

Project report on

APU EVENT
MANAGEMENT AND
BOOKING SYSTEM

A Web Based Project

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Introduction:

In this practical work we have made a website using the latest technologies for Event Hall Management and Booking where a client can register himself/herself and then can book a hall on a selected date for an event. There are basically three types of users.

- 1. Managing Staff:**

They can just view the report. Furthermore they can manage their account.

- 2. Sales Representatives:**

These users can add their hall for customers to book. They can manage the payments, feedbacks from customer and manage their own account

- 3. Customer:**

They can book a Hall on a selected date if the Hall is available. They can manage the payment as well as their account. They can also provide feedback on the halls they booked.

We used J2EE which consists of a set of APIs, services, and protocols that provide the functionality to develop multi-tiered web-based applications. It includes several technologies that extend the functionality of the Java SE APIs, such as Servlets, Connectors, Enterprise JavaBeans, in the core of J2EE we can find EJB's which provide features such as declarative transactions and security via annotations.


Web Design:

We used JSP and Servlets for this project. JSP is used with CSS for designing the webpages while the servlets were used for the input validations.

The JSP files in the project are given below.

login.jsp:

This file contains the code for our Login page. It asks for username and password. If the username and password is correct the user is logged in otherwise you have to enter the password again. If you donot have an account you can create one by simply pressing sign up button on the page. It has login servlet for validations



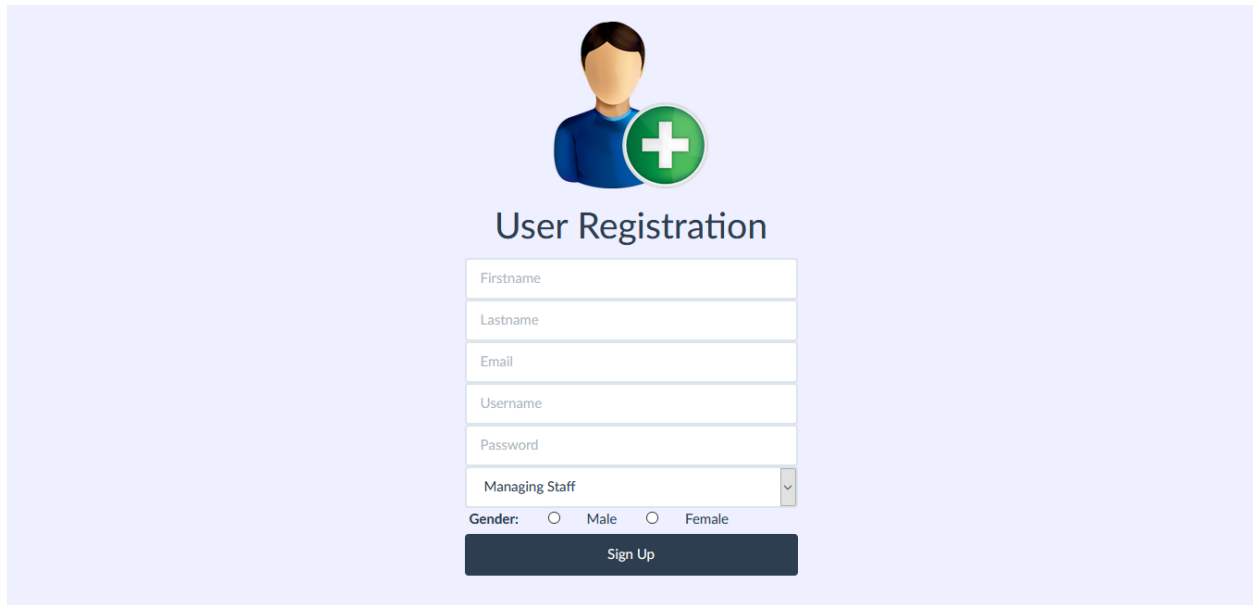
User Login

Username:

Password:

register.jsp:

On this Page user can register himself by providing the information about him/her. There are three user types available you can create account by selecting any one of them. There is proper validation on the fields so if you are unable to register then check for correct input. It have Register servlet for validations.



The image shows a user registration form titled "User Registration". At the top, there is an icon of a person with a green plus sign. Below the title, there are several input fields: "Firstname", "Lastname", "Email", "Username", "Password", and a dropdown menu for "Managing Staff". Below these fields, there are radio buttons for "Gender" with options "Male" and "Female". At the bottom, there is a dark blue button labeled "Sign Up".

managingstaff.jsp:

This page is only for users who are managing staff. On this page a report is shown to the user about the Bookings. It is connected with Management Servlets for performing different actions.

