Software Requirements Specification

for

Stadium Management System

Version 1.0 approved

Prepared by M. Noman, Mohtashim Hussain, M. Shahmeer Adnan, M. Usman,

CUI Wah

19/06/2022

Table of Contents

Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

This research is carried out because there are significant improvements that are to be made to the current ticket booking system which will be beneficent for the stadium management. Through Stadium management system time as well as money both are saved. The customers find it easier to purchase tickets without travelling and can buy their seats by their own choice. The Stadium Management team is responsible for the day-to-day management and responsible of running the stadium. Anyway, many fans live beyond the area, or can't get down to the arena to buy tickets ahead of time because of work.

This outcomes in huge lines at the ticket office on a match day. To simple ticket booking task, there is need for an online programming framework which should be made utilizing deeply grounded standards of programming and most recent advancements that ensure a serious level of dependability and improve approaches to purchasing somewhere else, ideally a bigger number of individuals would purchase ahead of time, facilitating the blockage.

1.2 Document Conventions

To implement the Convention properly, potential Parties must ensure, sufficient awareness of the Convention's obligations.

- Maintain record of customer.
- User Person who wants to buy tickets form system.
- Management, Admin is maintaining the whole Stadium Management system.

to each reader type.>

1.3 Produ1ct Scope

This system is aimed at developing an online application for Stadium management online System. This system can be used by end users (Customer and Admin/Staff) and administrator to perform extensible tasks and to book tickets in an easy and secure manner. The following facilities have been implemented by us:

- Secure registration and profile management facilities for customers.
- Adequate searching mechanisms for easy and quick access to seats and services.
- Book Tickets as per customer wish and do payment online via e-wallet or Bank account.
- Available Seats shown on booking panel

1.4 References

- Abdullah, J.I (2004). Introduction to the computer, A management tool: Victory publisher Nigeria, No. 2 odor street Owerri.
- Abraham S., Henry F.K, & Surdarshan S. (2006). Database System Concepts: (5th ed.). McGraw Hill Companies Inc, New York.
- https://www.academia.edu/40401417/DESIGN_AND_IMPLEMENTATION_OF_A_COMPUTERIZED_STADIUM_MANAGEMENT_INFORMATION_SYSTEM

2. Overall Description

2.1 Product Perspective

The Stadium Management system is a platform where people can get tickets online. The system stores data of customer from the ticket booking of people and the admin is responsible to give check and approve on time to every user.

2.2 Product Functions

- **Admin Information:**

  Id's, name, city, email, mobile number, house no, set password
  Shows order In Queue
  Quantity of Order From where the order is taken place

- **Customer Information:**

  Customer id's, name, city, email, mobile number, house no, set password
  Billing:
  Payment mode, date, ticket amount, paid details.
  Login Page
  Select Admin or Customer Panel
  Enter Password and email
  Stand View:
  Manage stand management, set environment
  Booking page:
  The page that contains the list of customer booking

2.3 User Classes and Characteristics

- A customer area where Customer can get tickets and get confirmation details .
- Admin of the System will manage the quality of work and they are responsible for delivering ticket booking on time, match status and stand management, ticket management can handle by Admin.

2.4 Operating Environment

- Operating System (OS) :Windows 7, 8,10
- Processor (CPU) :Intel Core i3 (Intel Core i3 or equivalent)
- RAM :4 GB
- HDD Space :1.5 GB
- Language: Java

2.5 Design and Implementation Constraints

The system should be fully operational at any given time. The system will generate an appropriate error message if there are any problems occurred.

- Login issues if they forget password, Customer interest on the Stadium Management system,
- The system will generate error messages when the user attempts to enter invalid data.
- The system will reject invalid user input without crashing.
- The system will display appropriate messages when the database is down.
- The system will be recoverable within a day if it is down.

2.6 User Documentation

If any customer faces any problems related to understand system, A manual about the system will provided to customer to understand how to book ticket how to pay via online.

2.7 Assumptions and Dependencies

Assumptions and dependencies are described below:
If the focal Database System changes to Distributed Database System, framework prerequisites influence, and it ought to be changed appropriately.

- Client has PC with Windows 7 or Above OS and Internet/Intranet Connection.
- Information base exchanges are thought to be secure and solid.
- This application relies upon the server. So, it is expected that server is working accurately.

