

Form-Based Specification
and
Tabular Specification

for

Students' Auditorium Management Software



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FORM-BASED SPECIFICATION

Manager:-

1)Login:-

Function	Manager Login
Description	The form given here will be used by manager to login into portal.
Inputs	1) User Id, 2) Password
Source	Input from user
Outputs	Redirection to manager dashboard.
Destination	Manager Dashboard
Action	The user id and the password will be matched with database table's data if the entered data is correct and matched each other then the user will be redirected to the dashboard otherwise an error will be shown.
Requires	Correct user id and password for authentication.
Pre-Condition	None
Post-Condition	None
Side-Effects	None

2) Fix Price:-

Function	Fix Seats Price
Description	This function is used for fixing the price of various types of seats.
Inputs	1) Show Id, 2) Type of Seat, 3) Price
Source	From manager (user)
Outputs	A confirmation message
Destination	Manager Dashboard (popup)
Action	After clicking the fix price button the manager will be asked to enter show id, seat type and price. After filling the details and clicking the submit button a confirmation popup will be showed.
Requires	Valid show id, seat type and price.
Pre-Condition	Show id should be valid.
Post-Condition	None
Side-Effects	None

3) Fix Total Seats :-

Function	Fix Seats
Description	This function is used for fixing the number of seats for various catagory.
Inputs	1) Show Id, 2) Type of Seat, 3) Total Available Seats
Source	User (manager) Input
Outputs	A confirmation message.
Destination	Dashboard (popup)
Action	After getting into fix seats function user (manager) will be asked to fill a form containing the show id, type of seats and total available seats for various catagories of seats and after submitting a confirmation popup will appear.
Requires	Valid show id and valid no of seats.
Pre-Condition	Show id and Number of seats must be valid.
Post-Condition	None
Side-Effects	None

4) Complementary Seats Distribution-

Function	Complementary Distribution
Description	This function is used for distributing the complementary seats to the members of organizing committee.
Inputs	1) Show Id, 2) Type of Seat, 3) Member Id
Source	User (manager) input
Outputs	Print popup for printing ticket with ticket id
Destination	New window
Action	For distribution of complementary seats user has to enter the show id, type of seat and the member id to whom the seat has to given. After submitting the details ticket id will be generated with option of ticket printing.
Requires	Valid show id and valid member id
Pre-Condition	Show id and member id must be valid and should already present in database table.
Post-Condition	Ticket Id generated should be in a specific format.
Side-Effects	None

5) Schedule Show:-

Function	Schedule show
Description	This function is used by manager to schedule a particular show on a date.
Inputs	Title of Show, Date, Time, Show Id, Total Seats for Sale
Source	User Input
Outputs	Show details in a popup box for verification
Destination	Dashboard
Action	The manager needs to enter the show title, date on which show is to be schedule, time, show id and total seats for sale. After submitting the details a popup will be shown with the show information and ask for the verification if the details are correct or not. After verification the show is scheduled on the date.
Requires	All the user inputs and verification after submitting the data.
Pre-Condition	The show id must be valid.
Post-Condition	None
Side-Effects	None

6) Create Sales Login:-

Function	Sales Person Registration
Description	This function is used for registration of sales person by manager.
Inputs	Name, User Id, Password, Valid Id number, Gender.
Source	User Input
Outputs	A popup after successful registration.
Destination	Dashboard
Action	For the sales person registration the manager will enter all the details of the sales person and will create a temporary password which will be send to the sales person for whom the id is created. After submitting the form the deails will be stored in sales person database table for further verification.
Requires	User Id in valid format, password in specified format.
Pre-Condition	None
Post-Condition	None
Side-Effects	None

7) Check Availability and Amount Collected:-

Function	Query Details
Description	This function is used by manager to query the number of seats available in a show and total amount collected from the distribution of the tickets of the show.
Inputs	Show Id
Source	User Input
Outputs	The total available seats in the show and the amount collected.
Destination	A new window that displays the information about show.
Action	The manager is needed to enter the valid show id for checking the seats availability and amount collected from the particular show. A new window containing these information will popup with a option of printing the details.
Requires	Valid show id
Pre-Condition	Manager must need to enter the valid show id.
Post-Condition	None
Side-Effects	None

