SRS PVR online movie ticket booking

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1 INTRODUCTION

1.1 Purpose

The purpose of this document is to present a detailed of the PVR: online movie ticket Booking system. This app is basicaly made for providing customer an anytime and anywhere service for booking the seat in the cinema hall and to gather information about the movies online.

1.2 Scope of project

This software ~~def~~ system will be PVR: online movie ticket Booking System. This system will be designed to maximize the easiness of the customers to Book Tickets. This System is designed to allow a customer to book and cancel his tickets at any time of the day.
The goals of our system are:

i> To provide an anytime anyplace service for the user.
ii> To minimize the number of staff at the ticket box.
iii> To promote the film on the internet.

2. Overall Description

2.1 System Environment

The movie Ticket Booking System has two active actors, customers and admin. The customer access the movie Ticket Booking system through the internet. Any customer communication with the system is through email. The Admin accesses the entire system directly.

2.2 System Interfaces

This system does have one interface with online payment gateway of the existing systems.

2.3 product functions

(1) Register

Input — Name, contact NO., password
Processing — User will be registered
Output — User's account has been

(2) Login

Input — Id Name, Password
Processing — Credentials will be cheked to verify the user or admin
Output → Go to Home page.

(3) Book Ticket

Input – movie Name, data, time, seat type, No. of tickets
processing – credentials of movie will be cheked that desired seat is available or not.
Output – movie will be booked

(4) payment

Input – Card No., CVV No.
processing – Details are verified
Output – payment done sucessfully

(5) Send Notification

Input – None
processing – Sends conformation message

(6) Cancel Tickets

Input – User Id, password, Ticket Id
processing – Cancellation proces is star by cheking that it fulfill cancellation constraint.
Output – Ticket will be cancelled with / without refund.

3 Specific Requirements

3.1.1 User interface

It is a login window that required user to enter correct ID and password so that after authentication of data stored in the user database is approved as a valid user so that user enter into our application.

3.1.2 Database Interface

→ The user's details database includes user ID, password and previous and current booking details.

→ The events' details database includes information about all listed events, their orgainizers, dates, timing, venue, price per ticket and available seats.

→ The organizers' details database include orgainizers' ID, password and previous and current listed events' details.

3.1.3 Functional Requirements

• Every online booking needs to be associated with an account.

2.4 General constraints

→ User interface is only in English. No other language option is available.
→ Internet connection is required to use the system.
→ User should carry their mobile phones with registered mobile number.

2.5 User characteristics

→ User uses the system to fetch information about available movies, their price, duration, data and timings and majorly to book tickets.
→ User can also give feedback of the movie watched, in the form of ratings.
→ Back up of the database in case of hardware failure, disaster, natural calamities.

2.6 Assumptions and Dependencies

→ Admin is created in the system already.
→ password must contain atleast 10 characters according to the rule.
→ Internet is must.

- one account cannot be associated with multiple users.
- search results should enable users to find the most recent and relevant booking options.
- System should enable user to book/pay for their tickets only in timeboxed manner after tickets being added to the cart.
- System should only allow user to move to payment only when mandatory fields such as date, time, location has been mentioned.
- System should consider timezone synchronisation when accepting bookings from different timezones.
- Booking confirmation should be sent to user to the specific contact details.
- user can cancel the movie ticket anytime but with a limitation, if he/she cancels before 3 hours of show timing than 50% money is refunded back into his/her account otherwise only ticket will be cancelled without any refund.

3.2 Performance Requirements

3.2.1 Security:

The online movie ticket system is fully accessible to only authentic

user. It requires username and password to become member of the app.

3.2.2 Reliability:

The application is highely reliable and it generates all the updated information in correct order.

3.2.3 Availability

Any information should be quickly available from any computer to the authorizeda user.

3.2.4 Maintainability

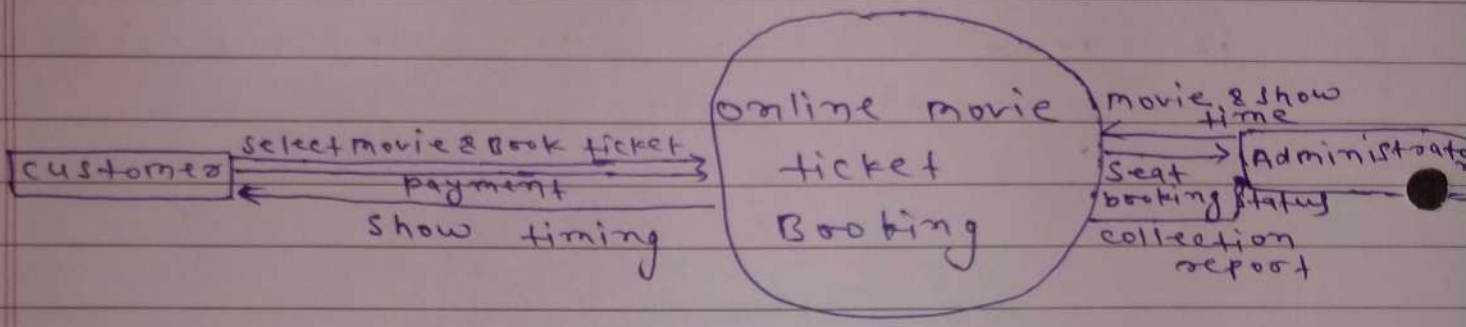
The application is maintainable in such a manner that if any new requirements occur them it should be easily incorporated in an individual module.

