

A PROJECT REPORT  
ON  
**Faculty Portal - Faculty Profile Management Module**

By  
**Nirav Jivani (CE061) (19CEUOS083)**  
**Vimal Matholiya (CE078) (19CEUOG120)**  
**Jenit Nakrani (CE089) (19CEUEG098)**

Subject : **System Design Practice**  
B.Tech (CE) Semester – VI

Guided By  
**Prof. Siddharth P. Shah**  
**Assistant Professor**  
**CE Department, DDU, Nadiad**



**Dharmsinh Desai University, Nadiad**  
**Faculty of Technology**  
**Department of Computer Engineering**



**Dharmsinh Desai University, Nadiad**  
**Faculty of Technology**  
**Department of Computer Engineering**

**CERTIFICATE**

This is to certify that the practical / term work carried out in the  
subject of

**System Design Practice**

and recorded in this journal is the bonafide work of

**Nirav Jivani (CE061) (19CEUOS083)**

**Vimal Matholiya (CE078) (19CEUOG120)**

**Jenit Nakrani (CE089) (19CEUEG098)**

of **B.Tech** semester **VI** in the branch of

**Computer Engineering**

during the academic year

**2021-2022.**

**Prof. Siddharth P. Shah**

Dept. of Computer Engg.

Faculty of Technology

D. D. University, Nadiad

**Dr. C. K. Bhensdadia**

Head of Dept. of Computer Engg.

Faculty of Technology

D. D. University, Nadiad

## **Contents :**

|   |    |
|---|----|
| 1. Abstract -----                           | 4  |
| 2. Introduction-----                        | 5  |
| 3. Software Requirement Specifications----- | 6  |
| 4. Design -----                             | 11 |
| i. Use-Case Diagram -----                   | 11 |
| ii. Class Diagram -----                     | 12 |
| iii. Data Flow Diagram -----                | 13 |
| iv. ER Diagram -----                        | 16 |
| 5. Implementation Details-----              | 17 |
| 6. Testing -----                            | 19 |
| 7. Snapshots of the System-----             | 20 |
| 8. Conclusion -----                         | 30 |
| 9. Limitations & Future Extensions-----     | 30 |
| 10. Bibliography-----                       | 31 |

## **Abstract :**

This is system for managing faculty's profile details. In this system faculties can't register themselves, but admin or module admin register them. After registration faculty will get their username and temporary password, using which they can log in tot the system.

After login they can add their profile details, which includes attend events, conducted events, organized events and research papers. After adding profile details the can manage their details appropriately. They can also upload certificates related to some events.

This system also provides filter functionality, using which faculty can search their profile details easily. It also provides functionality for exporting details in csv file. In this system faculties can manage their profile details easily with less manual efforts and time.

## **Introduction :**

This project is for managing faculty's profile. There are mainly three roles for users which are faculty, admin and module admin. According to their roles users can perform different actions.

Admin or module admin can register any new faculty. They can also update registered details for any faculty. They can disable any faculty account, after that faculty can't log in to the system. Admin can change roles of any user. They can also view all the faculties and their publication details.

Faculty can add their profile details, which includes details of their attended , organized or conducted events and publications (research papers – conference or journal) made by them. They can upload certificate or proof for any events. They can view all their events or publications. Faculty can also update details of their profile after adding them. They can delete any events or publications.

There are some other features like update account, forgot password and change password. In update account any user can update their account details like birth date, name, email, gender and qualification, but then can't update details like department, designation and join date.

## **Technologies :**

- JavaScript
- React JS
- Express JS
- MYSQL
- Material UI

## **Tools :**

- Visual Studio Code
- PhpMyAdmin
- Git

## **Platform :**

- Local Development Server

# **Software Requirement Specifications (SRS) :**

## **Types of User :**

- Admin
- Faculty

## **System Functional Requirements :**

### ***R.1 Manage Account***

#### ***R.1.1 Login***

- Description : User have to sign in for use functionality of web application.
- Input : Username and password.
- Output : Home page will be displayed.

#### ***R.1.2 Forgot Password***

- Description : User can change the password if one forgot it. Reset link will be sent to specified email address.
- Input : Email id
- Output : Reset password link will be sent.

#### ***R.1.3 Change Password***

- Description : User can change his/her password after login to the system.
- Input : Old and New password.
- Output : Appropriate message.

#### ***R1.4 Update/View Account Details***

- Description : User can view or update his/her account details.
- Input : New account details (If any).
- Output : Appropriate message.

### ***R.2 Manage Event Attended***

User can manage their attended event details in this module. In this module user can add details of attended events like workshop, seminar, STTP, FDP etc. User can edit or delete existing event details. User can also upload certificate and manage it appropriately.

#### *R.2.1 Add Event Details*

- Description : User can add their event details or upload certificates.
- Input : Event details and scanned copy of certificate (if any)
- Output : Appropriate message

#### *R.2.2 Update Event Details*

- Description : User can update their event details or certificate.
- Input : Updated details and new certificate
- Output : Appropriate message

#### *R.2.3 Delete Event Details*

- Description : User can delete their event details.
- Input : Select event.
- Output : Appropriate message.

#### *R.2.4 View/Download Event Details*

- Description : User can view/download their event details or certificate.
- Input : Selected event.
- Output : Event details or certificate.

### *R.3 Manage Event Conducted*

User can manage their conducted event details in this module. In this module user can add details of conducted events like workshop, seminar, STTP, FDP etc. User can edit or delete existing event details. User can also upload certificate and manage it appropriately.

#### *R.3.1 Add Event Details*

- Description : User can add their conducted event details
- Input : Event details
- Output : Appropriate Message

#### *R.3.2 Update Event Details*

- Description : User can update their conducted event details or guest details.
- Input : Enter new details
- Output : Appropriate Message

#### *R.3.3 Delete Event Details*

- Description : User can delete their Event details.
- Input : Selected event
- Output : Appropriate message

#### *R.3.4 View/Download Event Details*

- Description : User can view/download their event details or certificate.
- Input : Selected event
- Output : Event details or certificate.

### *R.4 Manage Event Organized*

User can manage their organized event details in this module. User can add details of organized events like workshop, seminar, STTP, FDP etc. User can edit or delete existing event details. User can also upload certificate and manage it appropriately.

#### *R.4.1 Add Event Details*

- Description : User can add their organized event detail
- Input : Event details
- Output : Appropriate Message

#### *R.4.2 Update Event Details*

- Description : User can update their Organized Event details.
- Input : Enter new details
- Output : Appropriate Message

#### *R.4.3 Delete Event Details*

- Description : User can delete their Event details.
- Input : Select details
- Output : Appropriate message

#### *R.4.4 View/Download Event Details*

- Description : User can view/download their event details or certificate of particular event
- Input : Select event
- Output : Event details or certificate



## *R.5 Manage Publications*

User can manage their publication's details in this module. User can add conference and journal details and also can edit or delete existing publication details.