3. External Interface Requirements

3.1 User Interfaces

- **Admin\ Staff:**

  There is a login page where user have a unique id and password to login in the admin account, after login he will seemed the schedule update button and the list of customer that show how many customer booked tickets and when he click on one item of list then a new interface display which show the information of the customer and when the admin check the details of payment and send the message to the user that his seat is accepted and Check the management of Stand.

- **Customer:**

  There is the registration page where customer give there id's, name, city, email, mobile number, house no and then there is the list of different schedule of matches and it is another interface where the customer can get the choose of seat as his/her will and then he goes to another interface where the customer get the details about the seat you choose and the category of the seat and when he select specific seat then he place the order and there is another order interface in which the customer have the option to give the bill by hand and he/she also have the choice to give the bill online if he wanted to give the bill online then he will see another interface where he have to give his payment details otherwise he click on confirm button and ticket is booked.

3.2 Hardware Interfaces

<Describe the logical and physical characteristics of each interface between the software product and the hardware components of the system. This may include the supported device types, the nature of the data and control interactions between the software and the hardware, and communication protocols to be used.>

3.3 Software Interfaces

The software interface used by us is Java IDE NetBeans. The database used for this application is local storage.

3.4 Communications Interfaces

The communication interface used by us is Email, WhatsApp, Facebook.

4. System Features

Configured to Ordered Products. The system shall display all the tickets that can be configured. The system shall allow user to select the ticket to configure. The system shall display all the available seats in stadium. The system shall enable user to add one or more component to the configuration. The system shall notify the user about any conflict in the current configuration.

4.1 Maintain customer profile

- The system shall allow user to create profile and set his credential.
- The system shall authenticate user credentials to view the profile.
- The system shall allow user to update the profile information.

4.2 Provide personalized profile

- The system shall display both the active and completed order history in the customer profile.
- The system shall allow user to select the order from the order history.
- The system shall display the detailed information about the selected order.
- The system shall display the most frequently searched items by the user in the profile.
- The system shall allow user to register for newsletters and surveys in the profile.

4.3 Provide Customer Support

- The system shall provide online help, FAQ’s customer support, and sitemap options for customer support.
- The system shall allow user to select the support type he wants.
- The system shall allow user to enter the customer and product information for the support.
- The system shall display the customer support contact numbers on the screen.
- The system shall allow user to enter the contact number for support personnel to call.
- The system shall display the online help upon request.
- The system shall display the FAQs upon request.

4.4 Detailed invoice for customer

- The system shall display detailed invoice for current booked ticket once it is confirmed.
- The system shall optionally allow user to print the ticket.

4.5 Allow multiple payment methods

- The system shall display available payment methods for payment.
- The system shall allow user to select the payment method for order.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

A Stadium Management system has two primary requirements: First, it needs to book ticket by categories. Second, the Stadium Management system needs to be reliable; the required number of tickets needs to be available as per schedule.

5.2 Safety Requirements

Stadium Safety Plans (SSP) are an effective way of ensuring that an online booking is safe for human consumption and that it meets Database based standards and other regulatory requirements. It is based on a comprehensive risk assessment and risk management approach to all the steps in a Stadium management chain from catchment to consumer

5.3 Security Requirements

Functional Security Requirements, these are security services that needs to be achieved by the system under inspection. Examples could be authentication, authorization, backup, server-clustering, etc. This requirement artifact can be derived from best practices, policies, and regulations.

5.4 Software Quality Attributes

Fundamentally, a Stadium system may be described as consisting of three basic components: the source of ticketing, the processing Stand management, and the payment of ticketing through online by the users. Stadium from the source is conveyed to the treatment plant by conduits or aqueducts, either by booking and stand management. The quality of software is secure. Physical aspects such as the design, construction. Operation of such systems can have important impacts on management quality. The complexity of and demands on these systems make them the more easily to pay and receive ticket online.

5.5 Business Rules

- Establishments in the Stadium management business sell ticket as a public utility to book ticket, businesses, and public entities throughout our system.

- Stadium Management System businesses have performed well over the decade.
- Another stadium management option is governmental control of Stadium Management System.