3.2.5 Back up-

We will take a backup in our system database. In order to enable the administrator and the user to access the data from our system.

3.3 Data flow diagrams

3.3.1 context level diagram



In this data flow diagram, you will see the general process done during ticket booking process.

3.3.2 Dataflow diagram:

Data flow diagram is the starting point of the design that functionally decomposes the requirements specification. A DFD consists of a series of bubbles joined by lines. A DFD describes what data flow rather than how they are processed, so it does not hardware, software and data structure.

Data flow diagram (DFD) is a graphical representation of the

"flow" of data through an information system. DFD can also be used for the visualization of data processing. A Data flow diagram (DFD) is a significant modeling technique for analyzing and constructing information process. DFD literally means an illustration that ~~example~~ explains the course or movement of information in a process. DFD ~~issu~~ illustrates this flow of information in a process based on the inputs and output. A DFD can be referred to as a process model.

There are seven (7) Rules for construct a data flow

(i) Arrow should not cross each other.
(ii) Squares, circles and files must wears names.
(iii) Decomposed data flow must be balanced.
(iv) No two data flows, squares or circles can be the same names.
(v) Draw all data flows around the outside of the diagram.
(vi) choose meaningful names for data flows, process and data store.
(vii) [illegible] information such as record units, [illegible] and validation

requirements are not pertinent to a data flow diagram.

Additionally, a DFD can be utilized to visualize data processing or a structured design. The basic DFD can be then disintegrated to a lower level diagram demonstrating smaller steps exhibiting details of the system that is being modeled.

In our database design, we give names to data flows, process and data stores. Although the name are descriptive of data, they do not give details. Our interest is to build some details of the contents of data flow, process and data store. A data dictionary is a structured repository of data about data. It is a set of rigorous definitions of all DFD data element and structures.

Non - functional requirements:

(1) Security -

The system used SSL (secured socket layer) in all transaction that include any confidental customer information.
The system must automatically log out all customers after a period of inactivity.
The system should not leave any cookies on the customer's computer containing the user's password.
The system's back-end servers shall only be accessible to authenticated administors
Sensitive data will be encrypted before being sent over insecure connections like the internet.

(2) Accessibility :-

(a) The system shall provide handicap access.
(b) The system shall provide multi-language support.

(3) Accessibility :

The system will be a web-based application it is going to be accessible on the web browser.

(4) Performance:

~~The~~

- use of captcha and encryption to avoid bots from booking tickets.
- search results should populate within acceptable time limits.
- user should be helped appropriately to fill in the mandatory fields, incase of invalid input.
- system should accept payments via different payment methods, like paypal, wallets, cards, vouchers, etc.
- system should visually confirm as well as send booking confimation to the users contact.

- payment server should be up and running up 24*7 hours without any problem

- likewise such requirements can include many more related to ~~Prob~~ portability, scability, Accuracy and precision, Legal etc.

About ER Diagram:.

Entity Relationship Diagram

ER model is a popular high level - conceptual data model. This model and its variations are frequently used for the conceptual design of database application and many database design tools employ its concept.

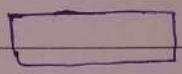
A database that confirms to an E-R diagram can be represented by a collection of tables in the relation System. The mapping of E-R diagram of E-R diagram to the entities are:.

- Attributes
- Relations
  - many - to - many
  - many - to - one
  - one - to - many
  - one - to - one
- weak entity
- sub - type and syper - type

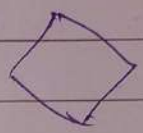
The entities and their relationships between them are shown using the

following conventions.

- An entity is shown in rectangle.



- A diamond represent the relationship among number of entities.



- The attributes shown as ovals are connected to the entities or relationship lines.

- Diamond, oval and relationships are labeled.

- model is an abstraction process that hides super details while highlighting details relation to application at end.

- A Data model is a mechanism that provides this abstraction for database application.