### *R.5.1 Add Publication Details*

- Description : User can add publication details in this function.
- Input : publication details
- Output : Appropriate Message

### *R.5.2 Update Publication Details*

- Description : User can update their publication details.
- Input : Enter new details
- Output : Appropriate Message

### *R.5.3 Delete Publication Details*

- Description : User can delete their Publication details.
- Input : Selected publication
- Output : Appropriate message

### *R.5.4 View/Download Publication Details*

- Description : User can view/download their publications details.
- Input : Selected publication
- Output: Publication details

## *R.6 Manage Faculty Details*

Admin or module admin can use this functionality. They can register new faculty and view all faculties details. They can also disable existing faculty account.

### *R.6.1 Register Faculty*

- Description : User can register faculty in this function.
- Input : Faculty details
- Output : Appropriate Message (notification will be sent to registered faculty)

#### *R.6.2 Update Faculty Details*

- Description : User can update details of specific faculty.
- Input : Enter new details
- Output : Appropriate Message

#### *R.6.3 Disable Faculty Account*

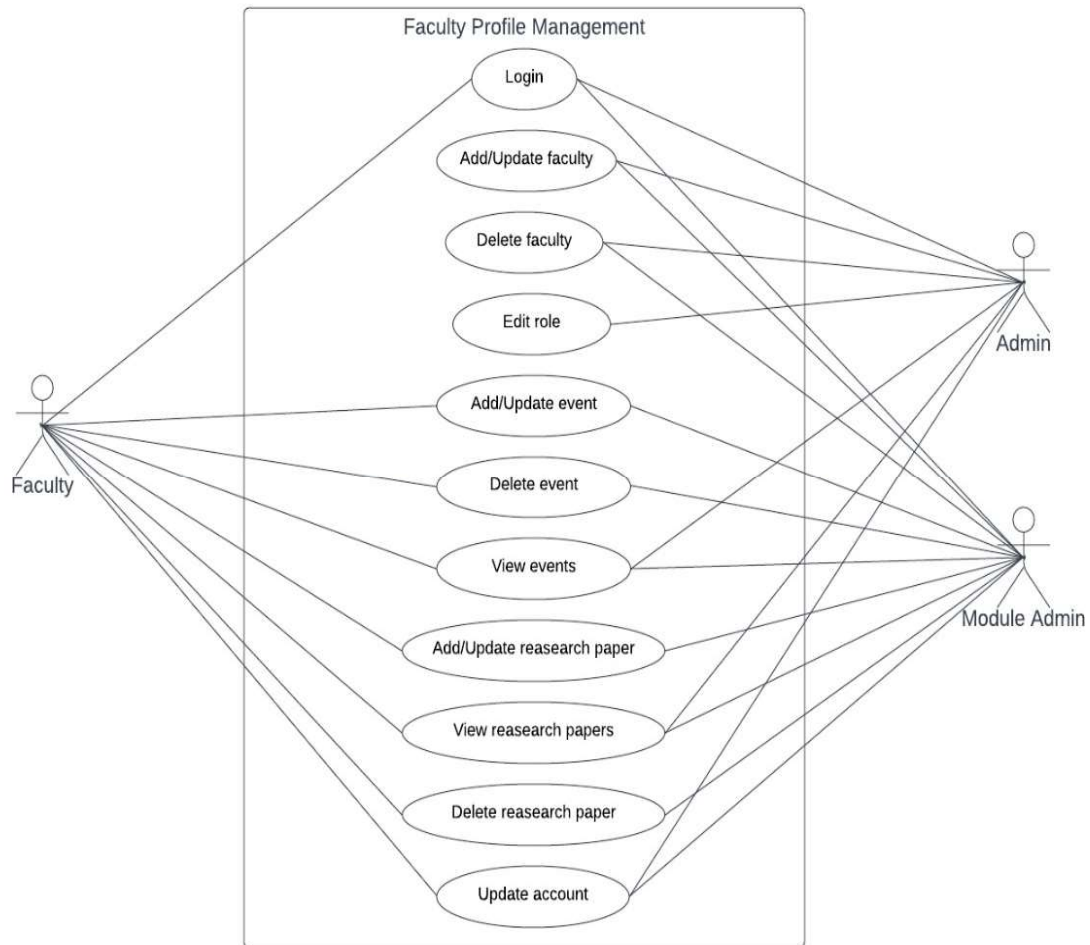
- Description : User can disable faculty account.
- Input : Selected faculty
- Output : Appropriate message

#### *R.6.4 View Faculty Details*

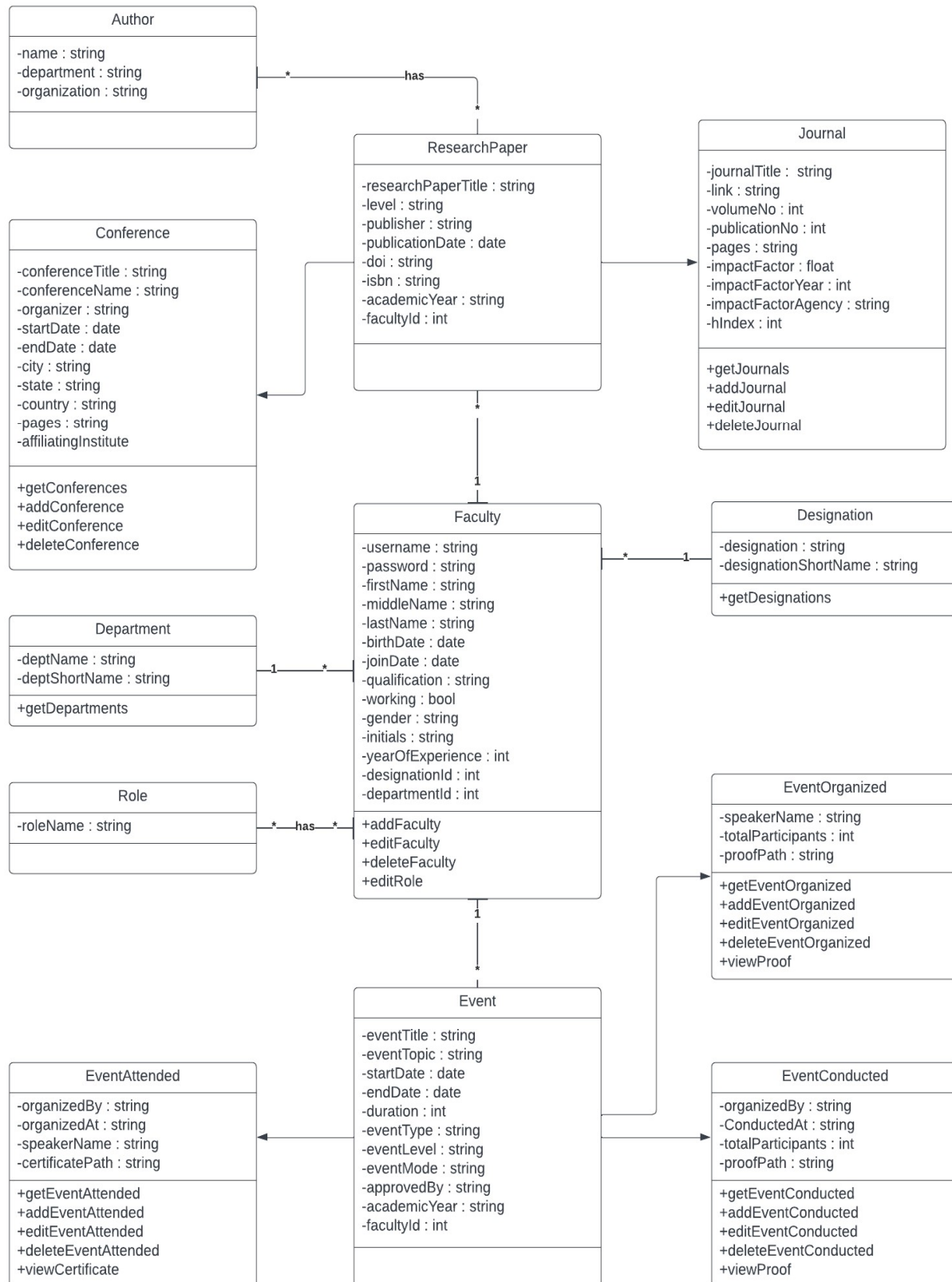
- Description : User can view faculty's details.
- Input : Selected faculty
- Output : Faculty details