8) Check Balance Sheet:-

Function	Check Balance Sheet
Description	This function is used for checking the balance sheet and printing it.
Inputs	Financial Year or Show Id
Source	User Input
Outputs	A new window displaing the balance sheet with the option of printing it either in a pdf or excel format.
Destination	A new window with the balance sheet information.
Action	The manager needs to enter the financial year or the show id he/she needs to check the balance sheet for. After the input a window with the balance sheet and the options of downloading the balance sheet in pdf or excel format will appear from where the manager can download the balance sheet.
Requires	Show id or Financial year.
Pre-Condition	Show id or Financial year must be valid.
Post-Condition	None
Side-Effects	None

Spectator:-

1) Registration:-

Function	Spectator Registration
Description	This function is used by spectator for registration.
Inputs	Name, User Id, Password, Valid Id number, Gender, Email.
Source	User Input
Outputs	A popup after successful registration.
Destination	Spectator Registration page
Action	The user needs to enter all the details required, password and email in a valid format. After successful registration an email with the user id, password and a verification link will be send using which the user needs to enter the otp received in the email. After verification user can login into the portal.
Requires	All the input details.
Pre-Condition	Valid Email, and password in a valid format.
Post-Condition	None
Side-Effects	None

2) Login:-

Function	Spectator Login
Description	The form given here will be used by spectator to login into portal.
Inputs	1) User Id, 2) Password
Source	Input from user
Outputs	Redirection to spectator dashboard.
Destination	Spectator Dashboard
Action	The user id and the password will be matched with database table's data if the entered data is correct and matched each other then the user will be redirected to the dashboard otherwise an error will be shown.
Requires	Correct user id and password for authentication.
Pre-Condition	None
Post-Condition	None
Side-Effects	None

3) Book Ticket :-

Function	Book Ticket
Description	This function is used by the spectator for booking the tickets for the show.
Inputs	Show Id, Number of Tickets, Id number
Source	User input
Outputs	A ticket with the unique ticket id.
Destination	Book Ticket Page.
Action	The spectator needs to enter all the details required and after submitting the details the ticket with unique ticket id will be generated and an option for printing the ticket will be available.
Requires	Show id, id number and total tickets
Pre-Condition	Valid show id.
Post-Condition	None
Side-Effects	None.

4) Cancel Ticket-

Function	Cancel Ticket
Description	This function is used by spectator to cancel the previously booked tickets.
Inputs	Show Id, Ticket Id and Reason of cancellation.
Source	User Input
Outputs	A confirmation message of cancellation and the refund amount.
Destination	Spectator Dashboard
Action	The user will enter all the details required and after submission the confirmation message for the cancellation will appear. After the confirmation the ticket will be cancelled and the refund process will be initiated.
Requires	Show Id, Ticket Id
Pre-Condition	Valid show id and ticket id.
Post-Condition	None.
Side-Effects	None.

Sales Person:-

1)Login:-

Function	Sales Person Login
Description	The form given here will be used by sales person to login into portal.
Inputs	1) User Id, 2) Password
Source	Input from user
Outputs	Redirection to sales person dashboard.
Destination	Sales person Dashboard
Action	The user id and the password will be matched with database table's data if the entered data is correct and matched each other then the user will be redirected to the dashboard otherwise an error will be shown.
Requires	Correct user id and password for authentication.
Pre-Condition	None
Post-Condition	None
Side-Effects	None

2) Book Ticket:-

Function	Book Ticket
Description	This function is used by the sales person for booking the tickets for the show.
Inputs	Show Id, Number of Tickets, Id number
Source	User input
Outputs	A ticket with the unique ticket id.
Destination	Book Ticket Page.
Action	The sales person needs to enter all the details required and after submitting the details the ticket with unique ticket id will be generated and an option for printing the ticket will be available.
Requires	Show id, id number and total tickets
Pre-Condition	Valid show id.
Post-Condition	None
Side-Effects	None.

