

Software Requirements Specifications of AMS software

Doc # AMS-SRS

Version: 3.1

Page 1 / 9

REVISION HISTORY

Date	Version	Description	Author
15/03/24	1.0	Document overview	Ilkin Tomuev
15/03/24	1.0	System overview	Ilkin Tomuev
15/03/24	1.1	Abbreviations	Rashad Musayev
16/03/24	1.2	References and Conventions edited	Teymur Mammadov
16/03/24	1.3	User Requirements Specifications modified	Rashad Musayev Ilkin Tomuev Jeyhun Javadov
17/03/24	2.0	System Architecture Diagram created	Jeyhun Javadov
17/03/24	2.1	UML Diagram Added	Ilkin Tomuev
17/03/24	2.2	Sequence Diagram Added	Teymur Mammadov
17/03/24	2.3	Activity Diagram Added	Jeyhun Javadov Rashad Musayev
17/03/24	2.4	System Requirements Specification	Teymur Mammadov Rashad Musayev
18/03/24	3.0	User Requirements Specifications edited	Teymur Mammadov
19/03/24	3.1	System Requirements changed	Jeyhun Javadov

Software Requirements Specifications of AMS software		
Doc # AMS-SRS	Version: 3.1	Page 2 / 9

TABLE OF CONTENTS

Revision History 1

1 INTRODUCTION 3

1.1	<i>Document overview</i>	3
1.2	<i>System overview</i>	3
1.3	<i>Abbreviations</i>	3
1.4	<i>References</i>	3
1.5	<i>Conventions</i>	3

2 REQUIREMENTS 4

2.1	<i>User Requirements Specification</i>	4
2.2	<i>System Architecture</i>	5
2.3	<i>Use Cases and Usage Scenarios</i>	6
2.4	<i>System Requirements Specification</i>	8

Software Requirements Specifications of AMS software		
Doc # AMS-SRS	Version: 3.1	Page 3 / 9

1 INTRODUCTION

1.1 Document Overview

This document presents the Software Requirements Specifications (SRS) for the Airport Management System (AMS) software development project. The AMS is designed to manage various aspects of airport operations, including passenger and flight management, as well as plane and ticket management. This document outlines the functional requirements, quality requirements, constraints, use cases, and usage scenarios of the AMS. It also provides an overview of the system architecture.

1.2 System overview

AMS software is a desktop application that allows users, who are meant to be admins of the system, to manage three fundamental pillars of the airport: Passenger Management System, Plane Management System, and Flight Management System. In the Passenger Management System to add a passenger user must specify the passenger's name, surname, passenger type, luggage count, and year of birth. The user may also remove the passenger and update the passenger details. In the Plane Management System, the user must specify each plane's ID number and capacity, the user may also remove planes. In the Flight Management System to create a flight user must specify departure and landing locations, and departure and return dates. Users may also delete the flight. In this section, the user can buy or cancel a ticket for a passenger by specifying the passenger id.

1.3 Abbreviations

AMS: Airport Management System
UML: Unified Modeling Language
IDE: Integrated Development Environment
JDK: Java Development Kit
SRS: Software Requirements Specification
STP: Software Test Plan
SDD: Software Design Document
SDP: Software Development Plan
STR: Software Test Report

1.4 References

#	Document Identifier	Document Title
[R1]	AMS-SDP-v2.2	Software-Development-Plan

1.5 Conventions

Requirements listed in this document are constructed according to the following structure:

Software Requirements Specifications of AMS software		
Doc # AMS-SRS	Version: 3.1	Page 4 / 9

SRS-AMS-001

Description of AMS-001 requirement

Every system requirement id includes the id of the corresponding user requirement as a prefix.

SRS-AMS-001.1

Description of SRS-AMS-001.1 system requirement, which is related to the user requirement SRS-AMS-001

2 REQUIREMENTS

2.1 *User Requirements Specification*

SRS-AMS-001

AMS shall enable users to add/update/delete passenger details.

SRS-AMS-002

AMS shall enable users to add/delete plane details.

SRS-AMS-003

AMS shall enable users to create/delete flights

SRS-AMS-004

AMS shall enable users to buy/cancel plane tickets.