## Design :

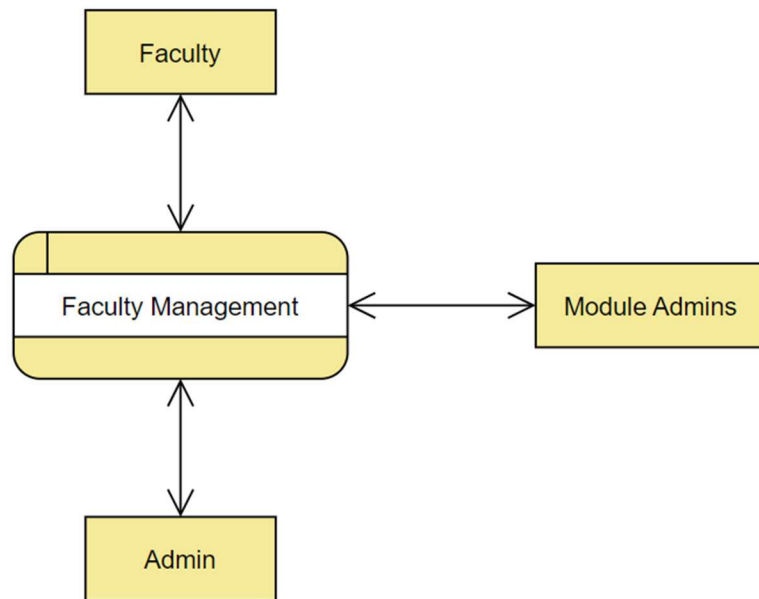
### Use-Case Diagram :



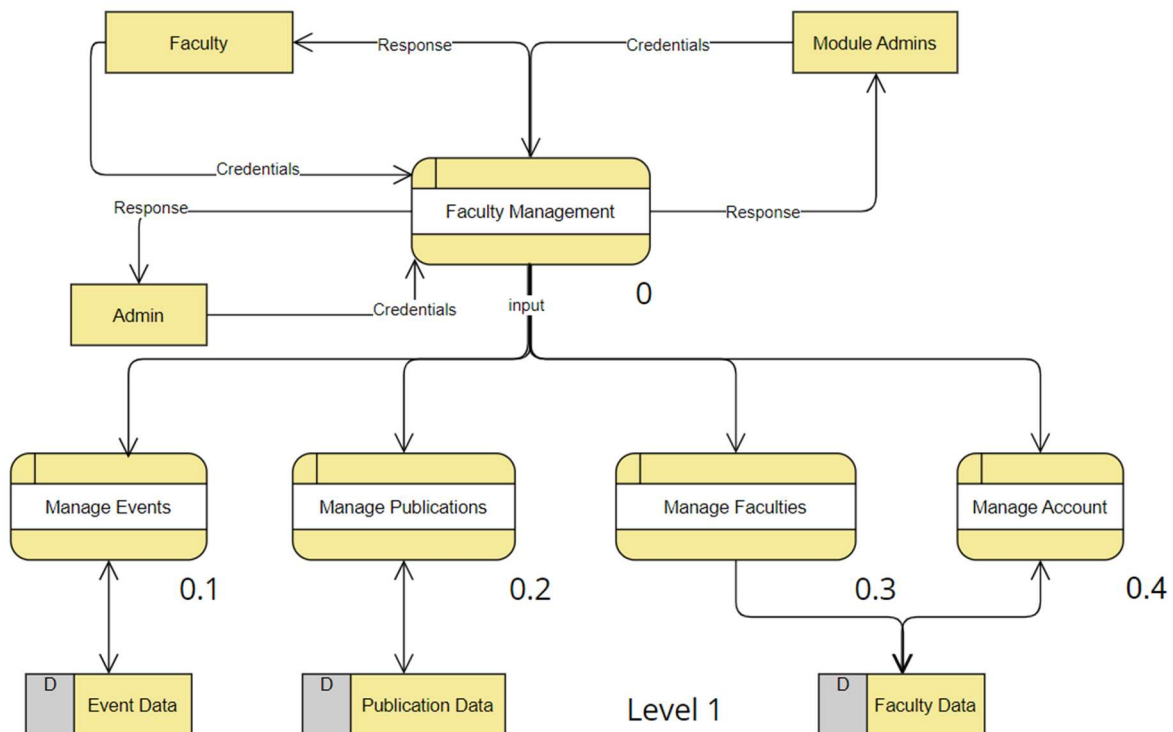
## Class Diagram :