APU Event Management System

admin

Profile Management

Logout

Report Management

Owner Name	Owner Gender	Hall Name	Hall Place	Hall Charges	Profit from Booking
aliahmed	Male	Qasim Banquet	Hyderabad	12500	37500
aliahmed	Male	hall2	place2	12000	36000
ahmedali	Male	saler2hall1	saler2place1	12999	0
ahmedali	Male	saler2hall2	saker2place2	13888	0

salesrepresentatives.jsp:

This page is only for users who are sales representatives. On this page the hall of the sales representative is shown. It is connected with Management Servlets for performing different actions.

APU Event Management System

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My Halls

Profile Management

Payment Management

Customer Feedbacks

Logout

Hall ID	Hall Name	Hall Place	Hall Price	Hall Details
6	Qasim Banquet	Hyderabad	12500	Nodetails
7	hall2	place2	12000	hall2 details

Add Hall

Edit Hall

customers.jsp:

This page is only for customers. On this page all halls are shown so that user can select the hall of his choice. It is connected with Management Servlets for performing different actions.

APU Event Management System

customer1 ▾

All Halls

Profile Management

Payment Management

Logout

Hall ID	Hall Name	Hall Place	Hall Price	Hall Details
6	Qasim Banquet	Hyderabad	12500	Nodetails
7	hall2	place2	12000	hall2 details
8	saler2hall1	saler2place1	12999	Reasonable price
9	saler2hall2	saler2place2	13888	af

Book Hall

My Bookings

Provide Feedback

account.jsp:

This page is available for only sales representatives and customers. Here they can add balance to their account. It is connected with Management Servlets for performing different actions.

APU Event Management System

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Account Management

Account Number

Balance

Update

addhall.jsp:

This page is only available for sales representatives. Here they can add their Hall so that it is visible to the customers. It is connected with Management Servlets for performing different actions.

APU Event Management System

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Add Event Hall

Hall Name

Hall Place

Hall Charges

Add Hall

bookhall.jsp:

This page is available to the customers and here they can book the hall of their choice. It is connected with Management Servlets for performing different actions.

APU Event Management Systemcustomer1

Book Event Hall

Hall ID

Choose Date:

mm / dd / yyyy

Book Hall

edithall.jsp

This page is available for sales representatives and here they can update the price of their hall. It is connected with Management Servlets for performing different actions.

APU Event Management Systemsaler1

Edit Event Hall

Hall ID

Hall Charges

Update Hall

editprofile.jsp:

This page is for managing the profile. Every user can manager his/her profile. It is connected with Management Servlets for performing different actions.

APU Event Management Systemsal1

Change Password

Current Password:

Password

New Password:

Password

Confirm Password:

Password

Update

feedback.jsp:

This page is available for customers here customer can submit feedback for their booked halls. It is connected with Management Servlets for performing different actions.

APU Event Management Systemcustomer1

User Feedback

Hall ID

Submit Feedback

viewbookings.jsp:

This page is available for customers and they can see their bookings on this page. It is connected with Management Servlets for performing different actions.

My Bookings

Booking ID	Hall ID	Customer ID	Booking Date
5	6	15	2021-01-27
8	7	15	2021-01-28
9	7	15	2021-01-29

viewfbs.jsp:

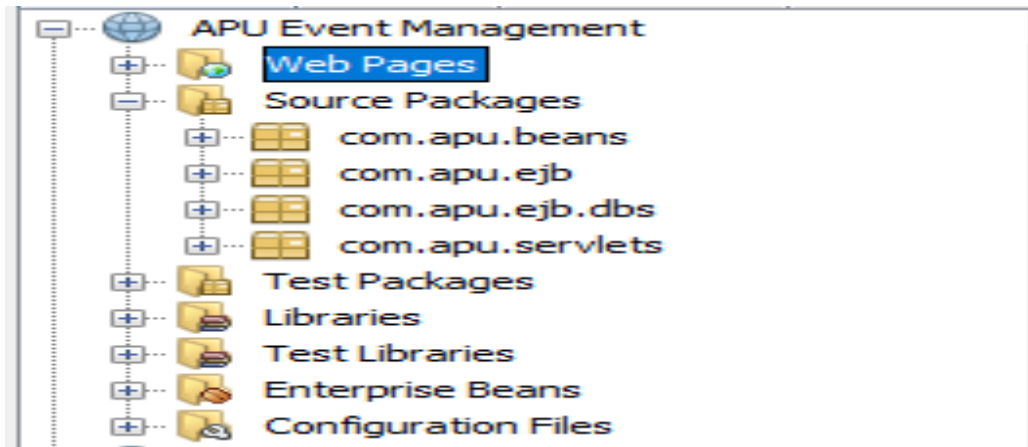
This page is available for sales representatives and here they can view the feedbacks given by the customers on their halls. It is connected with Management Servlets for performing different actions.