2.2 *System Architecture*

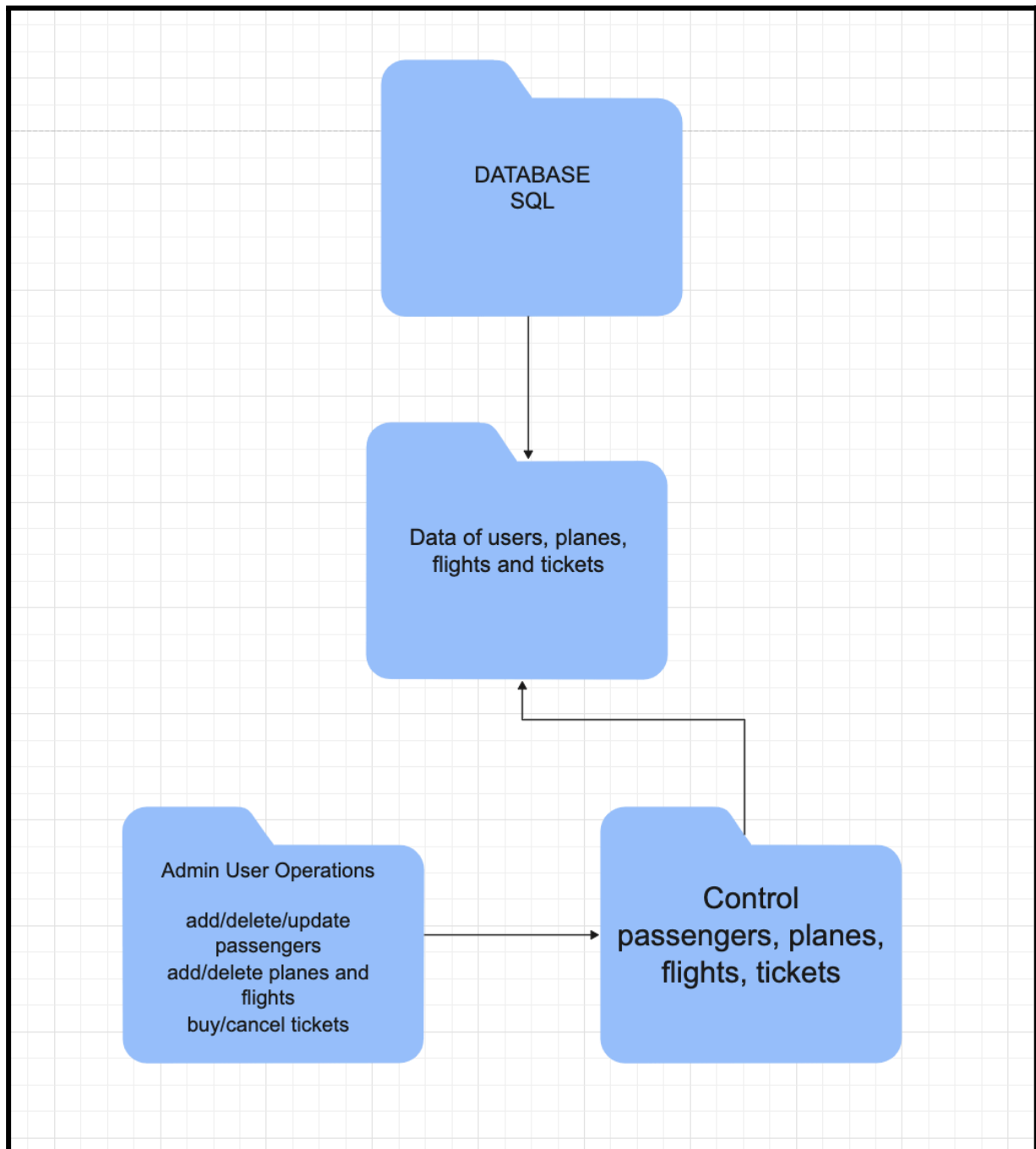
This chapter should present a high-level overview of the anticipated system architecture, showing the distribution of functions across system modules.

