (CS3074)

GROUP 19

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Introduction

1.1 Purpose

This SA/ SD Document provides a complete description of all the functionalities and specifications of the Student's Auditorium Management Software (SAMS) developed for automating the management of events at auditorium. The expected users of this software are the spectator, show manager, sales person.

1.2 References

1. IEEE 830-1998 standard for SRS.
2. Software Engineering [Lecture](#) By Prof Sanjeev Patel, NIT Rourkela.
3. Software Engineering [lecture](#) by Asst. Prof. Puneet Kumar Jain, NIT Rourkela.

1.3 Overview

The below chapters and their contents are:

Chapter 2 is the Feasibility study which helps us understand the problem by analyzing the stakeholders and their functions.

Chapter 3 contains UML Diagrams for this software SAMS. Chapter 4 has System Parameters Analysis. Chapter 5 is the last section where Assumption and Dependencies are discussed. Basically, the System Design and Analysis Document describes the system requirements, operating environment, system and subsystem architecture, files and database design, input formats, output layouts, human-machine interfaces, detailed design, processing logic, and external interfaces

Feasibility study

2.1 Understanding the problem and need of SAMS

This system auditorium management software includes all the features and functions needed to efficiently manage an auditorium. It includes a show manager account which is used to handle/control all the system functionality. The system keeps track of auditorium status and advance bookings. The system keeps records of auditorium bookings along with associated event details and customer contacts in a well-maintained database. The show manager can easily check the auditorium bookings and timings in the system GUI. The system also notifies when new event timing draws near.

2.2 Scope of the problem

This software consists of following functions:

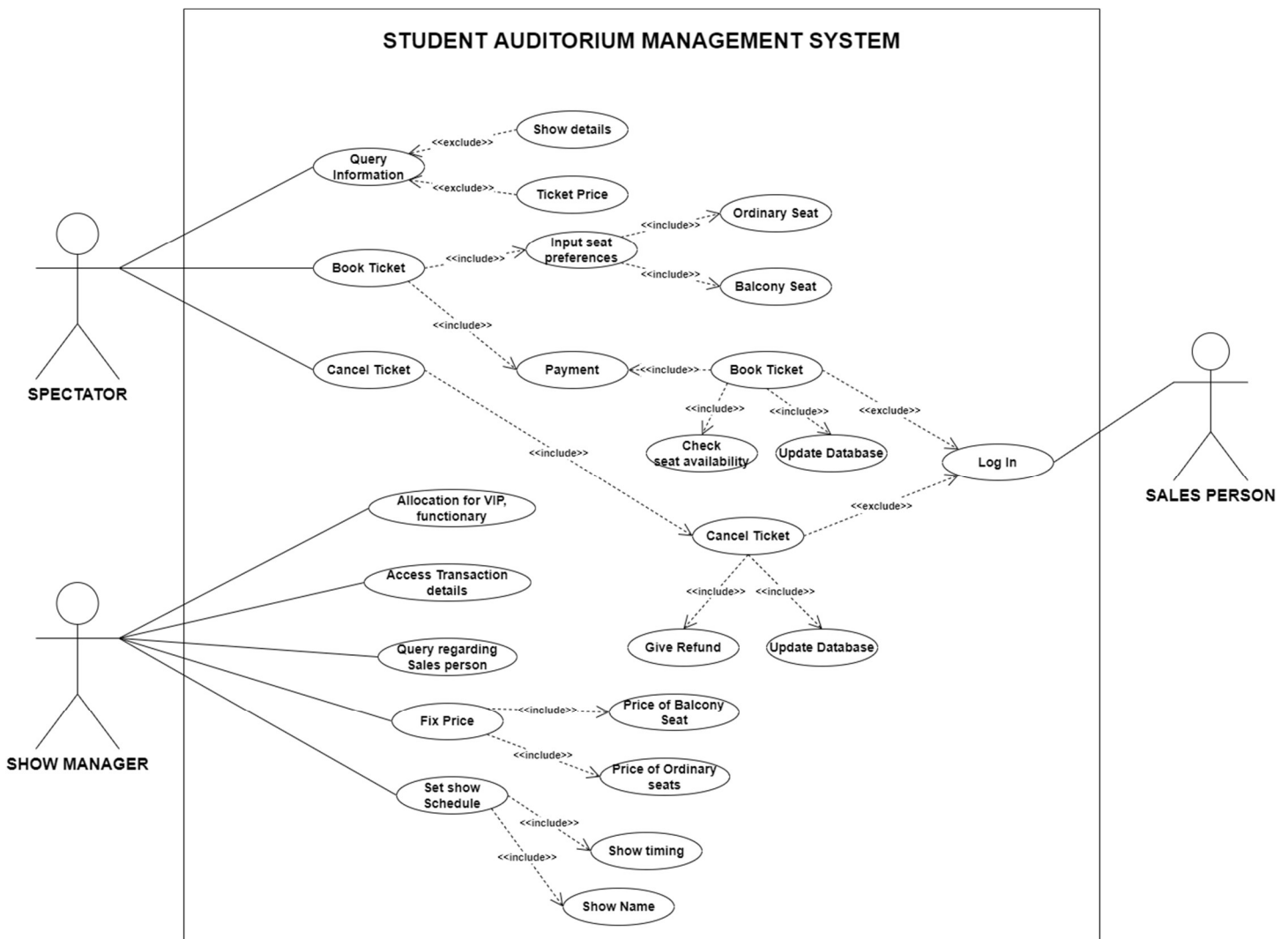
1. Adding new events as per availability of the Auditorium.
2. Allocating Balcony and Ordinary Seats for sale or to offer as complementary gifts to VIPs and functionaries along with fixing the price of different seats.
3. Booking and Cancellation of seats for an event.
4. Printing Ticket for booking and cancellation of a seat of an event.
5. Querying the number of available seats of different classes for an event.
6. Querying the percentage of seats booked for various classes of seats and the amount collected in each case.