View Feedbacks

Feedback ID	Customer ID	Hall ID	Owner ID	Feedback
1	15	6	13	Good

Business Tier Design:

In Business Tier we have our Business Logic. The connection to the database and the retrieval of data from the database is all here. We have the following packages shown in the picture below.



com.apu.beans Package:

This Package Contains our bean Classes or entity classes. Each class is designed for purpose of storing data from the database. The first class is Account class which is for storing our data from the account table. The second class is BookHall Class and it is for storing the data of bookhall table. The third class is Feedback class which is for storing the data of feedback table. The forth class is Hall class which is for storing the data of the hall table. The fifth class is User which is for storing data of users. The Attributes and methods of theses classes are shown below in the UML Diagram.

com.apu.ejb Package:

This package contains our remote interface DAO which is used to fetch data from the database. The user don't need to go for the implementation all they have to do is to call the method on this object. The abstract methods of this interface is given below in the diagram.

com.apu.ejb.dbs Package:

This package contains stateless ejb and singleton ejb class. The singleton ejb is for the database connection since we used DAO here in this project. The other class is DAOImpl which is implementing the remote interface DAO for fetching the data from the database.

com.apu.servlets Package:

This package contains servlet classes for the input validation received from the web pages or jsp files. There are 4 servlets. The first one is login servlet which is for the user login. The second servlet is for the logout which will handle the logout action. The third servlet is register which will handle the registration. The forth servlet is Management and it is generic servlet means it would handle all the remaining actions form the web application.

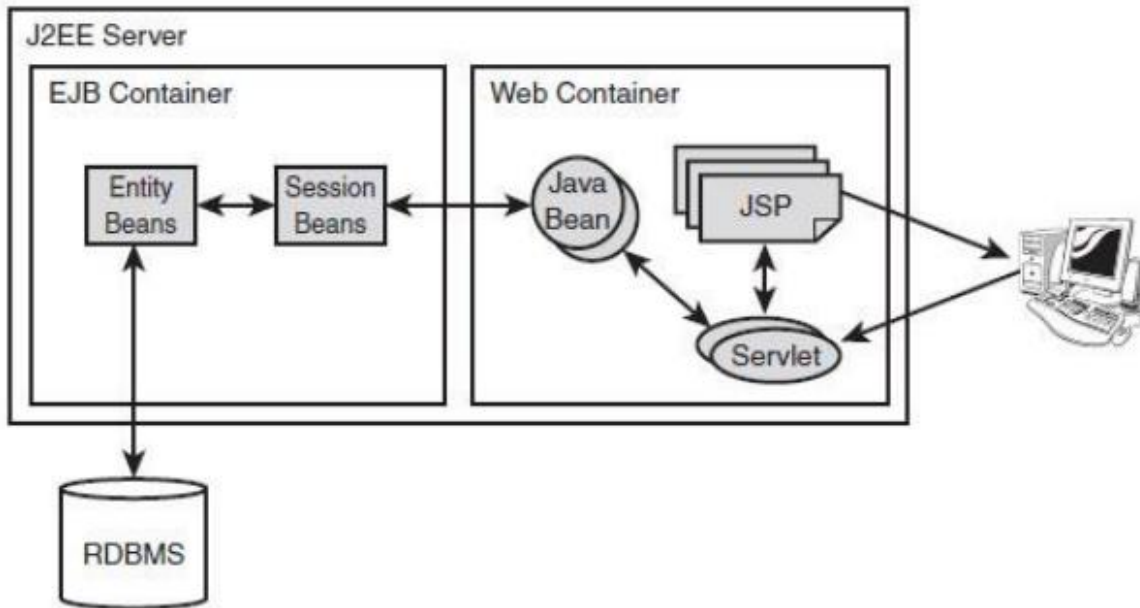


Diagram of com.apu.beans Classes:

Hall
-hallId: int -hallName: String -hallPlace: String -hallPrice: int -ownerId: int -bookedTimes: int -hallDetails: String
+Hall(String, String, String, int, int, int) +Hall(int, String, String, String, int, int, int) +setHallId(int): void +setHallName(int): void +setOwnerId(int): void +setHallPlace(String): void +setHallDetails(String): void +setBookedTimes(int): void +setHallPrice(int): void +getHallId(): int +getHallName(): String +getOwnerId(): int +getHallPlace(): String +getHallDetails(): String +getHallPrice(): int +getBookedTimes(): int