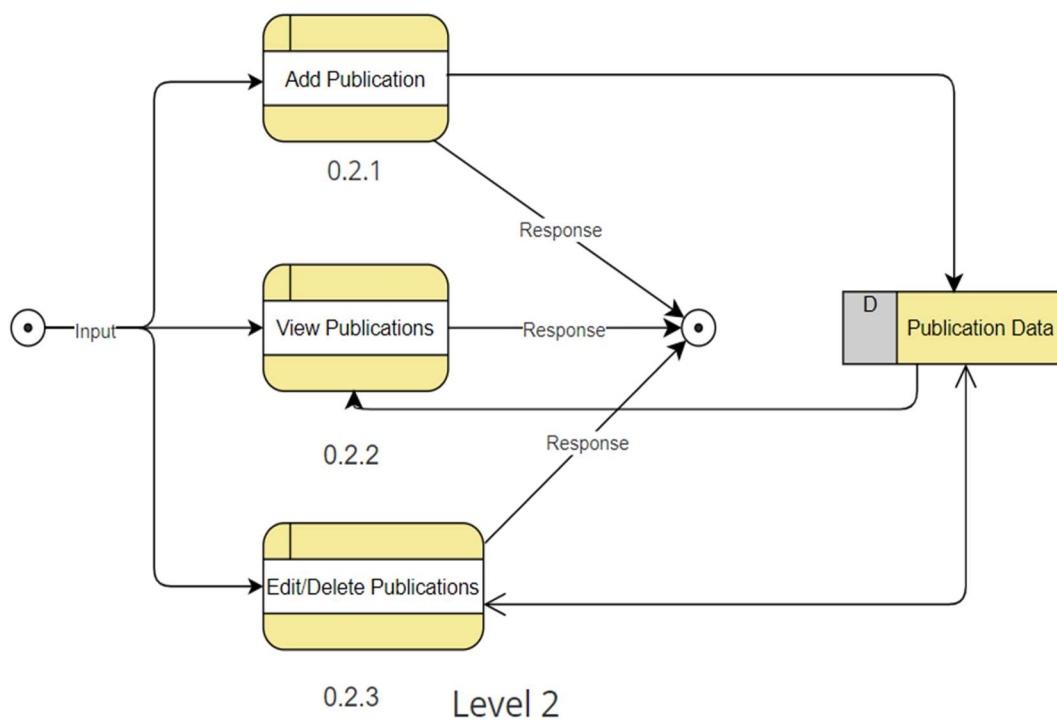
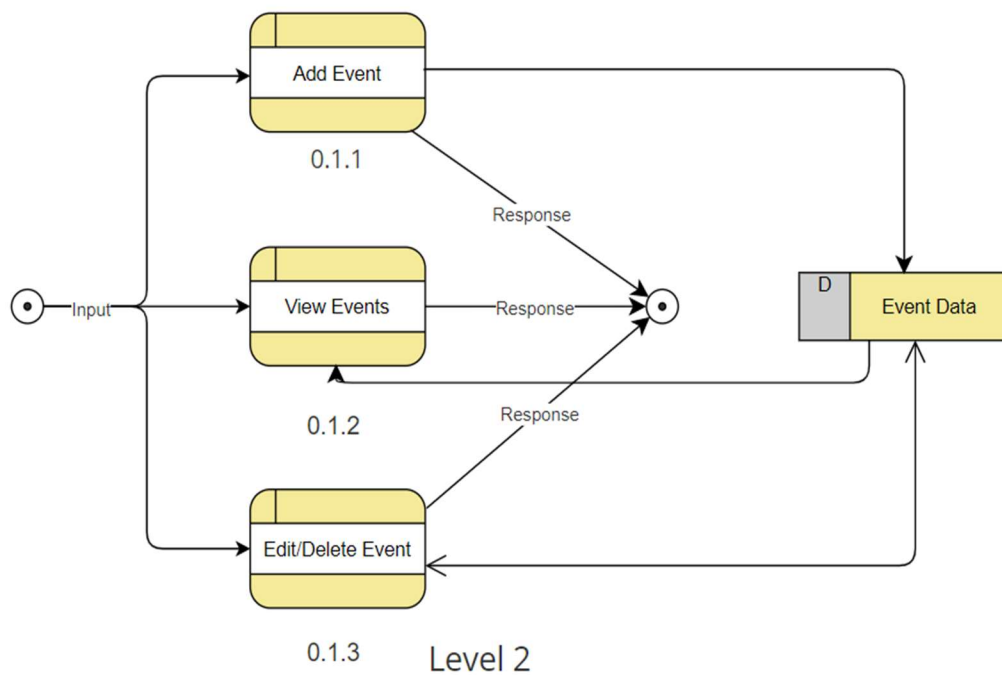
## Data Flow Diagram :