Clerk:-

1) Login:-

Function	Clerk Login
Description	The form given here will be used by clerk to login into portal.
Inputs	1) User Id, 2) Password
Source	Input from user
Outputs	Redirection to clerk dashboard.
Destination	Clerk Dashboard
Action	The user id and the password will be matched with database table's data if the entered data is correct and matched each other then the user will be redirected to the dashboard otherwise an error will be shown.
Requires	Correct user id and password for authentication.
Pre-Condition	None
Post-Condition	None
Side-Effects	None

2) Fill Expenditure:-

Function	Fill Expenditures
Description	This function is used by clerk to fill the expenditure details of the shows.
Inputs	Show id, Expenditure details
Source	Input from user.
Outputs	Confirmation message.
Destination	New window with the details entered .
Action	The clerk will enter all the details including show id and the expenditure details and after submitting the details a new window with the details will be shown for verification.
Requires	Show id
Pre-Condition	Show Id must be valid.
Post-Condition	None
Side-Effects	None

TABULAR -SPECIFICATIONS

Symbols and Meanings:- (1) = : Equals (2) != : Not Equals (3) table_name(attribute) in database
(4) <= : Less than or Equal to (5) > : Greater than (6) < : Less than (7) >= : Greater than or Equals to

Manager:-

Login:-

Condition	Action
IF userid = manager(uid) and password = manager(password)	Redirect to Manager Dashboard
IF userid != manager(uid) and password = manager(password)	Show error Message
IF userid = manager(uid) and password != manager(password)	Show error Message
IF userid != manager(uid) and password != manager(password)	Show error Message

Fix Price:-

Condition	Action
IF show_id = show(id)	Confirmation message and redirection to manager dashboard.
IF show_id != show(id)	Show error message.

Fix Total Seats:-

Condition	Action
IF show_id = show(id) and seats <= total_seats	Confirmation message and redirection to manager dashboard.
IF show_id != show(id)	Show error message.
IF seats > total_seats	Show error message.

Complementary Seats Distribution:-

Condition	Action
IF show_id = show(id) and member_id = member(id)	Confirmation message and Generate ticket id.
IF show_id != show(id) or member_id != member(id)	Show error message.

Schedule Show:-

Condition	Action
IF show_id = show(id) and seats_for_sale <= total_seats	Confirmation message.
IF show_id != show(id) or seats_for_sale > total_seats	Show error message.

Create Sales Person Login:-

Condition	Action
IF user_id not in user(id) and password matches pattern	Confirmation message.
Else	Show error message.

Check Availability and Amount Collected:-

Condition	Action
IF show_id = show(id)	Display information in a new window.
IF show_id != show(id)	Show error message.

Check Balance Sheet:-

Condition	Action
IF show_id = show(id) or financial_year = valid_year	Display information in a new window.
IF show_id != show(id) or financial_year != valid_year	Show error message.

Spectator:-**Registration:-**

Condition	Action
IF email_id is valid and password matches pattern	Confirmation message.
IF email_id not valid or password not matches pattern	Show error message.

Login:-

Condition	Action
IF userid = spectator(uid) and password = spectator(password)	Redirect to Spectator Dashboard
IF userid != spectator(uid) and password = spectator(password)	Show error Message
IF userid = spectator(uid) and password != spectator(password)	Show error Message
IF userid != spectator(uid) and password != spectator(password)	Show error Message

Book Ticket:-

Condition	Action
IF show_id = show(id) and no_of_ticket <= 4 and ticket = available	Unique ticket id generation and redirection of printing page of ticket.
IF show_id != show(id) or no_of_ticket > 4 or ticket not available	Show error message.

Cancel Ticket:-

Condition	Action
IF show_id = show(id) and ticket_id = ticket(id)	Cancellation confirmation and Display Refund amount .
IF show_id != show(id) or ticket_id != ticket(id)	Show error message.

Sales Person:-

Login:-

Condition	Action
IF userid = sales_person(uid) and password = sales_person(password)	Redirect to Sales Person Dashboard
IF userid != sales_person(uid) and password = sales_person(password)	Show error Message
IF userid = sales_person(uid) and password != sales_person(password)	Show error Message
IF userid != sales_person(uid) and password != sales_person(password)	Show error Message

Book Ticket:-

Condition	Action
IF show_id = show(id) and no_of_ticket <= 4 and tickets = available	Unique ticket id generation and redirection of printing page of ticket.
IF show_id != show(id) or no_of_ticket > 4 or ticket not available	Show error message.

Clerk:-

Login:-

Condition	Action
IF userid = clerk(uid) and password = clerk(password)	Redirect to Clerk Dashboard
IF userid != clerk(uid) and password = clerk(password)	Show error Message
IF userid = clerk(uid) and password != clerk(password)	Show error Message
IF userid != clerk(uid) and password != clerk(password)	Show error Message

Fill Expenditure:-

Condition	Action
IF show_id = show(id)	Redirection to expenditure filling table.
IF show_id != show(id)	Show error message.