User
-userId: int -firstName: String -lastName: String -userEmail: String -userPassword: String -userType: String -gender: String
+User(String, String, String, String, String, String, String) +User(int, String, String, String, String, String, String) +setUserId(int): void +setFirstName(String): void +setLastName(String): void +setUserEmail(String): void +setUserPassword(String): void +setUserType(String): void +setGender(String): void +getUserId(): int +getFirstName(): String +getLastName(): String +getUserEmail(): String +getUserPassword(): String +getUserType(): String +getGender(): String

Feedback
-feedbackId: int -customerId: int -hallId: int -ownerId: int -feedback: String
+Feedback(int, int, int, String) +Feedback(int, int, int, String) +setFeedbackId(int): void +setCustomerId(int): void +setHallId(int): void +setOwnerId(int): void +setFeedback(String): void +getFeedbackId(): int +getCustomerId(): int +getHallId(): int +getOwnerId(): int +getFeedback(): String

BookHall
-bookingId: int -hallId: int -bookerId: int -date: String
+BookHall(int, int, String) +BookHall(int, int, int, String) +setBookingId(int): void +setHallId(int): void +setBookerId(int): void +setDate(String date): void +getBookingId(): int +getHallId(): int +getBookerId(): int +getDate(): String

Account
-accountId: int -ownerId: int -balance: int
+Account(int, int, int) +setAccountId(int): void +setOwnerId(int): void +setBalance(int): void +getAccountId(): int +getOwnerId(): int +getBalance(): int