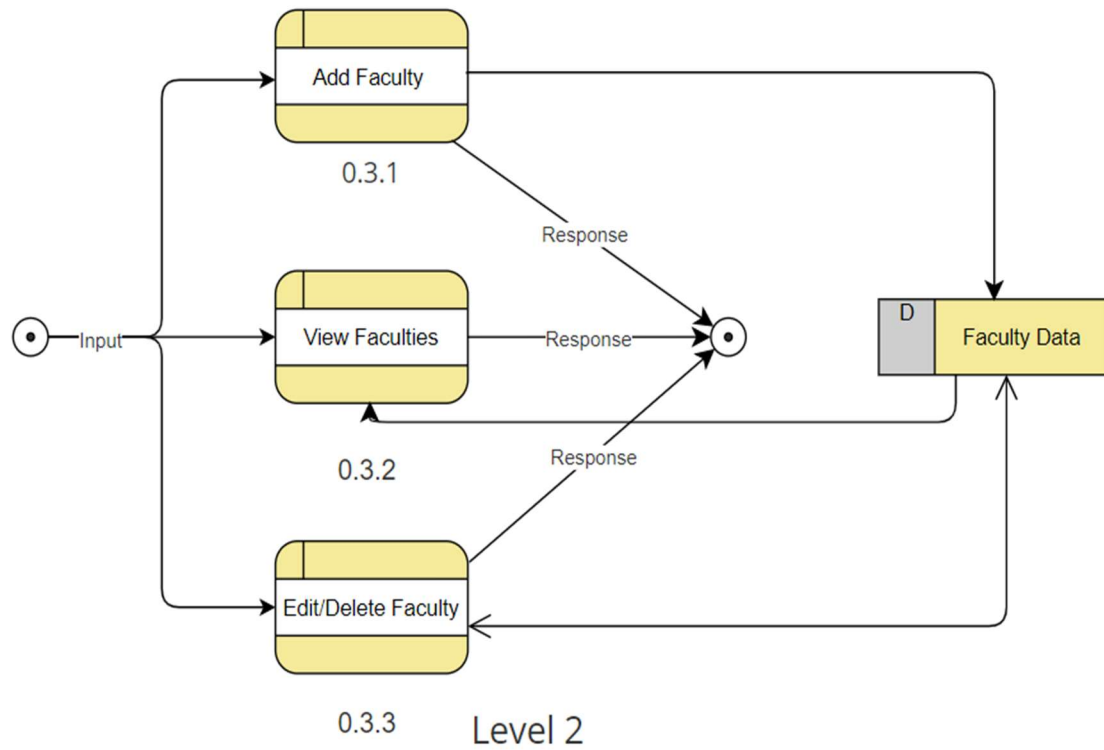


### Level 0

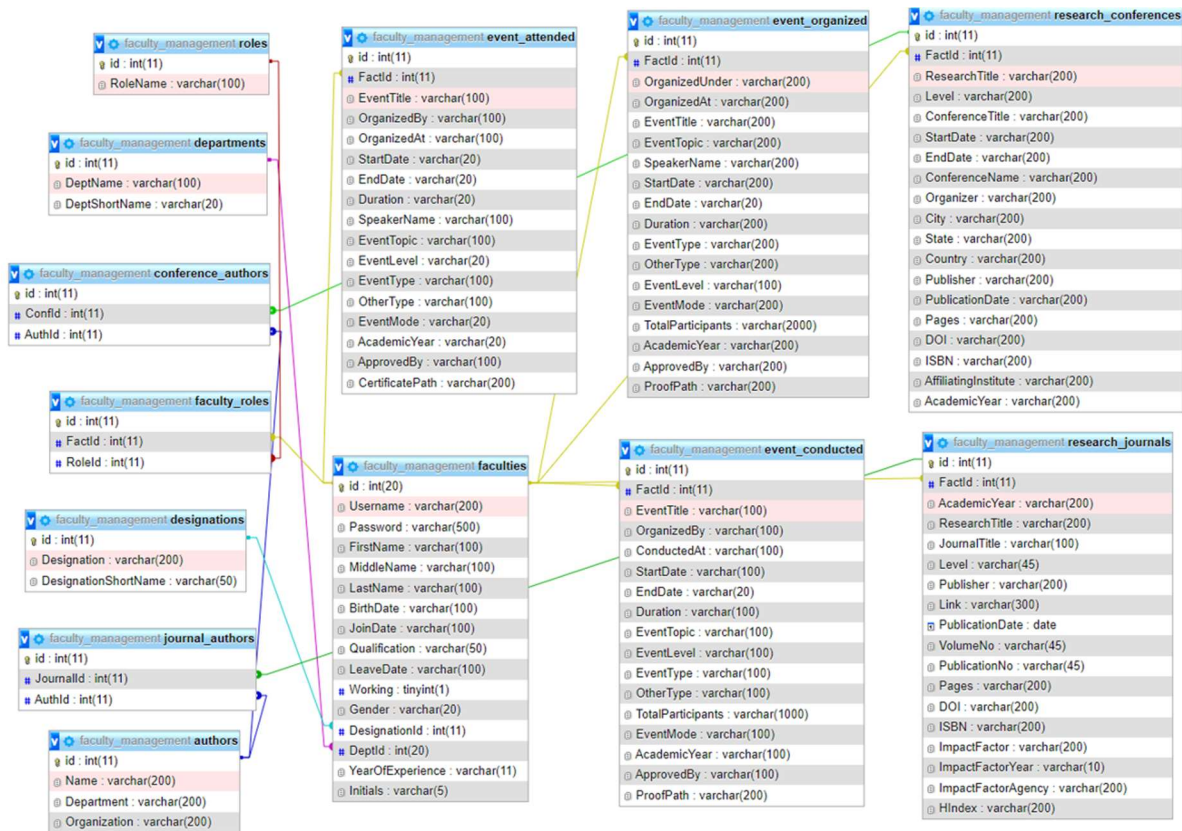


### Level 1





## ER Diagram :





## **Implementation Details :**

Modules created are as below :

### **Manage Faculties :**

This module contains functionalities like view all faculties, register new faculty, update faculty details and disable faculty account.

- Add or Update faculty
  - Add faculty details / update selected faculty details
  - Click on the given button
  - Faculty will be added / faculty details will be updated
- View faculties
  - Select appropriate link for viewing faculties
  - List of all the faculty will be displayed with edit and delete button for each faculty
  - View / Download csv file
- Delete faculty
  - Select faculty which needs to be deleted
  - System will ask for confirmation
  - If yes is selected faculty will be deleted

### **Manage Events :**

There are 3 sub modules under this module. Each for different type of event which are event-attended, event-organized and event-conducted.

Each sub module contains functionalities like view events, add new event, update event details, and delete events.

- Add or Update event
  - Add event details and upload certificate (if any) / update selected event details and certificate
  - Click on the given button
  - Event will be added / event details will be updated
- View events

- Select appropriate link for viewing events
- List of events belonging to current logged in faculty will be displayed with edit, delete and view certificate (if uploaded) button for each event
- View / Download csv file
- Delete event
  - Select event which needs to be deleted
  - System will ask for confirmation
  - If yes is selected event will be deleted

### Manage Publications :

This module contains functionalities like add research-paper, view research-papers, update research-paper details and delete research-paper.

- Add or Update research-paper
  - Select type (conference or journal) of the research-paper to add (in case of update research-paper type will has been already selected)
  - Add research-paper details / update research-paper details
  - Click on the given button
  - Research-paper will be added / research-paper details will be updated
- View research-papers
  - Select appropriate link for viewing research-papers
  - Select type (conference, journal or both) of the research-paper
  - List of research-papers belonging to current logged in faculty will be displayed with edit and delete button for each research-paper
  - View / Download csv file
- Delete research-paper
  - Select research-paper which needs to be deleted
  - System will ask for confirmation
  - If yes is selected research-paper will be delete
- View all research-papers
  - Select appropriate link for viewing all the research-papers
  - Select type (conference, journal or both) of the research-paper
  - List of research-papers belonging to any faculty will be displayed
  - View / Download csv file

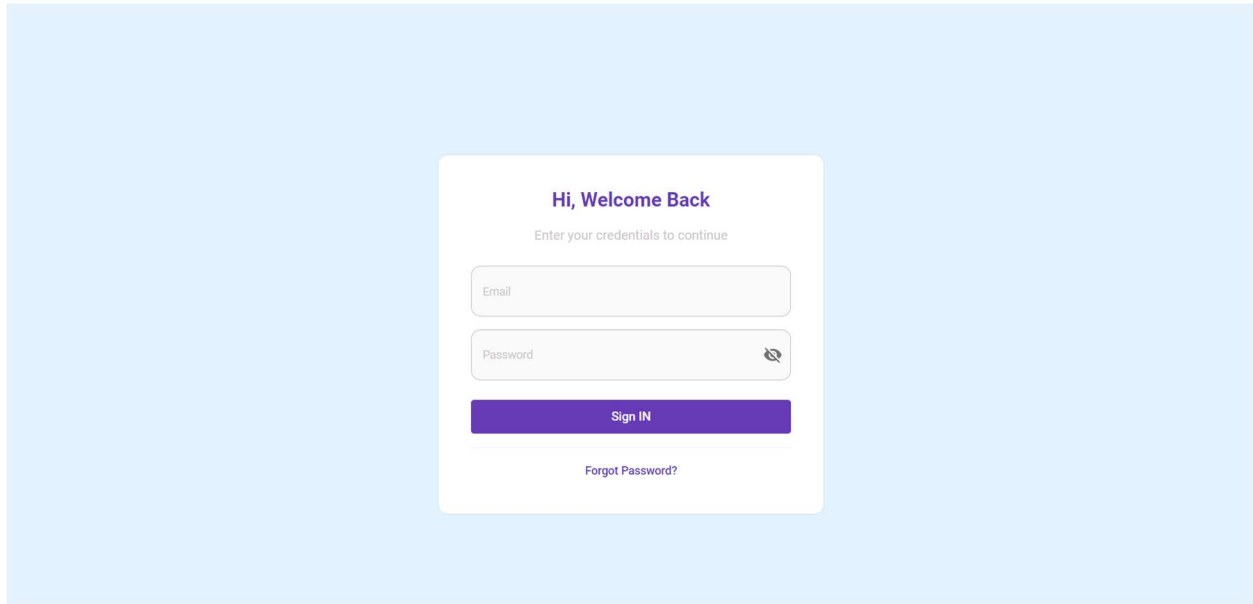
## **Testing :**

Manual testing is performed in order to find and fix the bugs in development process.