- Data modeling is used for representing entities and their relationship in the database.

- Relationship is used in data modeling to represent in association between an entity set.

- An association between two attributes indicates that the values of the associated attributes are independent.

Testing

White Box Testing :-

In this technique, the close examination of the logical parts through the software are tested by cases that exercise specied sets of conditions or loops. all logical parts of the software cheked once. when the box testing tests all the independent part within a module a logical decision on their true and the false side are exercised. all loops and bounds within their operational bounds were exercised and internal data structure to ensure their validity were exercised once.

Black Box testing

Black box testing tested the input, the output and the external data. It checks whether the input data is

correct and whether we are getting the desired output.

Alfa Testing

Acceptance testing is also sometimes called alfa testing. The alfa testing proceeds untill the system developer and the customer agree that the provided system is an acceptable implementation of the system requirements.

Beta Testing

During beta testing, a system is delivered among a number of potential users who agree to use it. This provides the product for real use and detects errors which may not have been anticipated by the system developers.

Unit Testing

Each module is considered independently it focuses on each unit of software as implemented in the source code. it is white box testing.

Integration Testing:

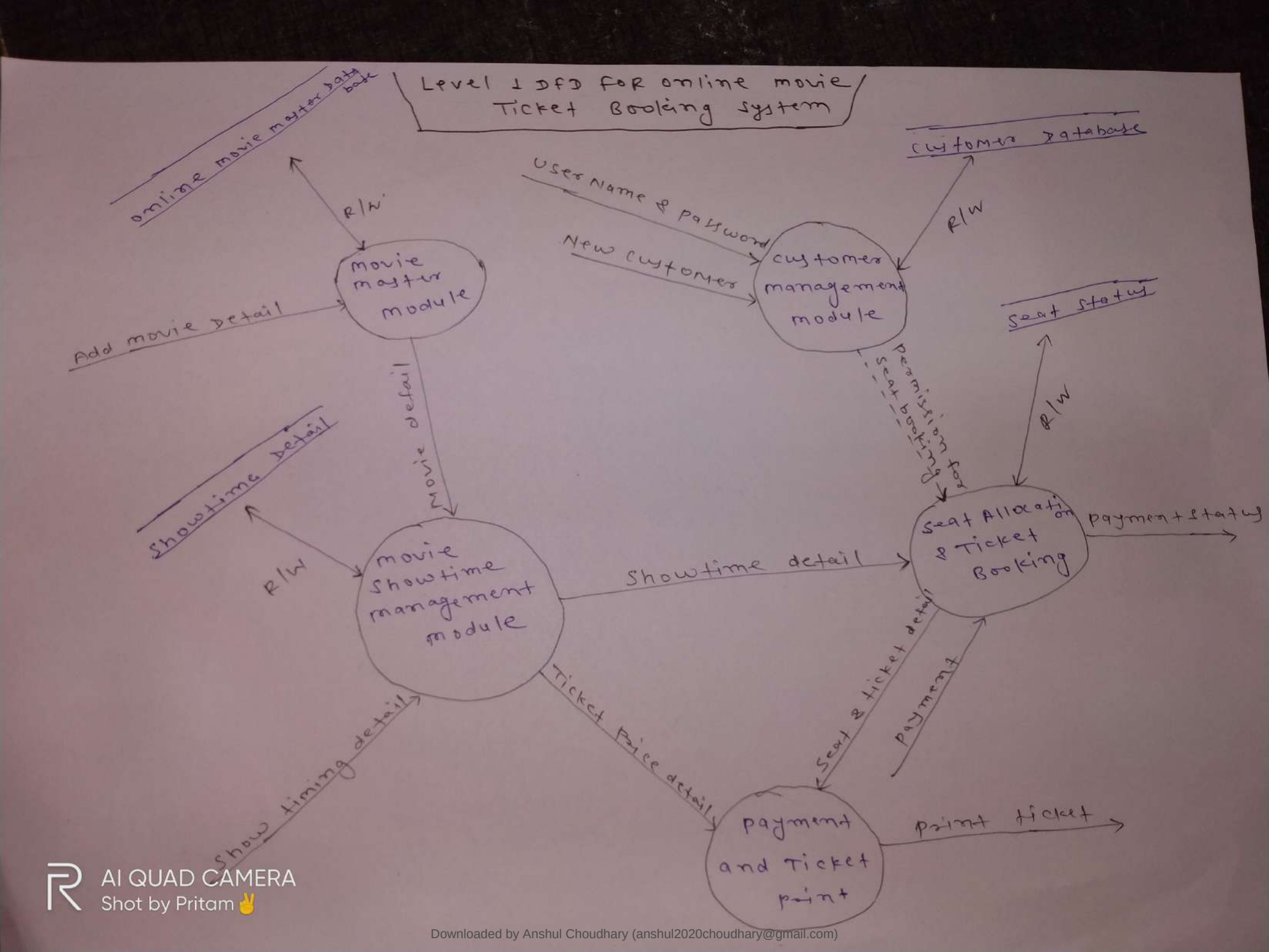
Integration testing aims at constructing the program structure while at the same constructing tests to uncover errors associated with interfacing the modules. modules are integrated by using the top down approach.

Validation Testing:

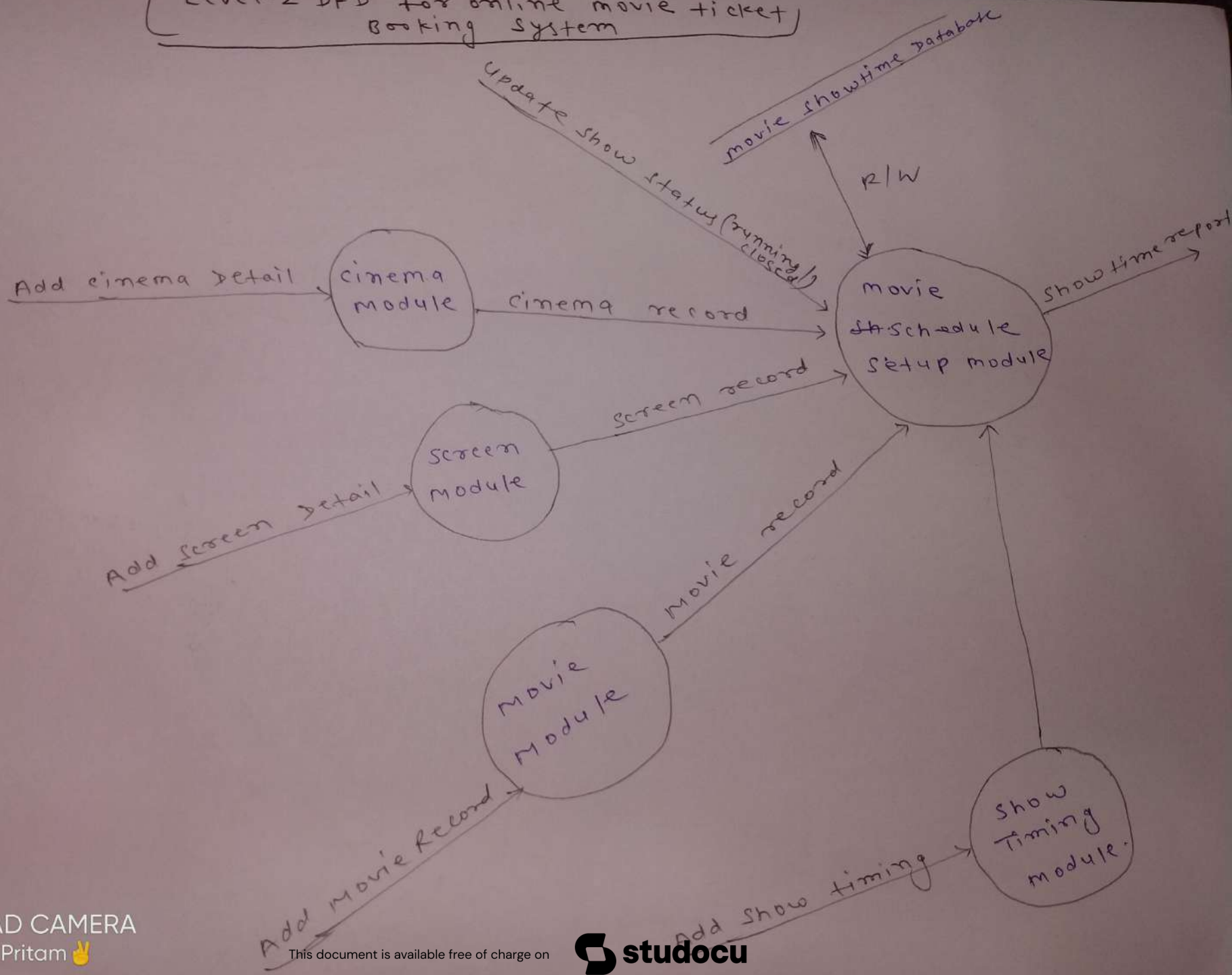
Validation testing was performed to ensure that all the functional and performance requirements are met.

System Testing:

System testing is done to ensure that the system satisfies all the user requirements.



Level-2 DFD for online movie ticket Booking System



General USE CASE : PVR: ONLine Movie ticket Booking