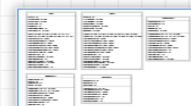
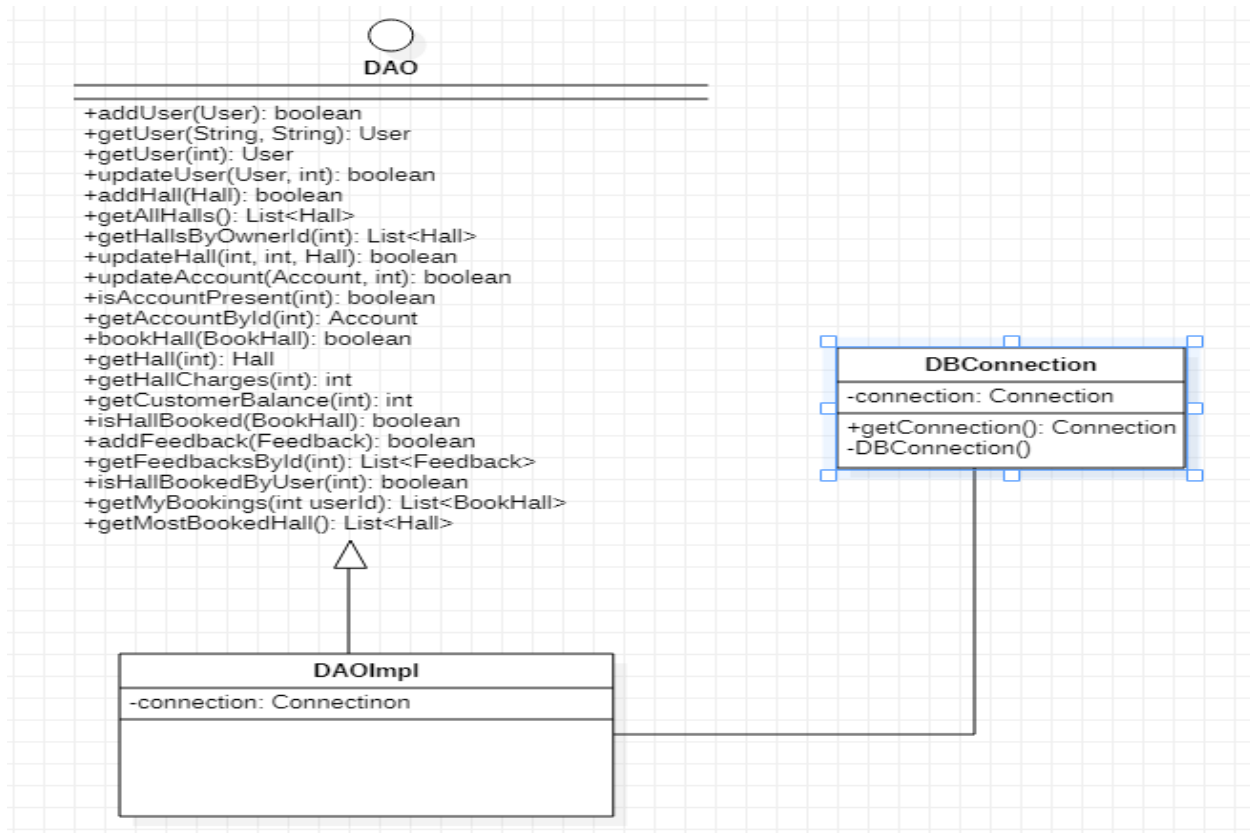
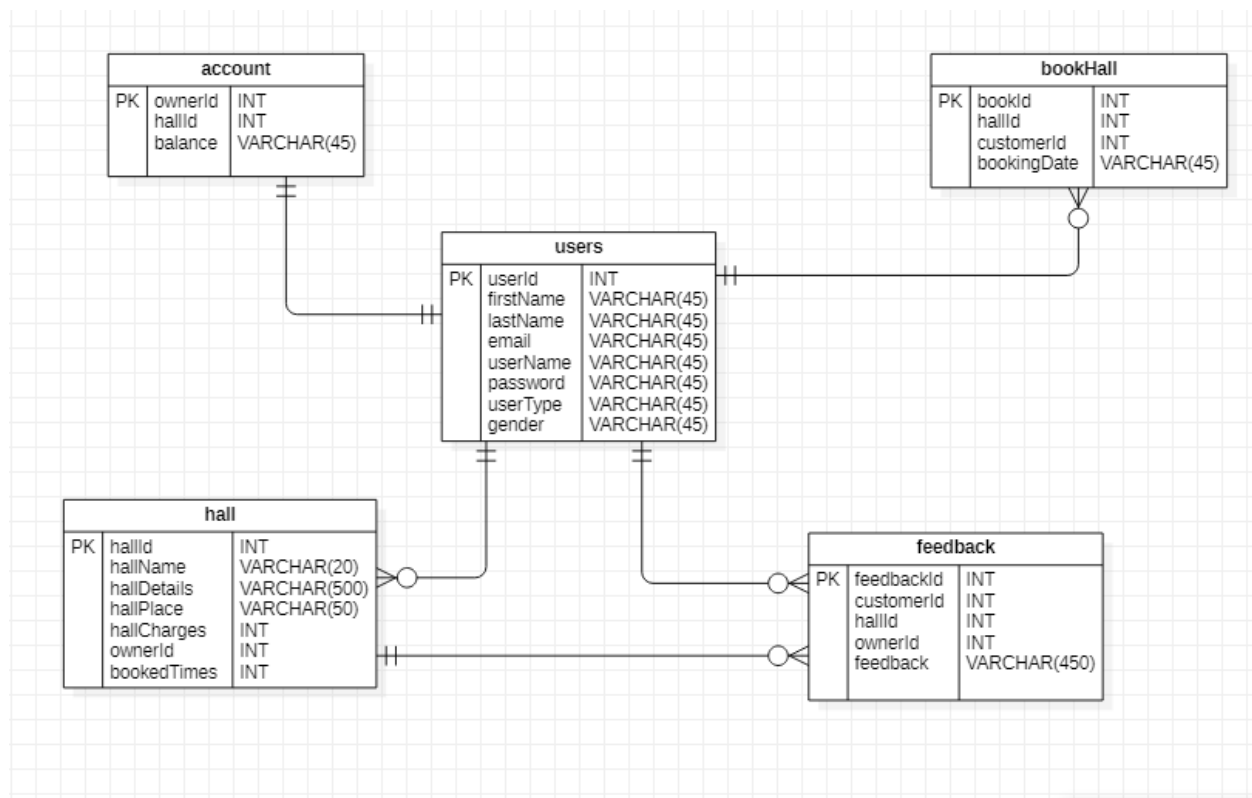


Diagram for classes of com.apu.ejb and com.apu.ejb.dbs Packages:



Database Design:

The database name is apu_dbs and it is created on MySQL workbench. It contains tables for our bean classes for storing the data. The E-R Diagram of our database is given below.



The account table stores the account balance of customers and sales representatives. One user can have only one account.

The User table stores the information about the users. There are three types of users in this table Managing staff, sales representative and customer. This table have the credentials for user login.

Hall table stores the data about the halls added by different sales representatives. One sales representative can either have one hall or have multiple halls. Similarly a hall can have multiple feedbacks.

BookHall table stores the information of bookings whenever a customer books a hall the data is saved inside this table. A user can either book one hall or multiple halls.

Feedback table is used to store the feedbacks of customers. A customer can either provide one feedback on a hall or multiple feedbacks.