Software Requirements Specifications of AMS software

Doc # AMS-SRS

Version: 3.1

Page 5 / 9

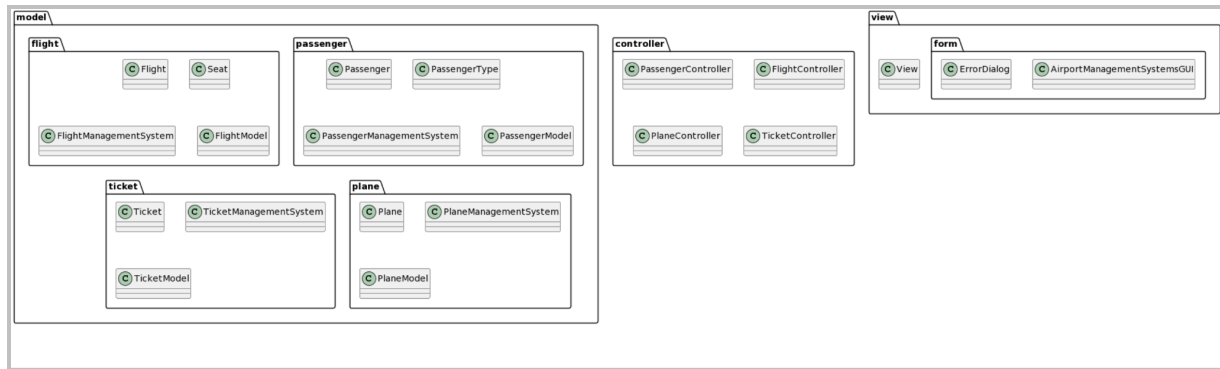


Software Requirements Specifications of AMS software

Doc # AMS-SRS

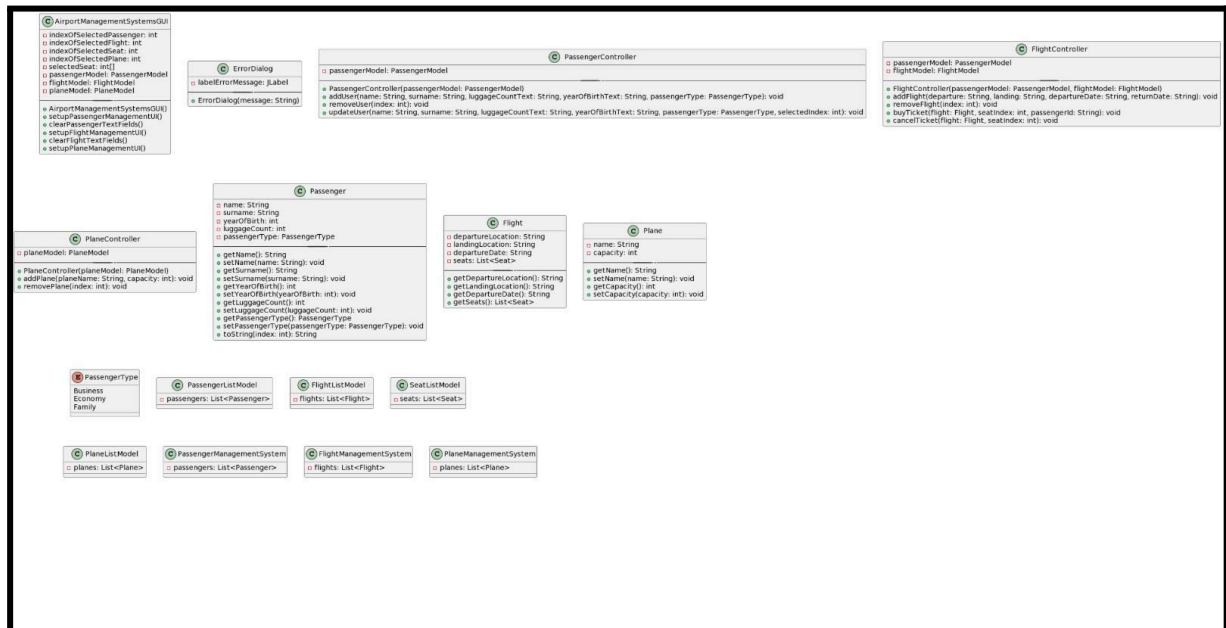
Version: 3.1

Page 6 / 9



2.3 Use Cases and Usage Scenarios

UML Diagram:



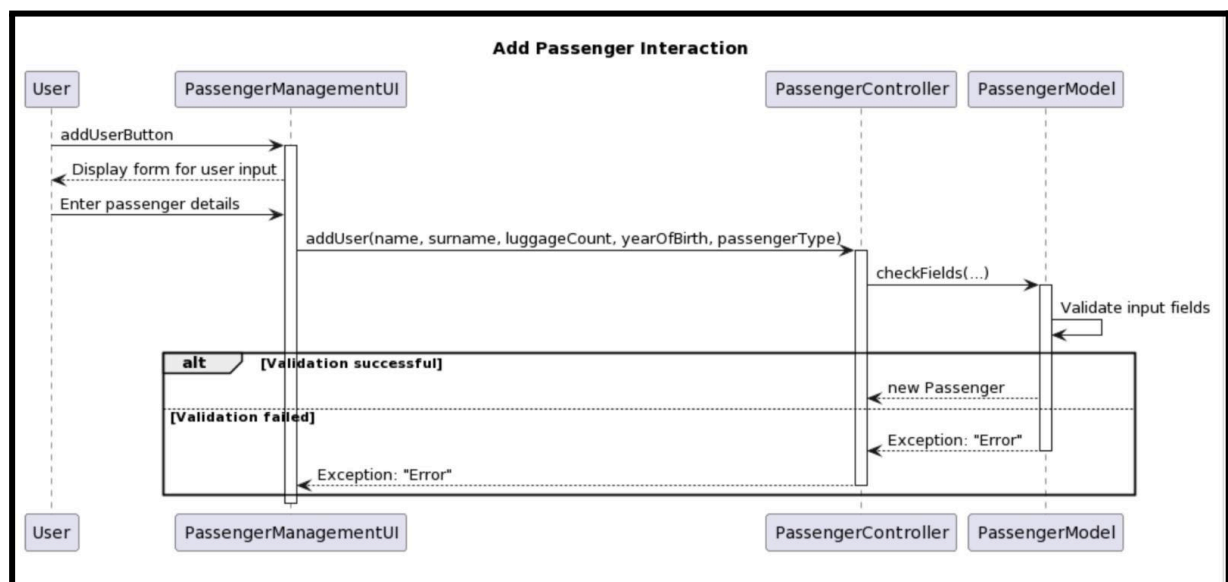
Software Requirements Specifications of AMS software

Doc # AMS-SRS

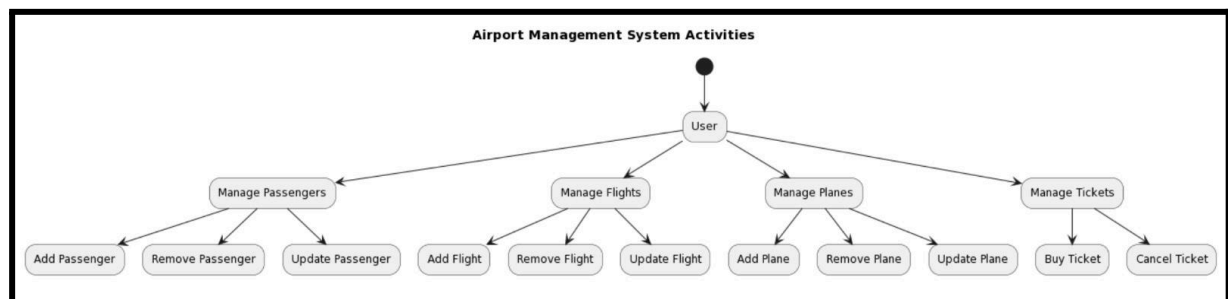
Version: 3.1

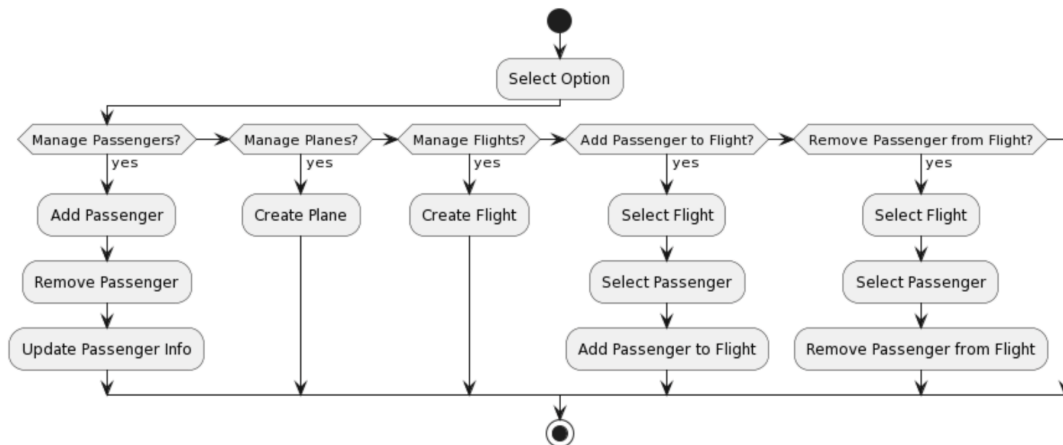
Page 7 / 9

Sequence diagram:

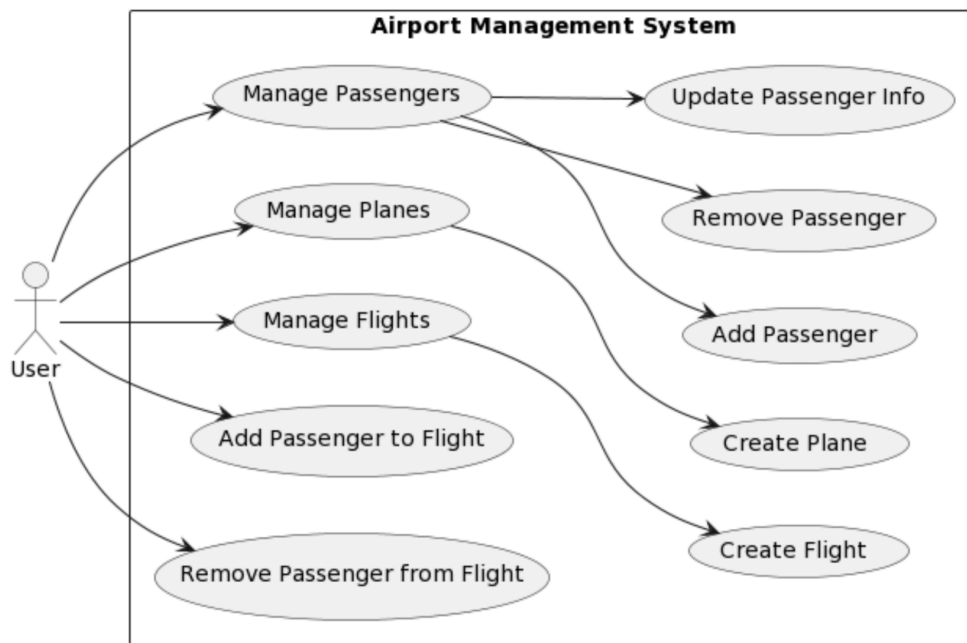


Activity diagram:





Use case diagram:



2.4 System Requirements Specification

SRS-AMS-001.1

AMS shall enable users to add/update the following passenger details:

- Name
- Surname
- Passenger Type (Business, Economy, Family)
- Luggage Count
- Year of Birth

Software Requirements Specifications of AMS software		
Doc # AMS-SRS	Version: 3.1	Page 9 / 9

SRS-AMS-001.2

AMS shall enable users to remove passengers from the system.

SRS-AMS-002.1

AMS shall enable users to add the following plane details:

- Name
- Capacity

SRS-AMS-002.2

AMS shall enable users to remove planes.

SRS-AMS-003.1

AMS shall enable users to add the following flight details:

- Departure Location
- Landing Location
- Departure Date
- Return Date

SRS-AMS-003.2

AMS shall enable users to remove flights.

SRS-AMS-004.1

AMS shall enable users to buy and cancel tickets from selected flights.

SRS-AMS-004.2

Users can buy tickets for only existing passengers which are shown in the list of Passenger Management System

SRS-AMS-004.3

Users can buy tickets for passengers only if their passenger type(business, economy, and family) matches the wanted seat type (VIP for business, economy class for economy passengers, and Family class for Family passenger types).