6. Other Requirements

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

Appendix A: Glossary

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

Appendix B: Analysis Models

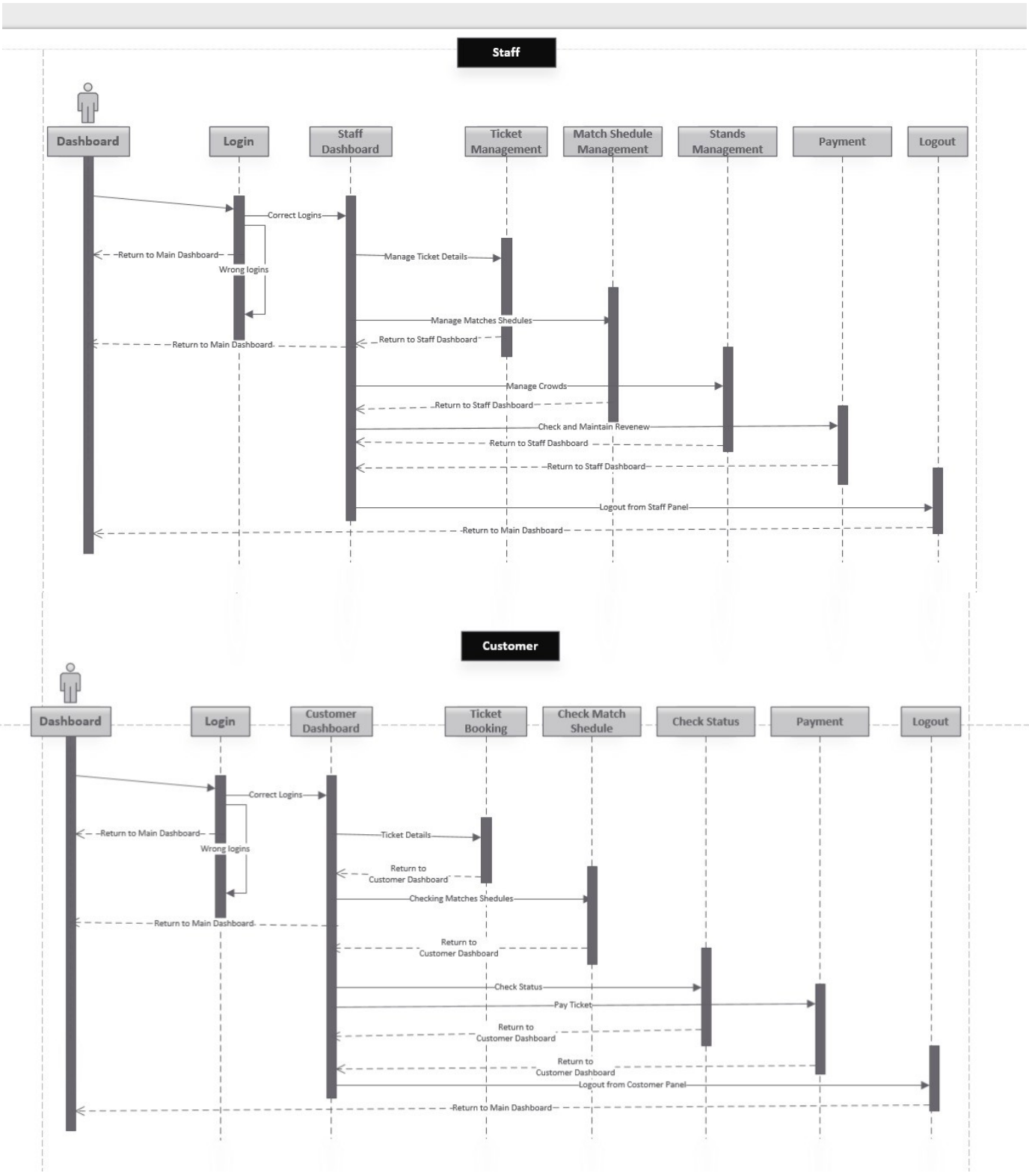
<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: To Be Determined List