8. Booking available seat for a particular show.
9. Creating new authorized sales person's alog in accounts.
10. Recording all the transactions including the sales person ID.

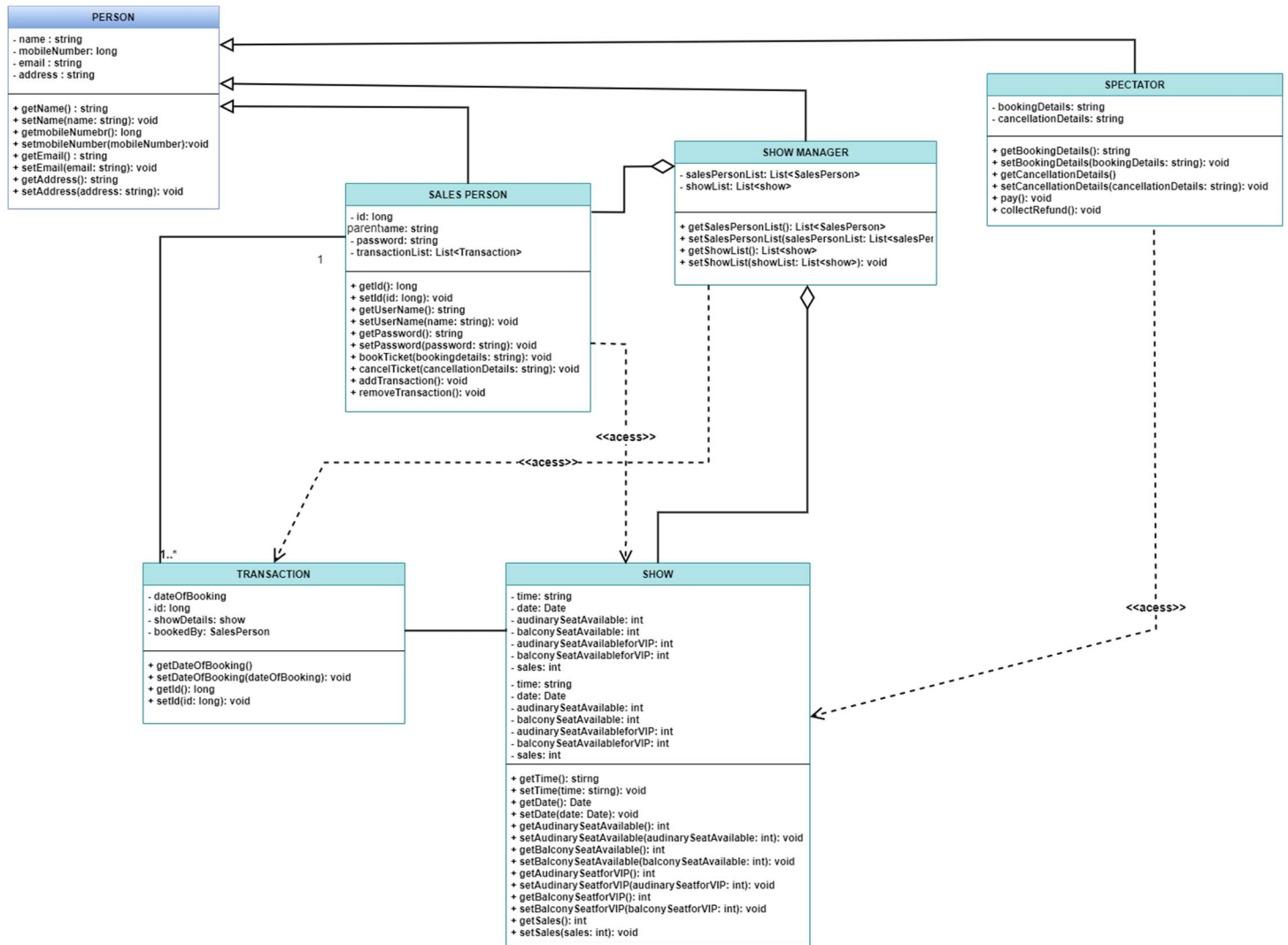
Chapter 3

UML Diagrams

3.1 Use case diagram

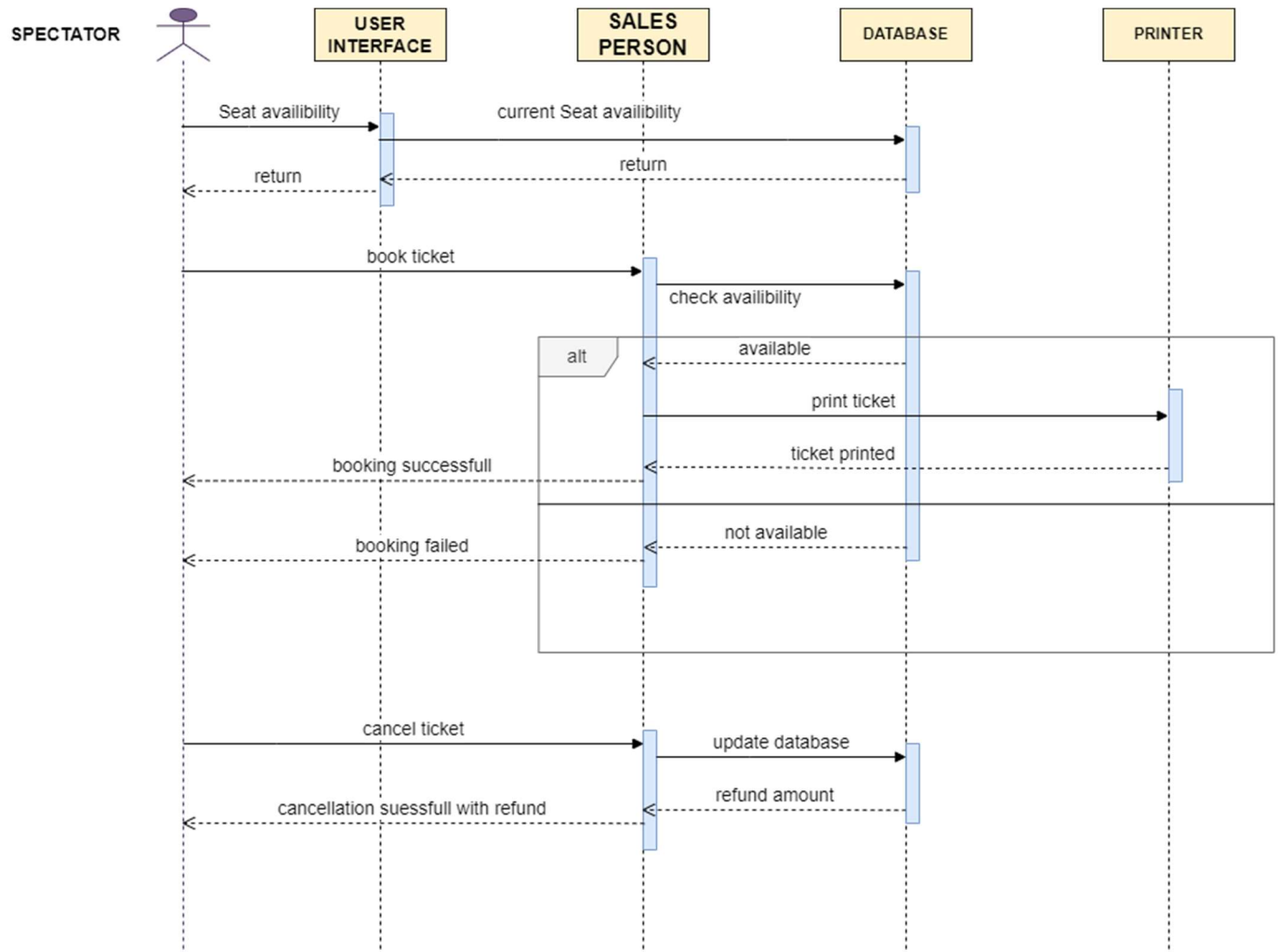


3.2 Class diagram

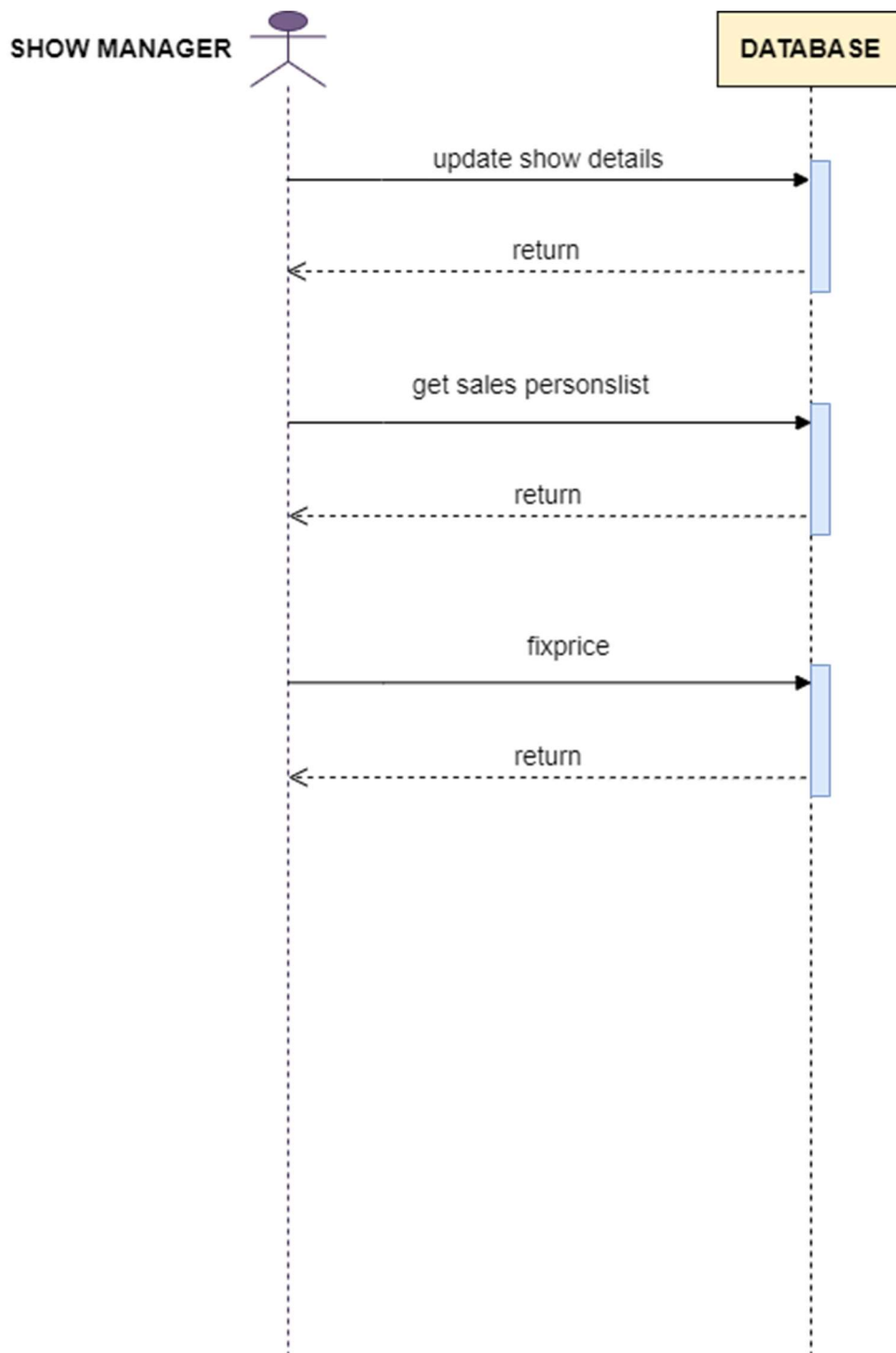


3.3 Sequence diagram

For spectator:



For Show Manager



For sales person