| <b>Sr No.</b> | <b>Test Scenario</b>                   | <b>Expected Result</b>                               | <b>Actual Result</b>                       | <b>Status</b> |
|---------------|--|--|--|---------------|
| 1             | Add Event details of Faculty           | Event details should be added to database.           | Event details is added to database.        | Success       |
| 2             | Update Event details of Faculty        | Event details should be updated to database.         | Event details is updated to database.      | Success       |
| 3             | Delete Event details of Faculty        | Event details should be erased from database.        | Event details is erased from database.     | Success       |
| 4             | Download Certificate of Faculty        | Certificate should be downloaded.                    | Certificate is downloaded successfully.    | Success       |
| 5             | Add Publications details of Faculty    | Publications details should be added to database.    | Event details is added to database.        | Success       |
| 6             | Update Publications details of Faculty | Publications details should be updated to database.  | Event details is updated to database.      | Success       |
| 7             | Delete Publications details of Faculty | Publications details should be erased from database. | Event details is erased from database.     | Success       |
| 8             | Register Faculty                       | Faculty's Registration should be done.               | Faculty's Registrations done successfully. | Success       |
| 9             | Update Faculty Details                 | Faculty details should be updated from database.     | Faculty details is updated to database.    | Success       |

## Snapshots of the System :

### Login

A screenshot of a login interface. It features a light blue background with a central white card. The card has a purple header "Hi, Welcome Back", a subtitle "Enter your credentials to continue", an email input field, a password input field with a toggle icon, a purple "Sign IN" button, and a "Forgot Password?" link.

Hi, Welcome Back

Enter your credentials to continue

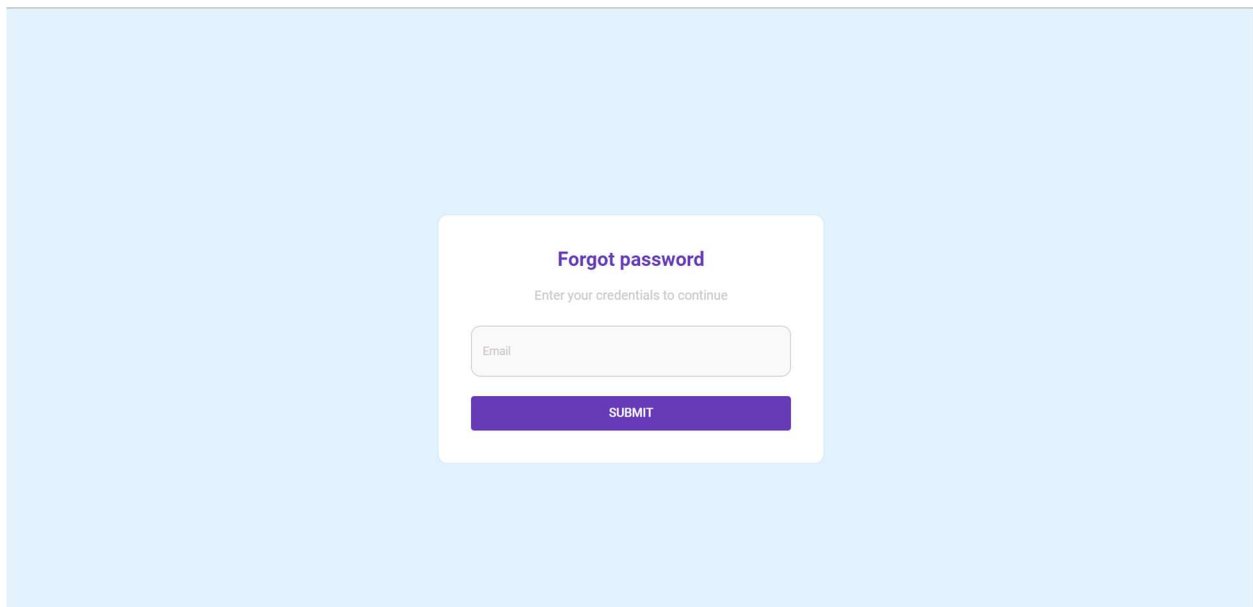
Email

Password

Sign IN

[Forgot Password?](#)

### Forgot Password

A screenshot of a "Forgot Password" interface. It features a light blue background with a central white card. The card has a purple header "Forgot password", a subtitle "Enter your credentials to continue", an email input field, and a purple "SUBMIT" button.

Forgot password

Enter your credentials to continue

Email

SUBMIT

## Home Page

☰

Home

Manage Faculty Details

+

 Add Faculty

👤

 View Faculties

Events

📅

 Event Attended

📅

 Event Conducted

📅

 Event Organized

Publications

📄

 Reserch Paper

Faculty Portal

© Dharmsinh Desai University

🔔

NJ

⚙️

Home Page

Faculty Management

## My Account

☰

Home

Events

📅

 Event Attended

📅

 Event Conducted

📅

 Event Organized

Publications

📄

 Reserch Paper

Faculty Portal

© Dharmsinh Desai University

🔔

NJ

⚙️

My Account

Nirav Jivani

First Name

Middle Name

Last Name

Nirav

D

Jivani

Email

Birth Date

niravjivani3@gmail.com

06-05-2002

Designation

Department

Join Date

Associative Professor

Chemical Engineering

18-02-2022

Year Of Experience

Qualification

13

B.Tech

Gender

☐ Female

☒ Male

Edit

## Change Password

### Change password

Enter your credentials to continue

CHANGE

## Add Faculty (Admin)

Home

Manage Faculty Details

Add Faculty

View Faculties

Events

Event Attended

Event Conducted

Event Organized

Publications

Reserch Paper

Faculty Portal

© Dharmsinh Desai University

Add Faculty

First Name

Monica

Last Name

Geller

Email

monicageller@gmail.com

Initials

MCG

Department

Mechanical Engineering

Designation

Assistant Professor

Join Date

04-01-2011

Add

## View Faculties (Admin)

Home

Manage Faculty Details

Add Faculty

View Faculties

Events

Event Attended

Event Conducted

Event Organized

Publications

Reserch Paper

Faculty Portal

© Dharmsinh Desai University

Add Sucessfully

View Faculties

Working

|                          | Email                    | First name | Last name | Department             | Designation           | Join Date     |
|--------------------------|--------------------------|------------|-----------|------------------------|-----------------------|---------------|
| <input type="checkbox"/> | niravjvani3@gmail.com    | Nirav      | Jivani    | Chemical Engineering   | Associative Professor | 18 Feb , 2022 |
| <input type="checkbox"/> | vimalmatholiya175@gm...  | Vimal      | Matholiya | Mechanical Engineering | Associative Professor | 19 Feb , 2022 |
| <input type="checkbox"/> | 19ceuos232@ddu.ac.in     | NIRAV      | JIVANI    | Chemical Engineering   | Associative Professor | 03 Mar , 2022 |
| <input type="checkbox"/> | jenitnakrani123@gmail... | Jenit      | Nakrani   | Chemical Engineering   | Assistant Professor   | 22 Feb , 2022 |
| <input type="checkbox"/> | cbing@gmail.com          | Chandler   | Bing      | Computer Engineering   | Assistant Professor   | 27 Dec , 2021 |
| <input type="checkbox"/> | monicageller@gmail.com   | Monica     | Geller    | Mechanical Engineering | Assistant Professor   | 04 Jan , 2011 |
| <input type="checkbox"/> | rachelgreen@gmail.com    | Rachel     | Green     | Computer Engineering   | Professor             | 04 Jan , 2010 |

## Edit Faculty (Admin)

Home

Manage Faculty Details

Add Faculty

View Faculties

Events

Event Attended

Event Conducted

Event Organized

Publications

Reserch Paper

Faculty Portal

© Dharmsinh Desai University

Edit Faculty "Rachel Green"

First Name

Rachel

Last Name

Green

Email

rachelgreen@gmail.com

Initials

RRG

Department

Computer Engineering

Designation

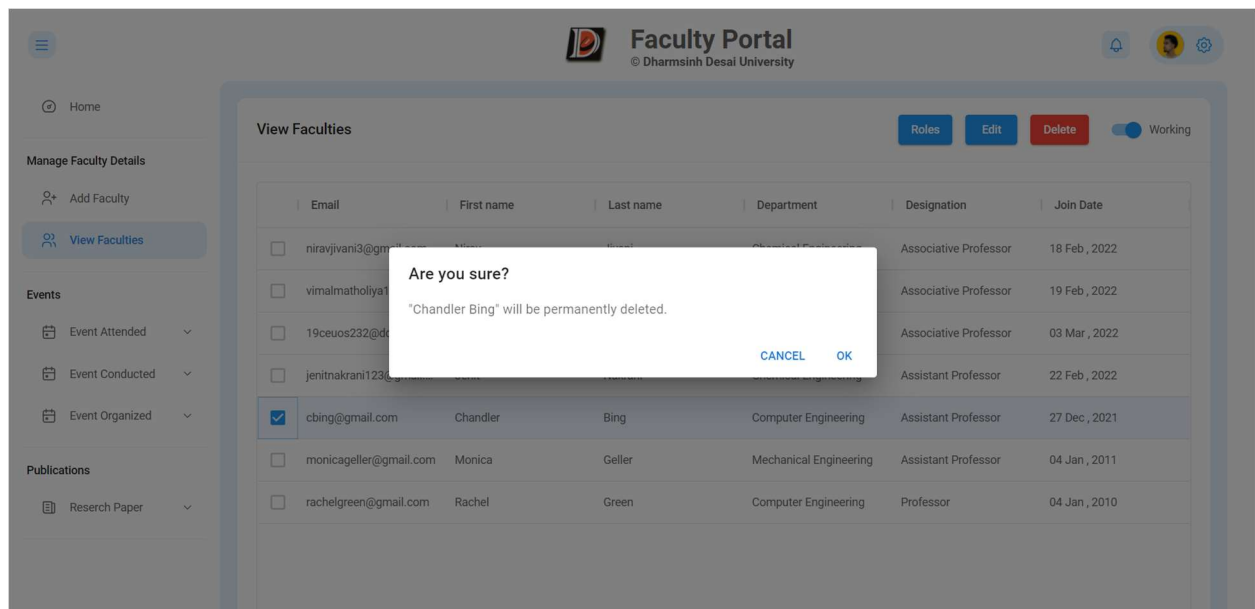
Associative Professor

Join Date

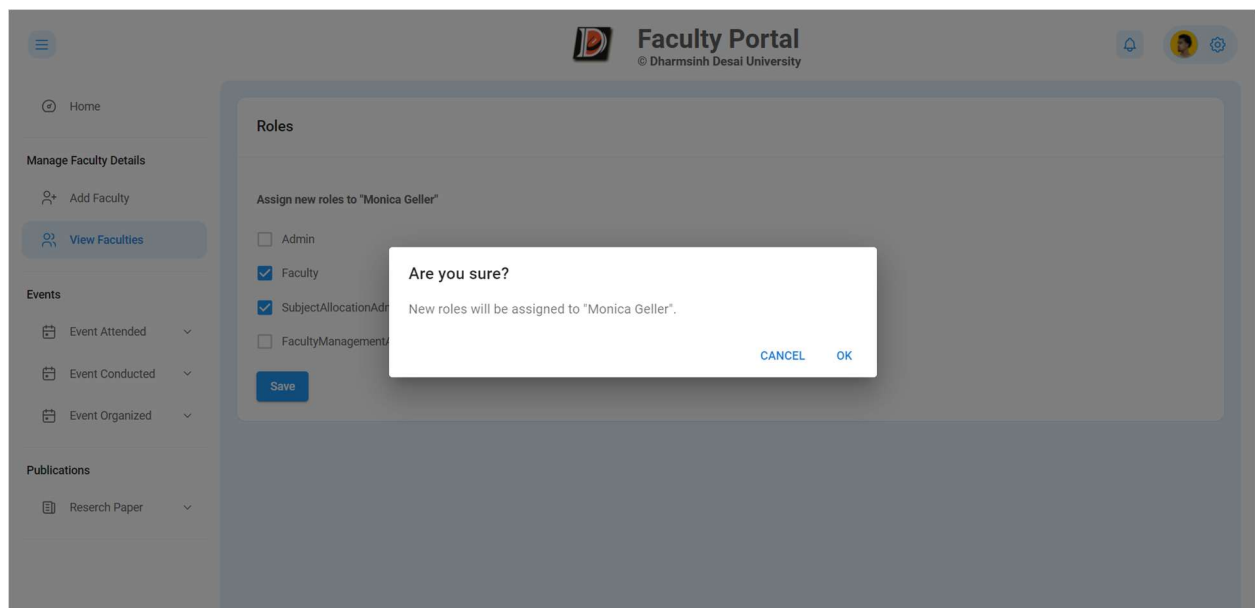
04-01-2010

Edit

## Delete Faculty (Admin)



## View/Edit Roles(Admin)





## Add Event

Home

Events

Event Attended

+ Add Event

View Events

Event Conducted

Event Organized

Publications

Research Paper

Faculty Portal

© Dharmsinh Desai University

Add Event (Attended)

Title of the programme

AN INTRO TO NEUTRAL NETWORK

Organized By

Google Developer Clubs

Organized At

DDU

From Date

04-04-2022

To Date

04-04-2022

Duration(in days)

1

Speaker Of The Event

Prof. Allen

## View Event

Home

Events

Event Attended

+ Add Event

View Events

Event Conducted

Event Organized

Publications

Research Paper

Faculty Portal

© Dharmsinh Desai University

Added Successfully

View Events (Attended)

Export

| <input type="checkbox"/> | Title                      | Topic                           | Type | Academic Year |             |
|--------------------------|----------------------------|---------------------------------|------|---------------|-------------|
| <input type="checkbox"/> | AN INTRO TO NEUTRAL NET... | Neural Network - Machine Lea... | FDP  | 2022-2023     | <div></div> |

## Edit Event

The screenshot shows the 'Update Event (Attended)' form in the Faculty Portal. The form is titled 'Update Event (Attended)' and contains several input fields for event details. The left sidebar shows the 'Events' section with 'Event Attended' selected. The form fields are as follows:

| Field                  | Value                       |
|------------------------|-----------------------------|
| Title of the programme | AN INTRO TO NEUTRAL NETWORK |
| Organized By           | Google Developer Clubs      |
| Organized At           | DDU                         |
| From Date              | 04-04-2022                  |
| To Date                | 04-04-2022                  |
| Duration(in days)      | 1                           |
| Speaker Of The Event   | Prof. Allen                 |
| Topic of The Event     |                             |

## Delete Event

The screenshot shows the 'View Events (Attended)' table in the Faculty Portal. A confirmation dialog is displayed over the table, asking if the user is sure to delete the event 'AN INTRO TO NEUTRAL NETWORK'. The dialog text reads: 'Are you sure? Event "AN INTRO TO NEUTRAL NETWORK" will be permanently deleted.' The dialog has 'CANCEL' and 'OK' buttons. The table in the background has the following columns: Title, Topic, Type, Academic Year. The row for 'AN INTRO TO NEUTRAL NETWORK' is visible, with the year '2023' partially visible.

| Title                       | Topic | Type | Academic Year |
|-----------------------------|-------|------|---------------|
| AN INTRO TO NEUTRAL NETWORK |       |      | 2023          |

## Add Research Paper

Home

Events

Event Attended

Event Conducted

Event Organized

Publications

Research Paper

Add Research Paper

View Research Papers

Faculty Portal

© Dharmsinh Desai University

Add Research Paper

Type of Research Paper

☒ Conference ☐ Journal

Title of the Research Paper

Recent Trends in Machine Learning-based Protein Fold Recognition Methods

Title of the Conference

International Conference on Intelligent Systems and Signal Processing . (ISSP-2017)

Author-1

Name

Vipul K. Dabhi

Department

IT

Organization

Dharmsinh Desai University

Author-2

Name

Jay d Shah

Department

CE

Organization

Dharmsinh Desai University

Level of Publication

National

## View Research Paper

Home

Events

Event Attended

Event Conducted

Event Organized

Publications

Research Paper

Add Research Paper

View Research Papers

Faculty Portal

© Dharmsinh Desai University

View Research Papers

☐ Conference ☐ Journal ☒ Both

Conferences

Export

| <input type="checkbox"/> | Research Paper Title   | Punblisher  | Conference Title        | Authors                  | Conference Name         | Academic Year |             |
|--------------------------|------------------------|-------------|-------------------------|--------------------------|-------------------------|---------------|-------------|
| <input type="checkbox"/> | On Pilot Contaminat... | MCGRAW-HILL | International Confer... | Vimal Matholiya          | 22st International S... | 2016-2017     | <div></div> |
| <input type="checkbox"/> | Recent Trends in Ma... | Springer    | International Confer... | Vipul K. Dabhi , Jay ... | 21st International S... | 2022-2023     | <div></div> |

## Update Research Paper

The screenshot shows the 'Update Research Paper' form in the Faculty Portal. The left sidebar contains navigation links: Home, Events (Event Attended, Event Conducted, Event Organized), and Publications (Research Paper, Add Research Paper, View Research Papers). The main form area is titled 'Update Research Paper' and includes the following fields:

- Type of Research Paper:** Radio buttons for 'Conference' (selected) and 'Journal'.
- Title of the Research Paper:** Text input field containing 'On Pilot Contamination in Massive MIMO System'.
- Title of the Conference:** Text input field containing 'International Conference on Intelligent Systems and Signal Processing . (ISSP-2017)'.
- Author-1:** Three input fields for Name ('Vimal Matholiya'), Department ('Information Technology'), and Organization ('Dharmsinh Desai University'). A blue '+' button is located below these fields.
- Level of Publication:** A dropdown menu currently set to 'International'.
- From Date:** A date input field showing '13-03-2022'.

## Delete Research Paper

The screenshot shows the 'View Research Papers' page in the Faculty Portal. The left sidebar is the same as in the previous image. The main area is titled 'View Research Papers' and includes radio buttons for 'Conference', 'Journal' (selected), and 'Both'. Below this is a 'Journals' section with a table of research papers. A modal dialog box is open in the center, asking for confirmation to delete a journal.

**Are you sure?**

Journal "International Journal of Communication Systems" will be permanently deleted.

CANCEL OK

|  | Academic Year |  |
|--|---------------|--|
| <input checked="" type="checkbox"/> Research Paper   | 2021-2022     |  |
| <input checked="" type="checkbox"/> Recent Trends in |               |  |

## View All Faculty's Research Paper (Admin)

**Faculty Portal**  
© Dharmsinh Desai University

**View All Research Papers**

☐ Conference ☐ Journal ☒ Both

**Conferences**

[Export](#)

| <input type="checkbox"/> | Research Paper Title        | Punblisher | Conference Title            | Authors                      | Conference Name            | Academic Year |
|--------------------------|-----------------------------|------------|-----------------------------|------------------------------|----------------------------|---------------|
| <input type="checkbox"/> | On Pilot Contamination i... | MCGRW-HILL | International Conference... | Vimal Matholiya              | 22st International Symp... | 2016-2017     |
| <input type="checkbox"/> | Recent Trends in Machin...  | Springer   | International Conference... | Vipul K. Dabhi , Jay d Sh... | 21st International Symp... | 2022-2023     |

## Exporting Data

**Faculty Portal**  
© Dharmsinh Desai University

**View Research Papers**

☐ Conference ☐ Journal ☒ Both

**Conferences**

[Export](#)

| <input checked="" type="checkbox"/> | Research Pa... | Punblisher | Conference T... | Authors         | Conference ...  | Academic Year |  |  |
|-------------------------------------|----------------|------------|-----------------|-----------------|-----------------|---------------|--|--|
| <input checked="" type="checkbox"/> | On Pilot Co... | MCGRW-H... | Internationa... | Vimal Math...   | 22st Interna... | 2016-2017     |  |  |
| <input checked="" type="checkbox"/> | Recent Tren... | Springer   | Internationa... | Vipul K. Dab... | 21st Interna... | 2022-2023     |  |  |

**Downloads**

research-conference-Nirav-Jivani.csv  
[Open file](#)

## **Conclusion :**

We have implemented all the functionality after understanding all the system modules according to requirements. Modules implemented in the system is as below :

- Manage Accounts
- Manage Events of Faculty
- Manage Publications
- Manage Administration

After implementation testing was also performed to check for the errors and flaws of the system.

## **Limitations & Future Extension :**

### **Limitations :**

- We can't add multiple events or publications using csv file.

### **Future Extensions :**

- We can add functionality to add multiple events or publications using csv file.
- We can add one field in publication form for uploading document related to publication.
- We can extend publication module by adding articles, books and some notifications management.
- we can try to further increase scalability and performance of our system.

## **Bibliography :**

- **React Documentation :** [Getting Started - React](#)
- **Express Documentation :** [Express - Node.js web application framework](#)
- **Material UI :** [Components - MUI](#)
- [Stack Overflow](#)