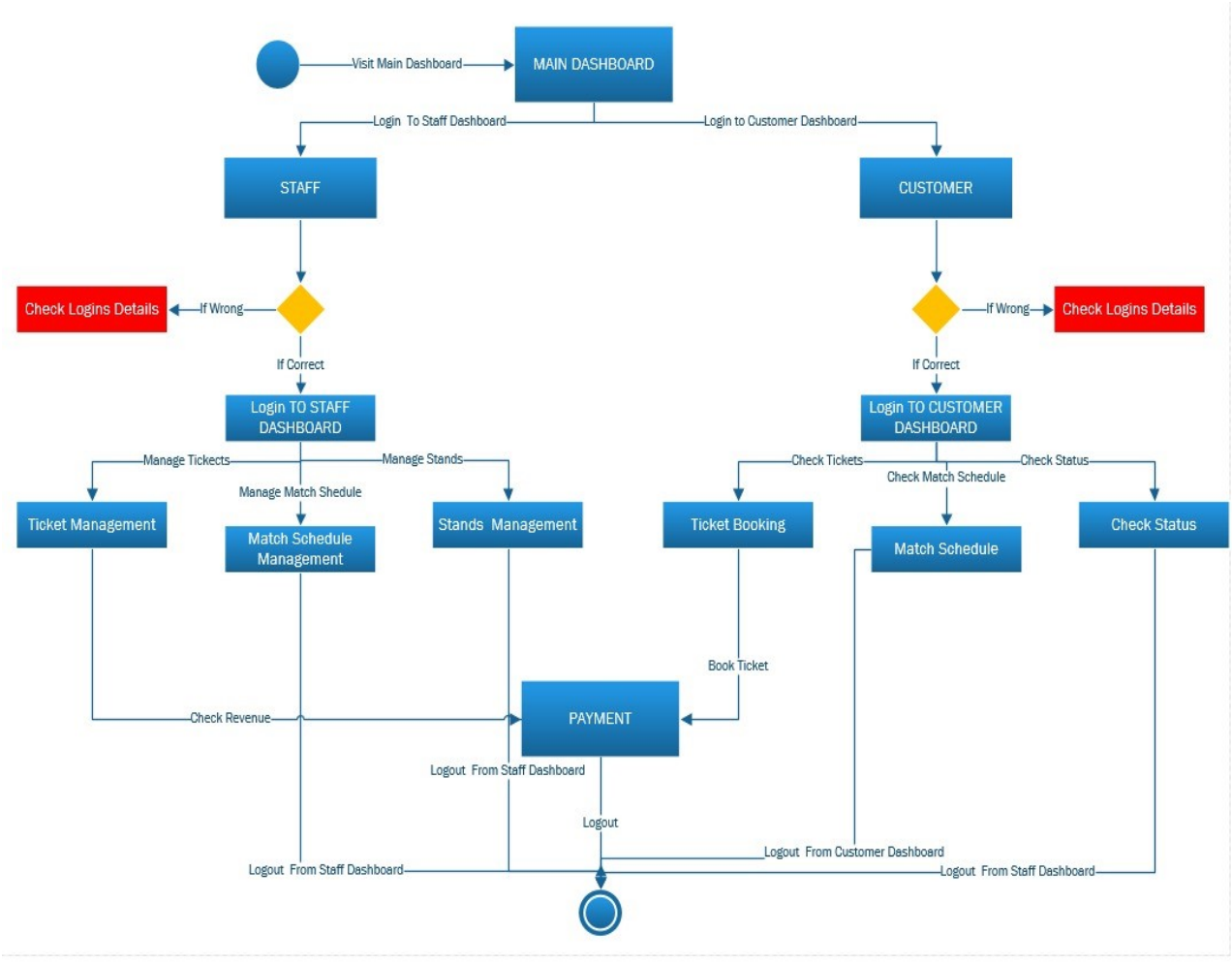
<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>

7. Design Description

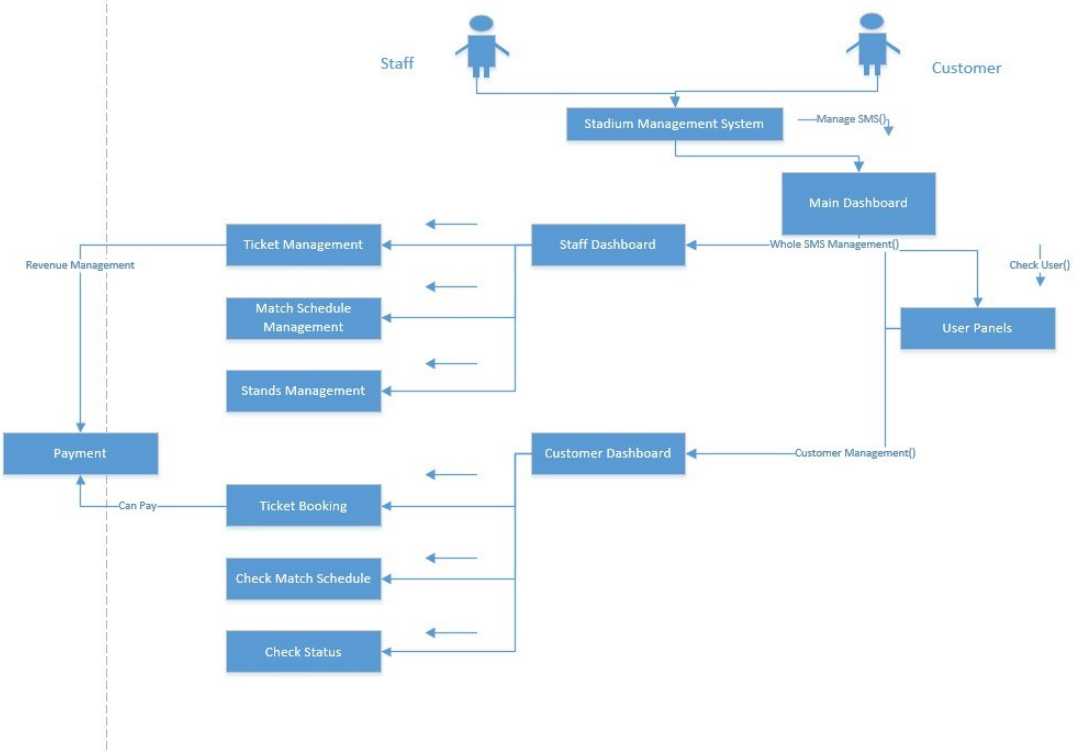
Sequence Diagram:



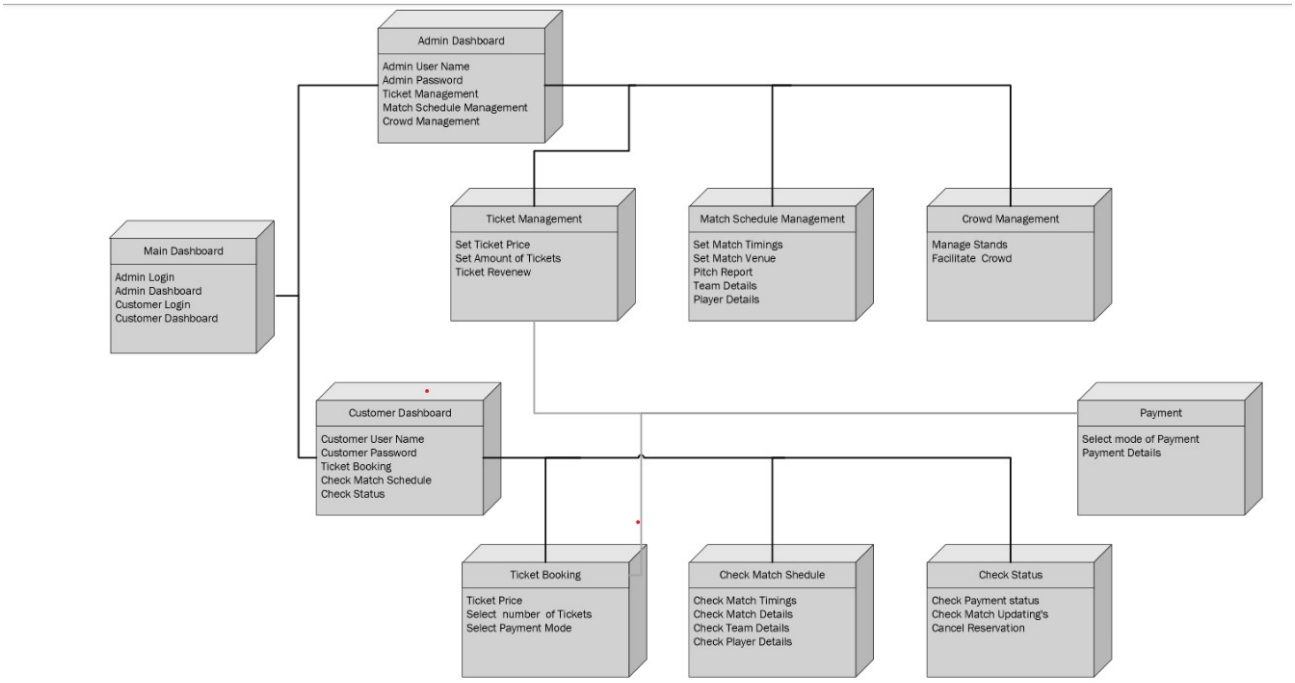
State Chart Diagram:



Collaboration Diagram:



Deployment Diagram:



Activity Diagram: