

CS67_GYANANSHU: The Scholar Connect

A Project Report

Submitted for the partial fulfillment for the award of the degree of

Bachelor of Technology in Computer Science

Submitted by

Priyanshi Mishra	2116262
Priyanshi Arora	2116261
Purvi Gangwar	2116263
Priya Kumari Gupta	2116259

Under the supervision of

Dr. Neelam Sharma
Associate Professor
Banasthali Vidyapith



Department of Computer Science

Banasthali Vidyapith

Session: 2023-24

Certificate

Certified that **Priyanshi Mishra, Priyanshi Arora, Purvi Gangwar and Priya Kumari Gupta** has carried out the project work titled “**GYANANSHU: The Scholar Connect**” from **27/10/2023 to 07/04/2024** for the award of the **Bachelor of Technology in Computer Science** from **Banasthali Vidyapith** under my supervision. The thesis embodies the result of original work and studies carried out by Student herself and the contents of the thesis do not form the basis for the award of any other degree to the candidate or to anybody else.

Dr. Neelam Sharma

Designation: Assistant Professor

Place: Banasthali Vidyapith

Date: 07/04/2024

ABSTRACT

Gyananshu could be loosely interpreted as a ray of knowledge. It's a name that conveys a sense of enlightenment or intelligence. It is an online database that is specific to Banasthali's academic and research data. It includes information related to researchers, institutions, and their work in various academic disciplines. It includes details about their publications, affiliations, and expertise.

Gyananshu is a web portal designed to connect students and faculty at Banasthali Vidyapith's Department of Computer Science. It provides a central location for faculty to share information about their research and for students to find professors who match their research interests. The portal also offers tools for collaboration and project management, and it provides data and analytics to help improve the department's research efforts.

Acknowledgement

In the process of studying for and preparing this dissertation, We were fortunate to obtain the assistance of many people, whom we would like to present our genuine thanks. My appreciation goes first to my supervisor and Dr. Neelam Sharma, Associate Professor, Department of Computer Science, Banasthali Vidyapith. She is an extremely knowledgeable, friendly and patient person who provided us sufficient guidance, appreciation, motivation and reminders which inspired us to stay focused and reflect deeply on the purpose of this study. Her recommendations and inputs dramatically improved this project.

We would also like to thank Dr. CK JHA, Head of Department of Computer Science, Banasthali Vidyapith, for providing us the best facilities in the department.

We would also like to thank all the teaching staff members of Banasthali Vidyapith, Department of Computer Science, for their valuable teaching and best advice given during our B.Tech study which helped us in completing our project successfully. We would also like to thank all the technical staff, for their support and help.

Finally, we are extremely grateful to our parents and friends for their constant support, and cooperation, as without their inspiration and help it would not have been possible to develop the project within the prescribed time.

With Sincere Thanks

Priyanshi Mishra
Priyanshi Arora
Purvi Gangwar

Table of Contents

- Introduction
- Requirement Analysis (SRS)
 - Requirement specification
 - H/w and S/w Requirements
 - Feasibility Study
 - Product Functions
 - Use-case Diagrams
- System Design (SDS)
 - High-level Design
 - ER Diagram/Class Diagrams
 - Database Design
 - Data flow diagrams/Activity Diagrams
 - Flowcharts/Sequence Diagrams
- Coding
 - Only main Modules
 - (Detail Coding is not required)
- Testing
 - Test cases
- User Interfaces
- Appendices
- References

INTRODUCTION

Research profile websites are vital for universities as they serve as central hubs for showcasing the scholarly contributions of faculty members. These platforms streamline student-faculty collaboration by allowing students to identify and connect with professors whose research aligns with their interests, promoting meaningful research projects and academic growth. Additionally, these websites enhance transparency by providing accessible, comprehensive information about faculty research, publications, and expertise, benefiting both the academic community and the public. They indirectly contribute to improving a university's reputation and global ranking by spotlighting the accomplishments of faculty members. Ultimately, these platforms play a key role in elevating a university's standing in the academic world and fostering innovation and academic excellence.

The "Gyananshu" website is a comprehensive academic platform developed to address the needs of Banasthali Vidyapith's Department of Computer Science. This Software Requirements Specification (SRS) document serves as a blueprint for the design, development, and implementation of the "Gyananshu" web portal. "Gyananshu" is aimed at providing a centralized, user-friendly, and robust solution to the challenges faced by the academic community at Banasthali Vidyapith in accessing and showcasing vital research-related information. It sets out to streamline student-faculty interactions, simplify the process of connecting students with professors for research guidance, and contribute to the university's recognition on the global academic stage.

One of the primary objectives of "Gyananshu" is to simplify the process of students finding the right professors for their research projects. With easy access to the research profiles and areas of expertise of our esteemed faculty, students can make informed decisions when seeking guidance for their academic pursuits. It also plays a significant role in enhancing the university's visibility on the global stage. By showcasing the depth and breadth of our faculty's research activities, the web portal indirectly contributes to various university ranking procedures, enhancing our standing in the academic world.

REQUIREMENT ANALYSIS (SRS)

FUNCTIONAL REQUIREMENTS

1. It is assumed that the large number of faculty records could be saved.
2. The system shall perform validity checks on the inputs, such as checking for missing or incorrect data.
3. It is assumed the web portal must be secured by login id and password.
4. This is supposed to make the user interface easy to understand and use.
5. The all frequently updated data is saved into the database successfully.
6. The system shall provide error handlings and recovery mechanisms, such as tracking and logging all actions for compliance and auditing purposes.

NON-FUNCTIONAL REQUIREMENTS (SOFTWARE SYSTEM ATTRIBUTES)

Non-functional requirements are the aspects of a software system that describe how the system should perform, rather than what it should do.

Availability: Gyananshu should maintain 24/7 availability with a target uptime percentage (e.g., 99.9%) to ensure continuous access to academic and research-related information.

Performance: The system must respond to user interactions within a maximum of 2 seconds and exhibit scalability to accommodate a growing user base and increasing data volume.

Security: Gyananshu must employ robust security measures, including data encryption, role-based access control, and regular security assessments, to protect sensitive data and maintain system integrity.

Usability: The platform will adhere to accessibility standards (e.g., WCAG) and provide user training materials to ensure ease of use for a diverse audience.

Maintainability: The system will be designed with modularity and version control systems to facilitate maintenance and updates.

Reliability: Gyananshu must maintain high data accuracy and employ data validation mechanisms to ensure the reliability of academic and research-related information, preventing errors and unexpected failures.

HARDWARE INTERFACES

Server Side

RAM: 512 MB (recommended)

HDD: 40GB or more

Processor: 1-2GHz (P4) or onwards 11

Basic I/P device(s): Mouse and keyboard

Basic O/P device: Monitor

Client Side

RAM: 128 MB

HDD: 10GB or more (free space excluding data size)

Processor: 450GHz (P2)

Basic I/P device(s): Mouse and keyboard

Basic O/P device: Monitor

Developer side

RAM: 8GB

Processor: Intel® core (TM) i5 8th Generation

I/P device(s): Mouse and keyboard

O/P device: Monitor

SOFTWARE INTERFACES

Server Side

OS: Windows 2000 or onwards

Client Side

OS: Any OS

Browser: Any browser compatible with IE 5.0 or onwards

Developers Side

OS: Windows 10

Browser: Microsoft Edge

IDE: Visual Studio Code

Feasibility Study

Economic Feasibility:

The project is economically feasible as the only cost involved is having a computer with the minimum requirements mentioned earlier. For the users to access the application, the only cost involved will be in getting access to the Internet.

Technical Feasibility:

The only technical aspects needed are mentioned below:

Operating system: Microsoft Windows 10

Platform: Visual Studio 9

Front end: HTML, CSS, JavaScript

Backend: PHP, MySQL

For Users:

Web browser

Internet Connection

Behavioural Feasibility:

The application requires no special technical guidance and all the views available in the applications are self-explanatory. The users are well guided with warning and failure messages for all the actions taken.

PRODUCT FUNCTIONS

The product function of "Gyananshu" as an online database specific to Banasthali University's academic and research data is to serve as a comprehensive and user-friendly platform for users, including researchers and visitors. Its primary functions include:

Data Repository:

Storing and organizing academic and research data, including information about researchers, institutions, and their work.

Information Dissemination:

Providing access to a wide range of academic content, such as research papers, articles, and publications.

Search and Discovery:

Enabling users to search for researchers, their institutions, and academic content by using various search criteria, including keywords, research areas, and affiliations.

Analytics and Insights:

Offering analytics and insights into user engagement, research trends, and publication metrics.

Security and Privacy:

Implementing security measures to protect user data and providing privacy controls for user profiles.

Feedback and Support:

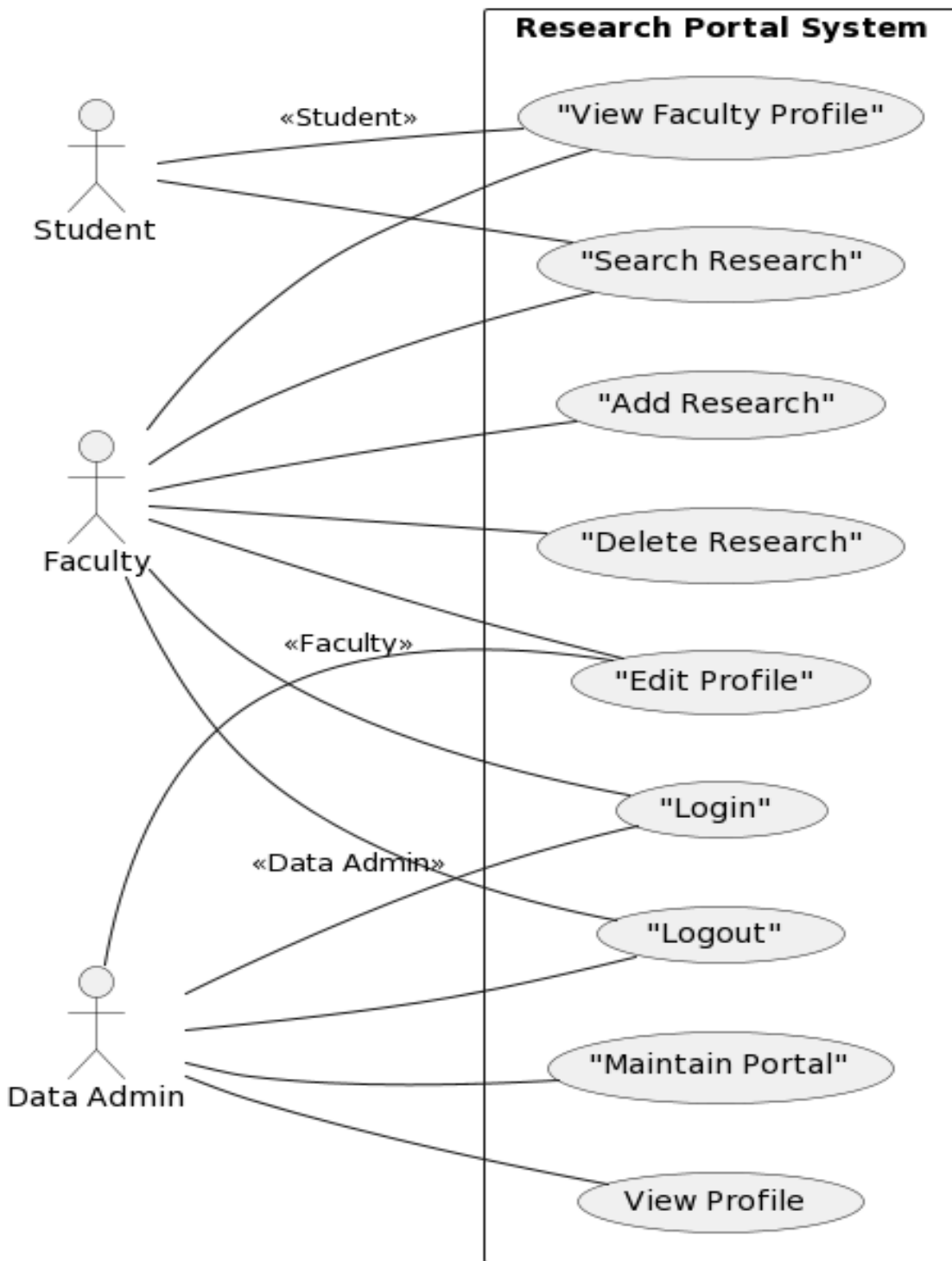
Offering mechanisms for users to provide feedback, report issues, and access support resources.

Customization and User Preferences:

Allowing users to customize their experience, set preferences, and control privacy settings.

USE CASE DIAGRAM

(Taking student as a visitor)



SYSTEM DESIGN (SDS)

High-level Design Overview

Authentication and User Management:

Implement a secure authentication system allowing both students and professors to log in using their credentials.

Manage user roles (visitors and faculty) to control access and permissions within the portal.

User Interface:

Visitor's Interface:

Dashboard:

Displays an overview of the portal.

Provides access to research information, search functionalities, and navigation options.

Research Information:

Allows students to view research details, abstracts, and related information categorized by professors or research topics.

Search Functionality:

Enables students to search and filter research information based on various criteria such as professor name, research topic, or publication date.

Faculty Interface:

Dashboard:

Displays an overview of the portal.

Provides access to research information, search functionalities, and options to add/edit research details.

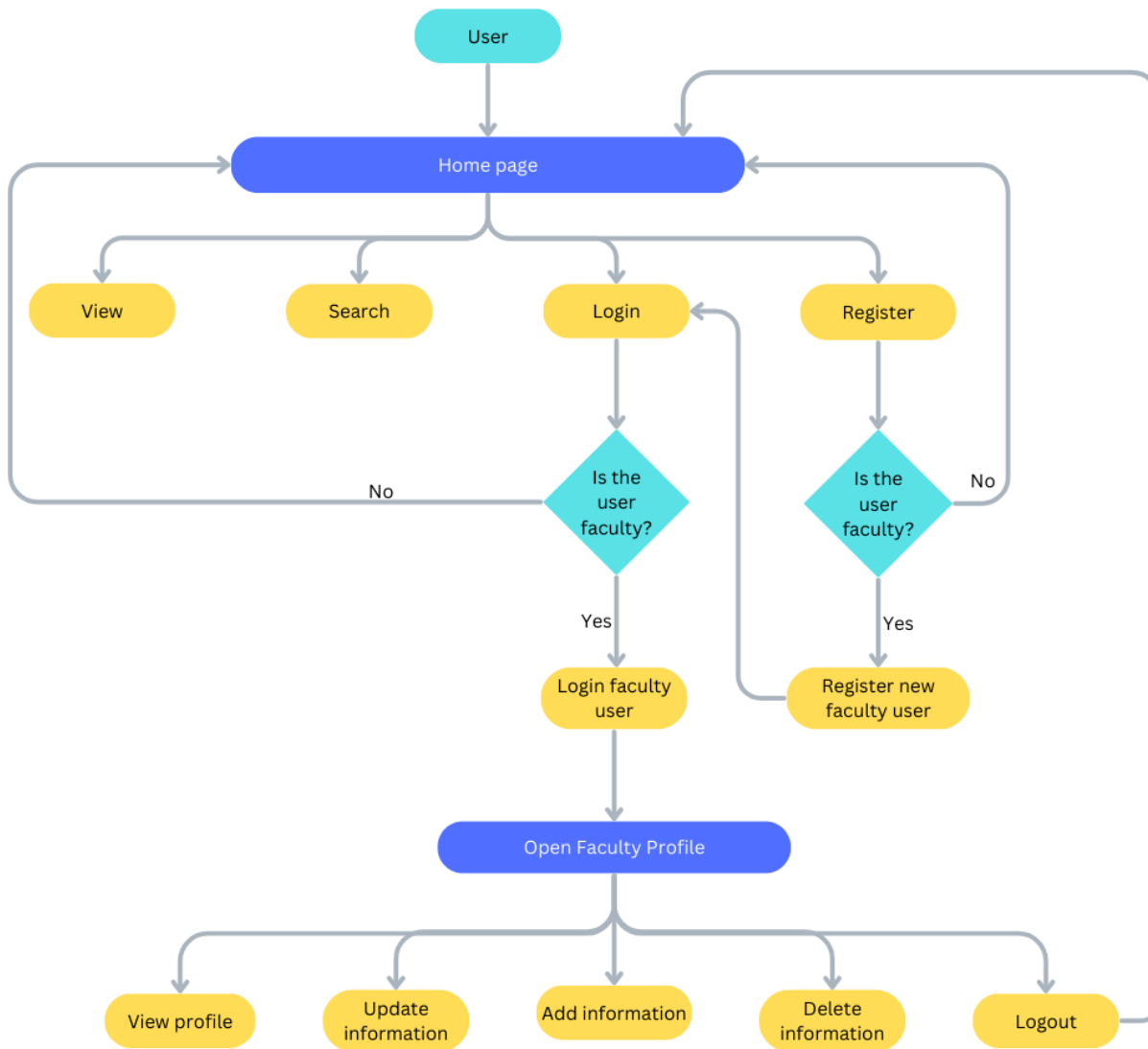
Research Information:

Allows professors to view their research information, abstracts, and related details.

Search, Sort, and Edit:

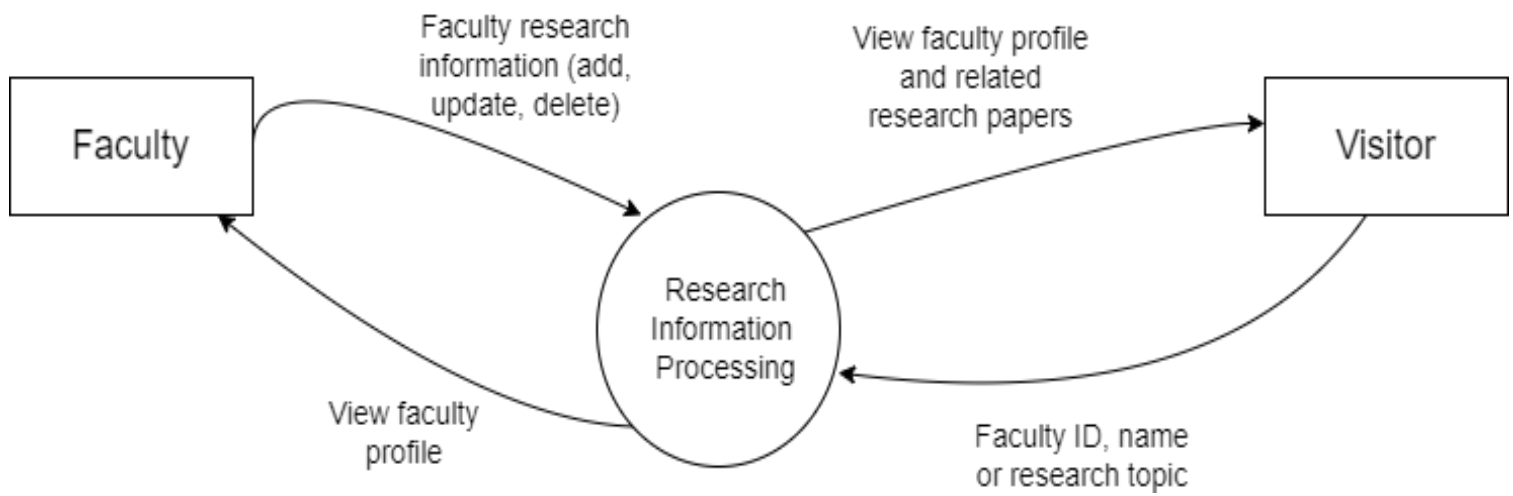
Enables professors to search, sort, and edit their research information based on various parameters.

ACTIVITY DIAGRAM

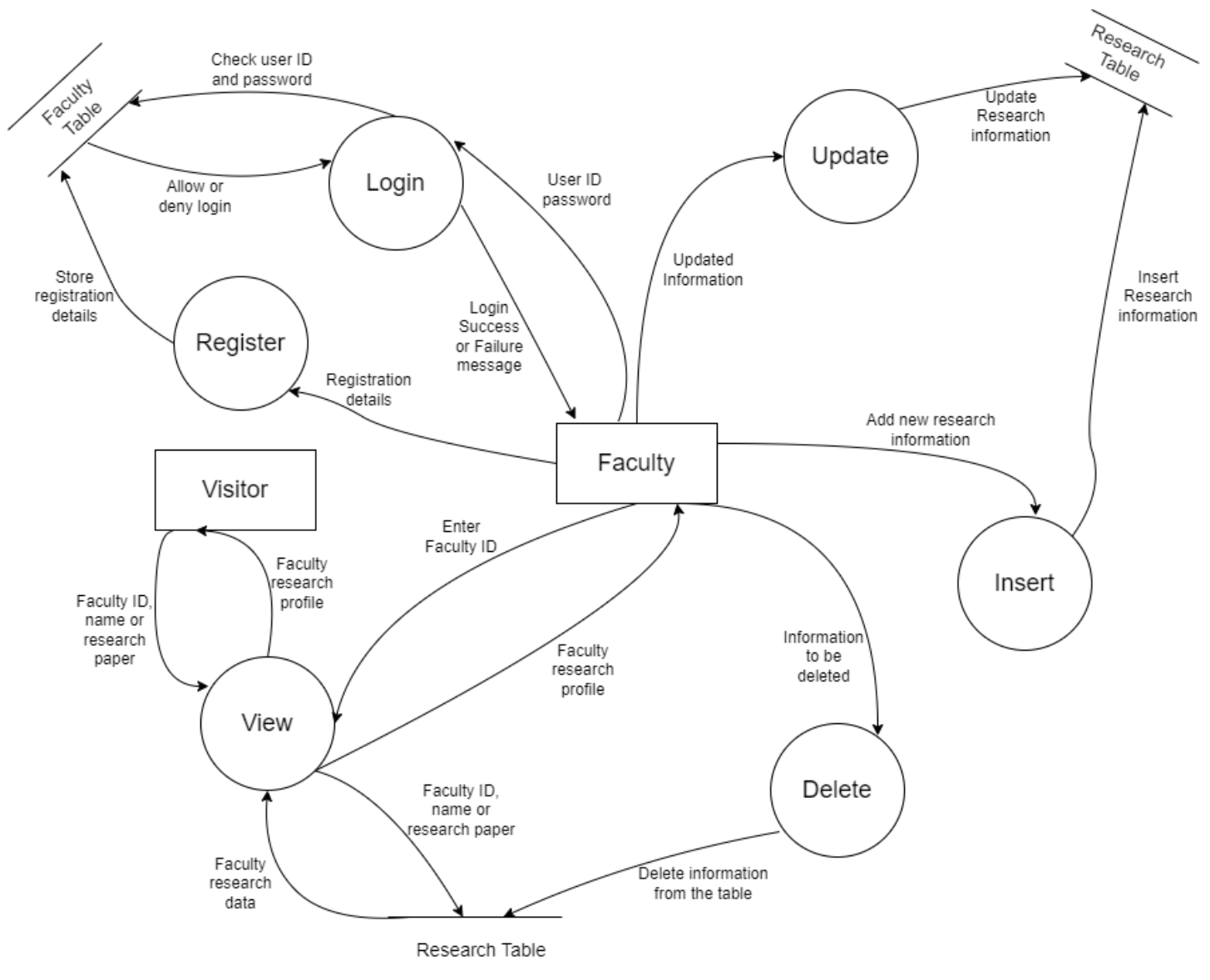


DATA FLOW DIAGRAMS

1. Level 0 DFD

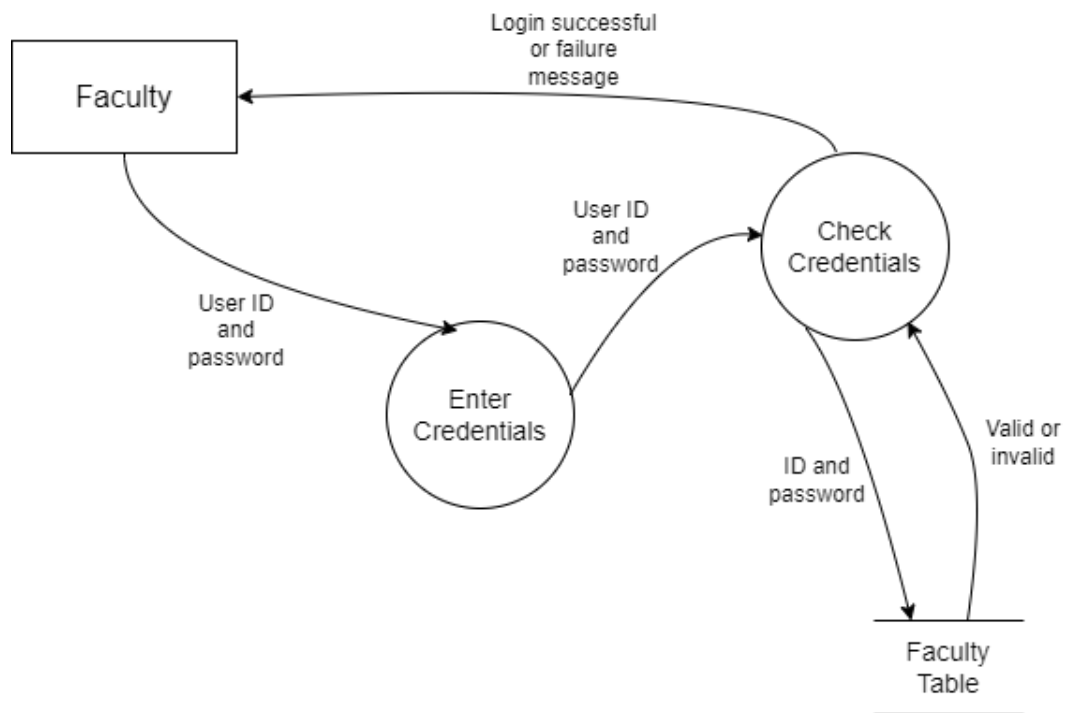


2. Level 1 DFD

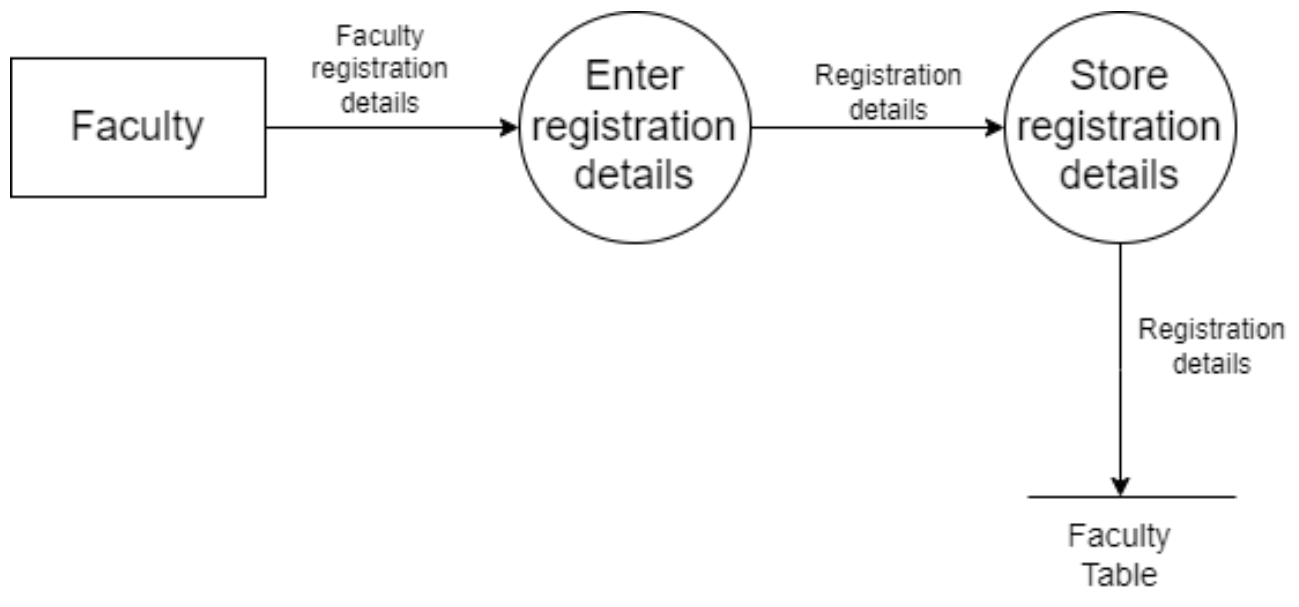


- Level 2 DFD

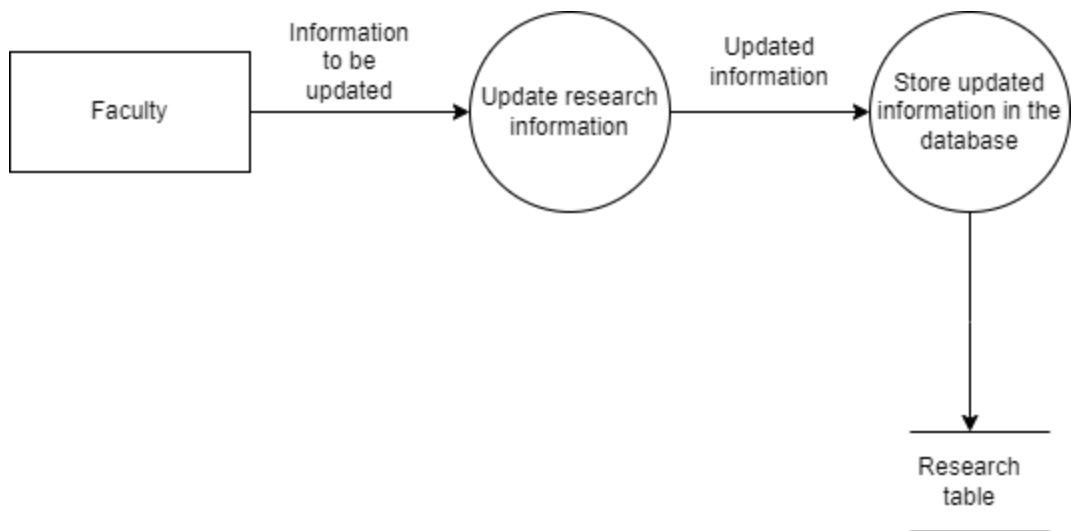
Login process DFD



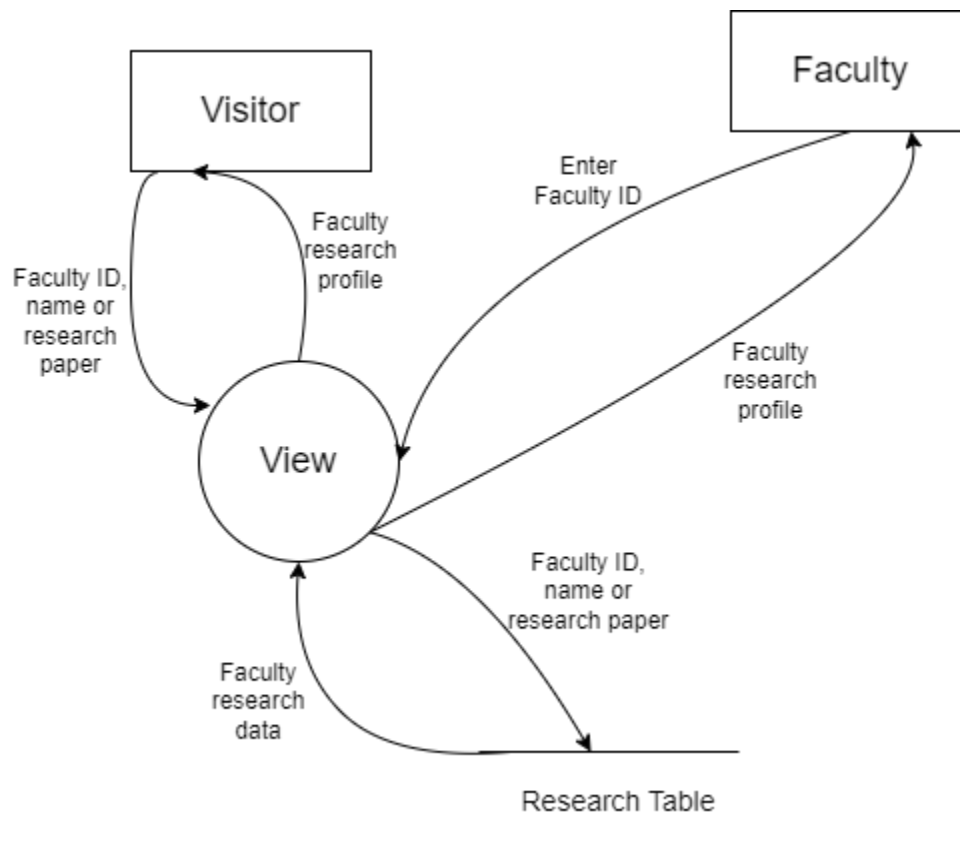
Registration process DFD



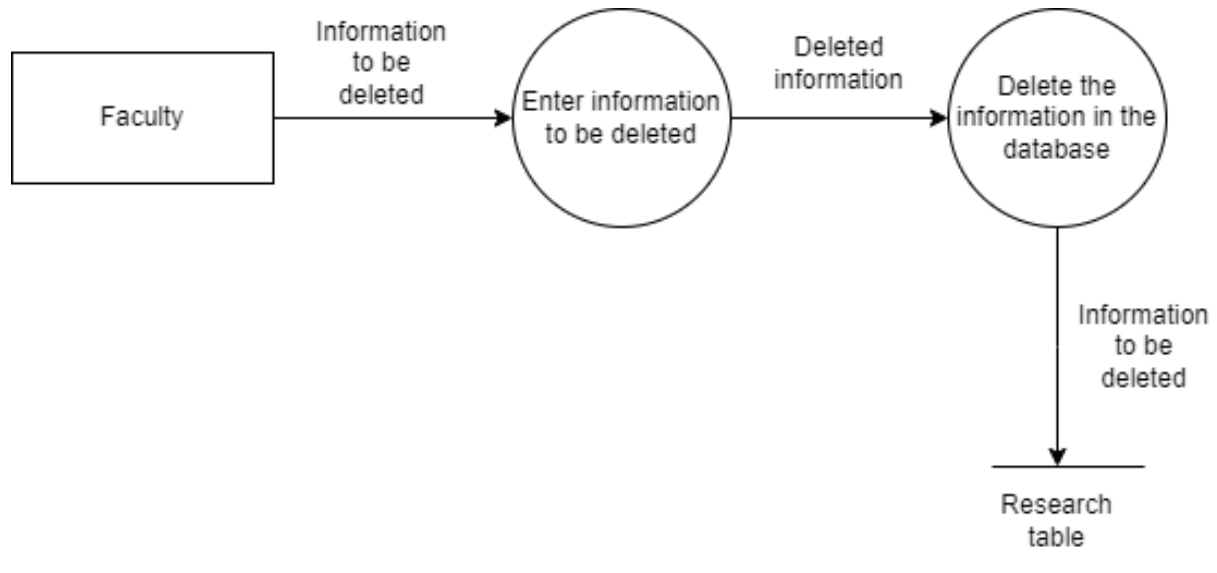
Update process DFD



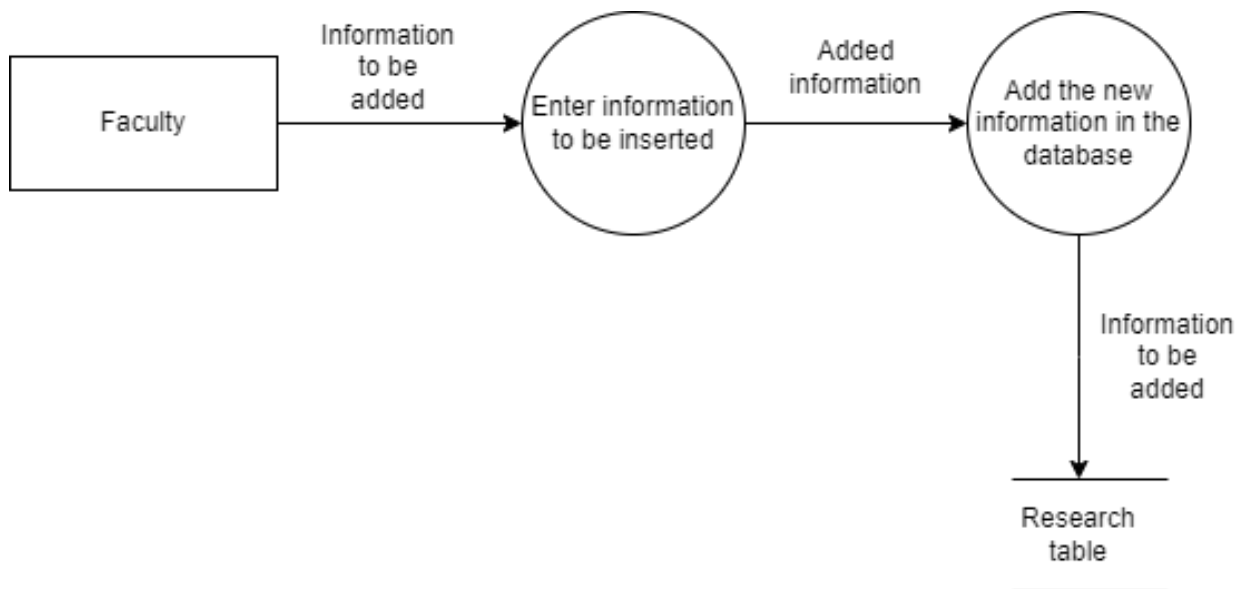
View process DFD



Delete process DFD

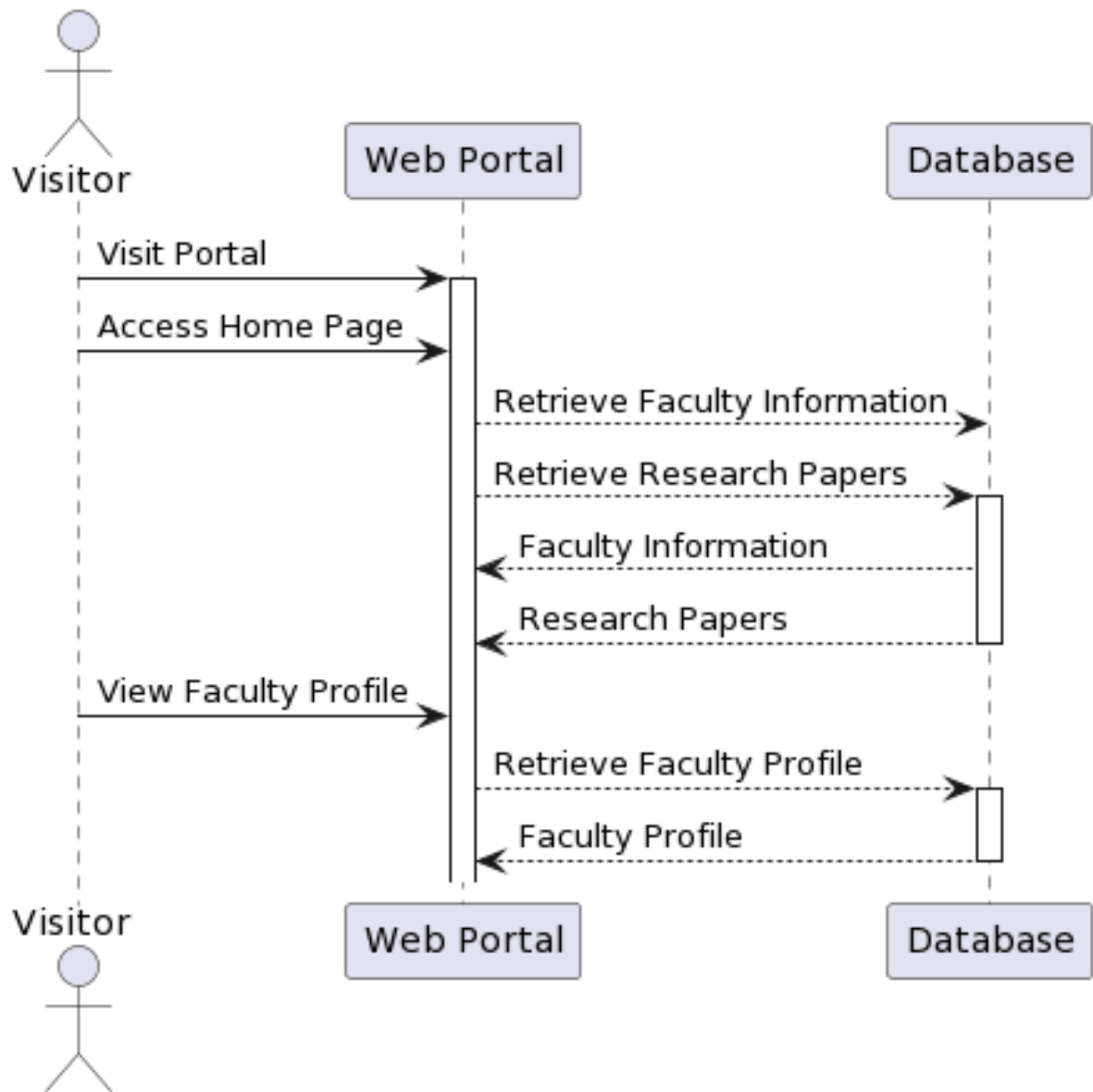


Insert process DFD

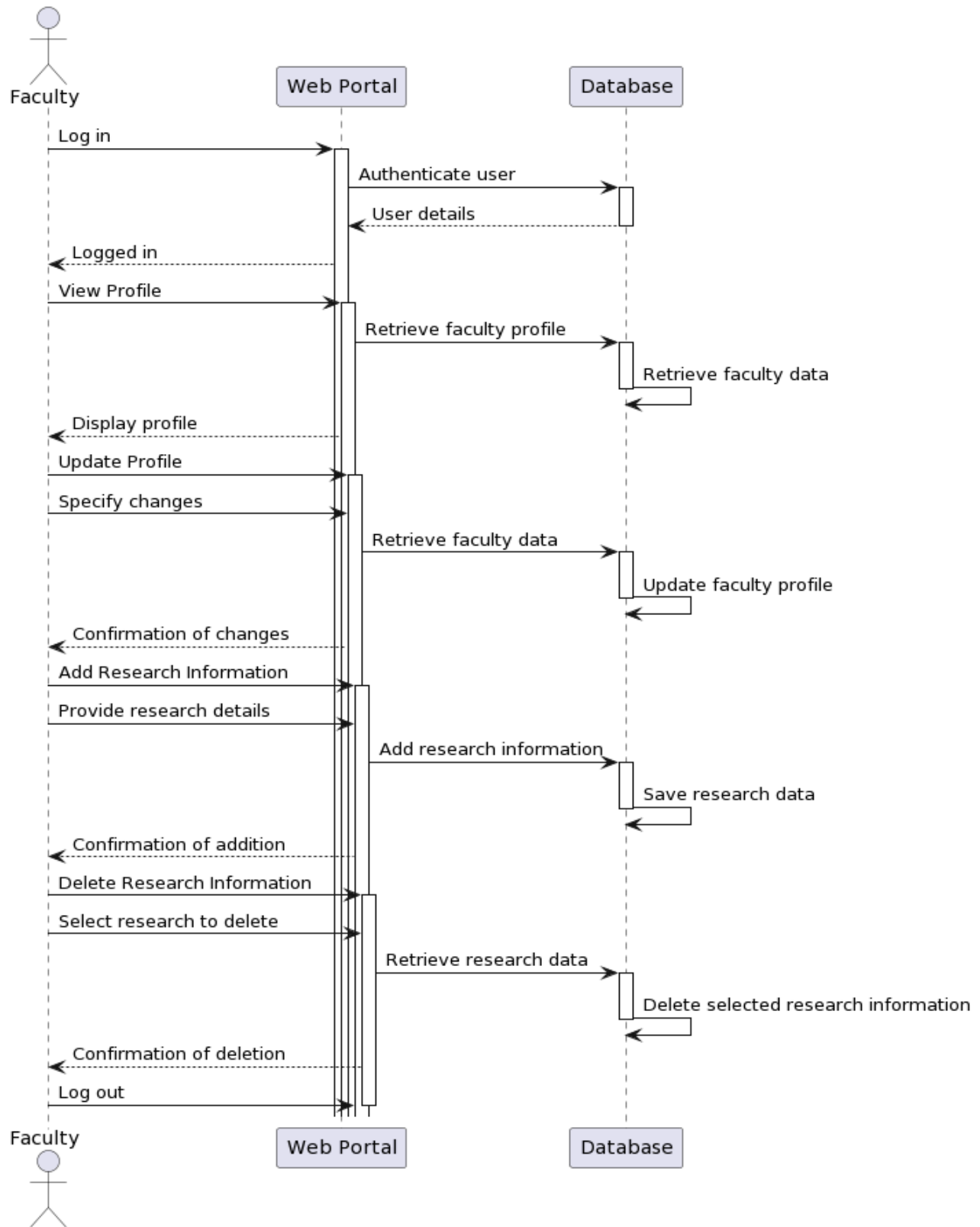


SEQUENCE DIAGRAM

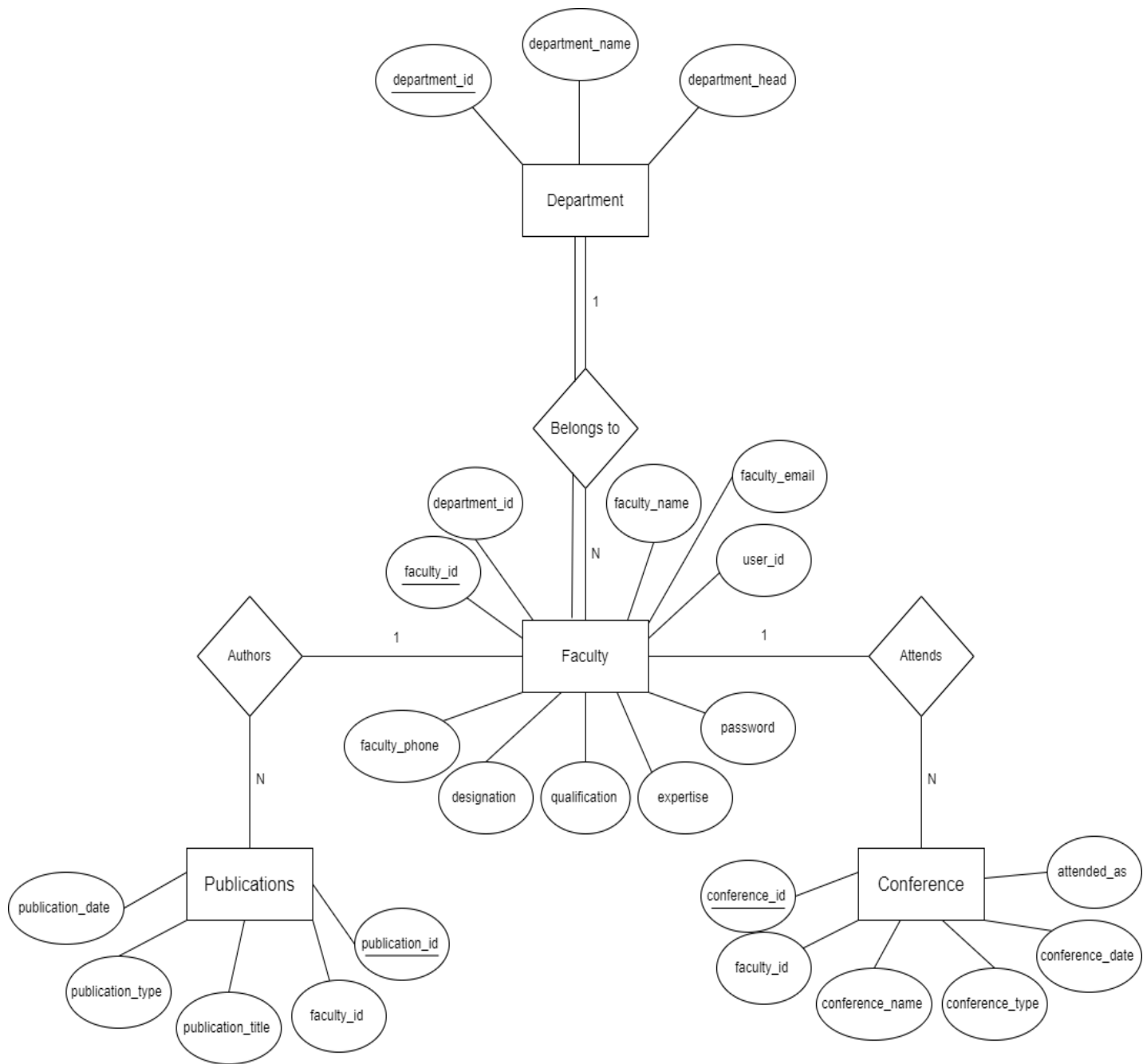
- For Visitors



- For Faculty



ER DIAGRAM



Department Table:

Field	Type	Constraint	Description
department_id	NUMERIC	Primary Key	Unique ID for each department
department_name	VARCHAR	Not Null	Name of the department
department_head	VARCHAR	Not Null	Name of head of the department

Faculty Table:

Field	Type	Constraint	Description
faculty_id	NUMERIC	Primary Key	Unique ID for each faculty member
user_id	VARCHAR	Unique, Not Null	User ID for faculty login
password	VARCHAR	Not Null	Password for faculty login
department_id	NUMERIC	Foreign Key (Referencing Department)	Department ID associated with the faculty
faculty_name	VARCHAR	Not Null	Name of the faculty member
faculty_email	VARCHAR	Not Null	Email ID of faculty member
faculty_phone	NUMERIC	-	Phone number of faculty member
designation	VARCHAR	Not Null	Designation of faculty member
qualification	VARCHAR	Not Null	Qualification of faculty member
expertise	VARCHAR	Not Null	Expertise of faculty member

Publications Table:

Field	Type	Constraint	Description
publication_id	NUMERIC	Primary Key	Unique ID for each publication
faculty_id	NUMERIC	Foreign Key (Referencing Faculty)	Faculty ID associated with the research paper
publication_title	VARCHAR	Not Null	Title of Research Paper written by faculty
publication_type	VARCHAR	Not Null	Type of publication journal
publication_date	DATE	Not Null	Date of Publication of the research

Conference Table

Field	Type	Constraint	Description
conference_id	NUMERIC	Primary Key	Conference attended by faculty
faculty_id	NUMERIC	Foreign key (Referencing Faculty)	Faculty ID associated with the research paper
conference_name	VARCHAR	Not Null	Name of conference attended
conference_type	VARCHAR	Not Null	Type of conference
conference_date	DATE	Not Null	Date of Conference attended
attended_as	VARCHAR	Not Null	Faculty has presented/audience

CODING

1. FACULTY.PHP

```
<?php
// Check if faculty_id is set in the URL query parameters and is not empty
/*if(isset($_GET['faculty_id']) && !empty($_GET['faculty_id'])) {
    $faculty_id = htmlspecialchars($_GET['faculty_id']); // Sanitize the input
} else {
    // Handle the case where faculty_id is not provided or is empty
    die("Faculty ID not provided.");

}*/

include 'db.php'; // Include your database connection

// Assuming you have the faculty ID
$faculty_id = $_GET['faculty_id'] ?? ""; // Replace with a valid default or error handling as
needed

// Prepare SQL query to fetch faculty information along with department name
$sql = "SELECT f.title, f.first_name, f.last_name, f.gender, f.designation, f.year_of_join,
f.qualification, f.expertise, d.department_name
FROM faculty f
JOIN department d ON f.department_id = d.department_id
WHERE f.faculty_id = ?";

$stmt = $conn->prepare($sql);
$stmt->bind_param("i", $faculty_id);
$stmt->execute();
$result = $stmt->get_result();

if ($result->num_rows > 0) {
    $faculty = $result->fetch_assoc(); // Fetch faculty information
} else {
    echo "No faculty found.";
    // Handle case where no faculty is found
}

$sql2 = "SELECT publication_title, publisher, publication_type, publication_date,
publication_link
FROM publication
WHERE faculty_id = ?
ORDER BY publication_date DESC"; // Ordering by publication_date for example
```



```

$stmt2 = $conn->prepare($sql2);
$stmt2->bind_param("i", $faculty_id);
$stmt2->execute();
$result2 = $stmt2->get_result();

$publications = [];
if ($result2->num_rows > 0) {
    while ($row = $result2->fetch_assoc()) {
        $publications[] = $row;
    }
} else {
    echo "No publications found.";
    // Handle case where no publications are found
}
$expertise_list = $faculty['expertise']; // This contains a comma-separated list of expertise areas

// Convert the comma-separated list into an array
$expertise_array = explode(',', $expertise_list);
$sql3 = "SELECT image_url FROM faculty WHERE faculty_id = ?";
$stmt3 = $conn->prepare($sql3);
$stmt3->bind_param("i", $faculty_id);
$stmt3->execute();
$result3 = $stmt3->get_result();

if ($result3->num_rows > 0) {
    $row = $result3->fetch_assoc();
    $image_url = $row['image_url'];
    preg_match('/\file\d\(.*)\/', $image_url, $matches);
    $file_id = $matches[1] ?? "";

    // Construct the direct image URL
    $direct_image_url = "https://drive.google.com/uc?export=view&id={$file_id}";
} else {
    echo "Faculty image not found.";
    // You may choose to set $image_url to a default image path if no specific image is found
    $image_url = "images/default.jpg"; // Path to a default image
}
$stmt->close();
$conn->close();

```

```
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Faculty</title>
  <link rel="stylesheet" href="faculty.css">
  <link rel="stylesheet" href="css/style.css">
</head>
<body>

  <!-- Header Section -->
  <nav class="navbar">
    <ul class="nav-list">
      <div class="logo">
      </div>
      <li><a href="index.html">HOME</a></li>
      <li><a href="aboutus.html">ABOUT US</a></li>
      <li><a href="login.php">LOGIN</a></li>
      <li><a href="reg.php">REGISTRATION</a></li>
    </ul>

    <div class="rightnav">
      <form action="searchresults.php" method="post">
        <select name="search_category">
          <option value="faculty_name">Faculty Name</option>
          <option value="designation">Designation</option>
          <option value="expertise">Expertise</option>
          <option value="department">Department</option>
          <option value="publication">Research Paper/Publication</option>
          <option value="conference">Conference</option>
        </select>
        <input type="text" name="search_query" placeholder="Search...">

        <button type="submit" class="btn btn-sm">Search</button>
      </form>
    </div>
  </nav>
```

```

<div class="outer-section">
  <div class="inner-section">
    <!--<a href="#" class="edit-button"><i class="fas fa-edit"></i> Edit Profile</a>-->
    <a href="edit.html?faculty_id=<?php echo $faculty_id; ?>" class="edit-button">Edit
Profile</a>

    <!-------Faculty Information----->

    <div class="faculty">

      <!-- <div class="image">-->
        <!---->
        <!--
        <form action="upload.php" method="post" enctype="multipart/form-data">
        Select image to upload:
        <input type="file" name="facultyImage" id="facultyImage">
        <input type="hidden" name="facultyId" value="<?php echo $faculty_id; ?>">
        <input type="submit" value="Upload Image" name="submit">
        </form>-->
        <!--<?php if (!empty($image_url)): ?>
        

        <?php else: ?>-->
        <!-- Optionally display a default image if $image_url is empty -->
        <!--

        <?php endif; ?>
      </div>-->
      <div class="image">
        <?php if (!empty($image_url)): ?>
        <!-- Display image from the direct URL stored in $image_url -->
        
        <?php else: ?>
        <!-- Optionally display a default image if $image_url is empty -->
        
        <?php endif; ?>
      </div>

```

```

<div class="details">
  <!-- <h2>Dr Sudeshna Sarkar</h2>
  <h3>Affiliation</h3>
  <p>Department of Computer Science</p>
  <h3>Biography</h3>
  <p>Dr Sudeshna Sarkar Obtained Ph.D.(Development of Fast VLSI RBS
Pipelined Arithmetic Logic Unit) from UttarPradesh Technical University,
      M. Tech. (Digital Systems), B. Tech (EC) Hons from T.I.E.T., Patiala. Gold Medal
for Pre-Engg. Examination, GND University has published around 15
      research papers and articles. Her area of interest is VLSI Design, Computer
Architecture. Currently she is Principal, women Engineering College,
      IET Alwar, Rajasthan, India. Member of IEEE, IETE,</p-->
  <h2><?php echo htmlspecialchars($faculty['title'] . " " . $faculty['first_name'] . " " .
$faculty['last_name']); ?></h2>
  <h3>Affiliation</h3>
  <!-- Dynamically insert department name -->
  <p>Department of <?php echo htmlspecialchars($faculty['department_name']); ?>,
Banasthali Vidyapith</p>
  <p><?php echo htmlspecialchars($faculty['designation']); ?></p>
  <!--<h3>Biography</h3>-->
  <!-- Dynamically insert biography, qualification, and expertise -->
  <!--<p><?php
      echo
          "Qualification: " . htmlspecialchars($faculty['qualification']) . "<br>" .
          "Expertise: " . htmlspecialchars($faculty['expertise']);
      ?></p>-->
  </div>
  <!-- Dynamically insert faculty name -->

```

```

</div>

```

```

<!-- Table for Sections -->

```

```

<!--<div class="container">

```

```

  <table class="section-table" >

```

```

    <tr>

```

```

      <th><a href="#expertise" class="active navlink"></a>

```

```

        <i class="fas fa-briefcase"></i> Expertise</th>

```

```

    </tr>

```

```

    <tr>

```

```

      <th><i class="fas fa-user"></i> Personal Information</th>

```

```

        </tr>
        <tr>
            <th><i class="fas fa-chart-line"></i> Experience</th>
        </tr>
        <tr>
            <th><i class="fas fa-graduation-cap"></i> Qualification</th>
        </tr>
        <tr>
            <th><i class="fas fa-book"></i> Publications</th>
        </tr>
    </table>
</div>-->

```

```

<!--Experties-->
<div class="bg-section" id="expertise">
    <div class="info">
        <hr>
        <h3><i class="fas fa-briefcase"></i>Expertise</h3>
        <hr>
        <!--<ul>
            <li>Computer Science</li>
            <li>Natural Language Processing</li>
            <li>Machine Learning</li>
            <li>Data Mining</li>
        </ul>-->
        <ul>
            <?php foreach ($expertise_array as $expertise): ?>
                <li><?php echo htmlspecialchars($expertise); ?></li>
            <?php endforeach; ?>
        </ul>
    </div>
</div>
</div>

```

```

<!--Personal Information-->
<div class="bg-section">
    <div class="info">
        <hr>
        <h3><i class="fas fa-user"></i>Personal Information</h3>
        <hr>
    </div>
</div>

```

```
<!--<h4>Dr Sudeshna Sarkar</h4>
<p>Female</p>
<p>Department Of Computer Science And Engineering</p>
-->
<h4><?php echo htmlspecialchars($faculty['title'] . ' ' . $faculty['first_name'] . ' ' .
$faculty['last_name']); ?></h4>
<p><?php echo htmlspecialchars($faculty['gender']); ?></p>
<p>Department of <?php echo htmlspecialchars($faculty['department_name']);
?></p>
<p>Banasthali Vidyapith</p>
<p>Tonk, Rajasthan, India - 304022</p>
</div>
</div>
```

```
<!-- Experience Information -->
<div class="bg-section">
  <div class="info">
    <hr>
    <h3><i class="fas fa-chart-line"></i>Experience</h3>
    <hr>
    <p><strong><?php echo htmlspecialchars($faculty['year_of_join']); ?> -
Present</strong>
    <p><?php echo htmlspecialchars($faculty['designation']); ?></p>
    <p>Department of <?php echo htmlspecialchars($faculty['department_name']);
?></p>
    <p>Banasthali Vidyapith, Tonk, Rajasthan</p>
  </div>
</div>
```

```
<!-- Qualification Information -->
<div class="bg-section">
  <div class="info">
    <hr>
    <h3><i class="fas fa-graduation-cap"></i>Qualification</h3>
    <hr>
    <!--<p><strong>1996</strong></p>-->
    <p><?php echo htmlspecialchars($faculty['qualification']); ?></p>
  </div>
</div>
```

```

<!--publication section-->
<div class="bg-section">
  <div class="info">
    <hr>
    <h3><i class="fas fa-book"></i> Publications</h3>
    <hr>
    <!--<p><strong>Preface</strong></p>
    <p>Devismes S.;Mandal P.S.;Saradhi V.;Prasad B.;Molla A.R.;Sharma G.</p>

    <p><strong><br>Finding hierarchy of clusters</strong></p>
    <p>Pal S.S.;Mukhopadhyay J.;Sarkar S.</p>

    <p><strong><br>Delineating Variabilities of Groundwater Level Prediction Across
the Agriculturally Intensive Transboundary Aquifers of South Asia</strong></p>
    <p>Malakar P.;Bhanja S.N.;Dash A.A.;Saha D.;Ray R.K.;Sarkar S.;Zahid
A.;Mukherjee A.</p>

    <p><strong><br>Meta-ED: Cross-lingual Event Detection Using Meta-learning for
Indian Languages</strong></p>
    <p>Roy A.;Sharma I.;Sarkar S.;Goyal P.</p>

    <p><strong><br>Dysarthric Speech Recognition using Depthwise Separable
Convolutions: Preliminary Study</strong></p>
    <p>Shahamiri S.R.;Mandal K.;Sarkar S.</p>

    <p><strong><br>MorphBen: A Neural Morphological Analyzer for Bengali
Language</strong></p>
    <p>Das A.;Sarkar S.</p>

    <p><strong><br>An Approach to Battery Pack Balancing Control Optimizing the
Usable Capacity of the Battery Pack</strong></p>
    <p>Mukherjee N.;Sarkar S.</p>

    <p><strong><br>Estimating Cluster numbers in Landsat-8 images using Stability
Analysis</strong></p>
    <p>Chatterjee A.;Pal S.S.;Mukhopadhyay J.;Das P.P.;Sarkar S.</p>

    <p><strong><br>Deep Learning-Based Forecasting of Groundwater Level Trends
in India: Implications for Crop Production and Drinking Water Supply</strong></p>

```

<p>Malakar P.;Mukherjee A.;Bhanja S.N.;Sarkar S.;Saha D.;Ray R.K.</p>

<p>
Three decades of depth-dependent groundwater response to climate variability and human regime in the transboundary Indus-Ganges-Brahmaputra-Meghna mega river basin aquifers</p>

<p>Malakar P.;Mukherjee A.;Bhanja S.N.;Ganguly A.R.;Ray R.K.;Zahid A.;Sarkar S.;Saha D.;Chattopadhyay S.</p>-->

<?php foreach (\$publications as \$publication): ?>

<p><?php echo htmlspecialchars(\$publication['publication_title']); ?></p>

<p><?php echo htmlspecialchars(\$publication['publisher']); ?></p>

<p>Type: <?php echo htmlspecialchars(\$publication['publication_type']); ?></p>

<p>Year: <?php echo htmlspecialchars(\$publication['publication_date']); ?></p>

<?php if (!empty(\$publication['publication_link'])): ?>

<p>Link: <a href="<?php echo htmlspecialchars(\$publication['publication_link']); ?>" target="_blank">Read More</p>

<?php endif; ?>

<?php endforeach; ?>

</div>

</div>

</div>

</div>

</div>

</body>

</html>

INDEX.PHP

<?php include('server.php') ?>

<!DOCTYPE html>

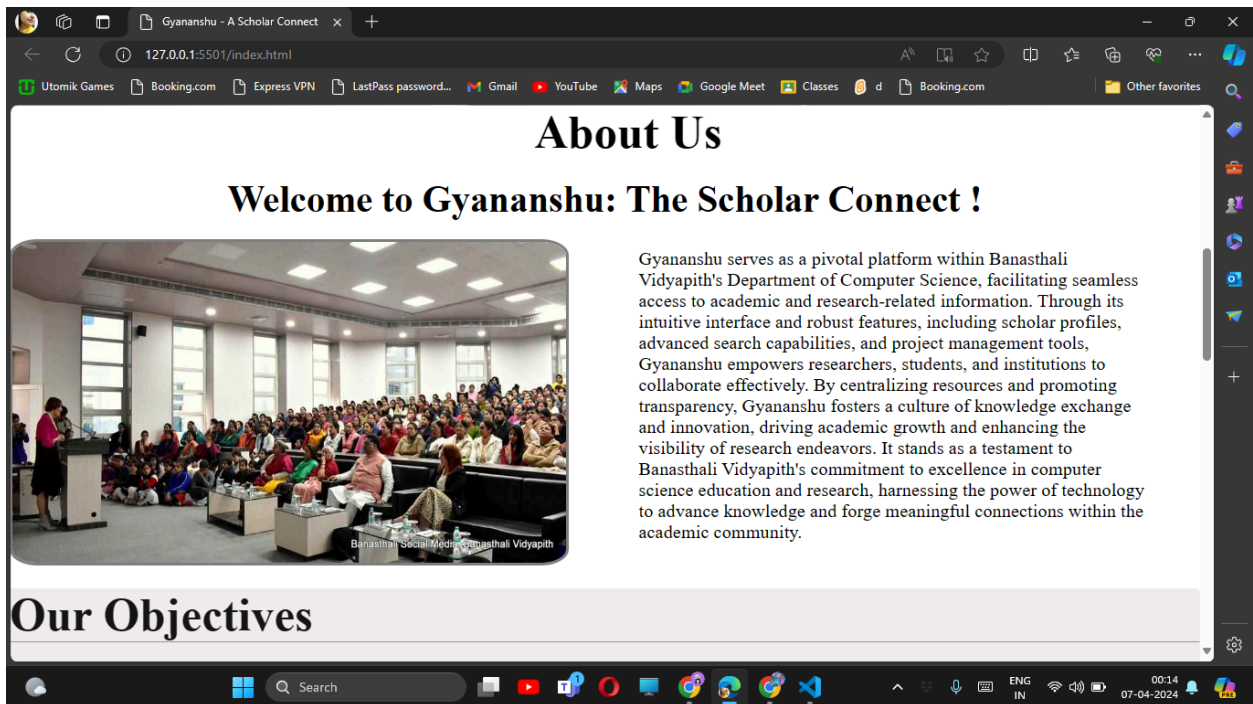
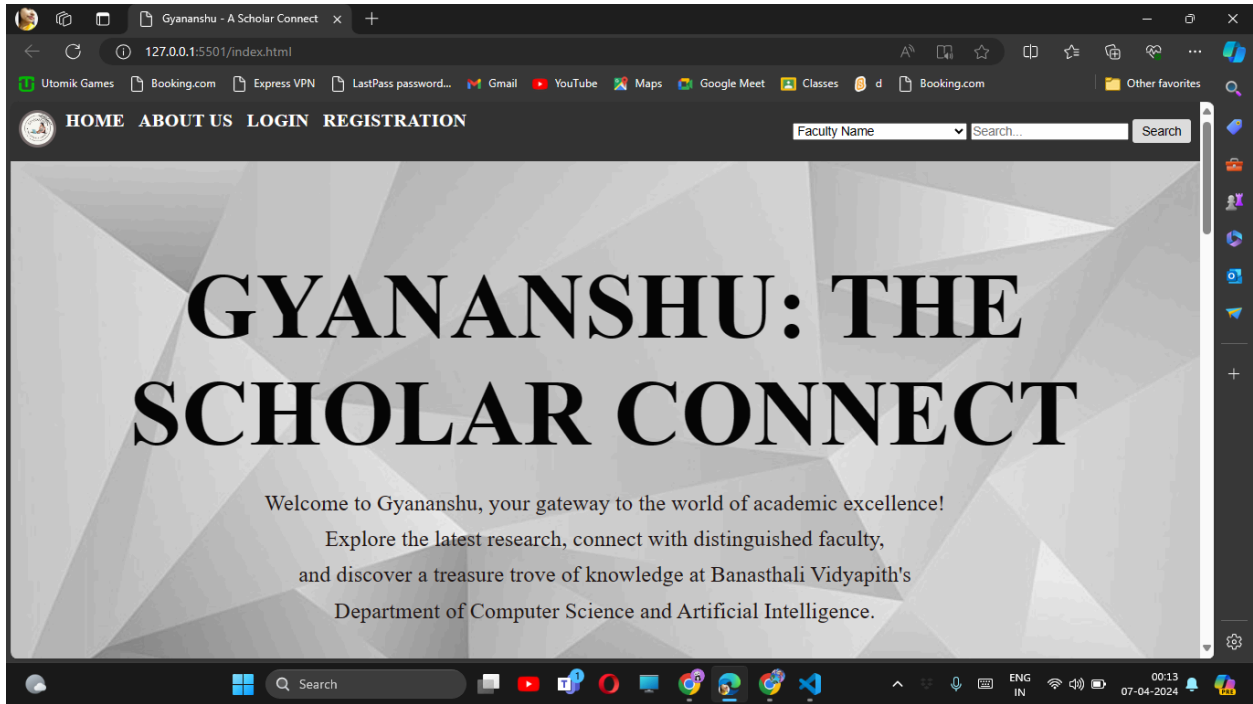
<html lang="en">

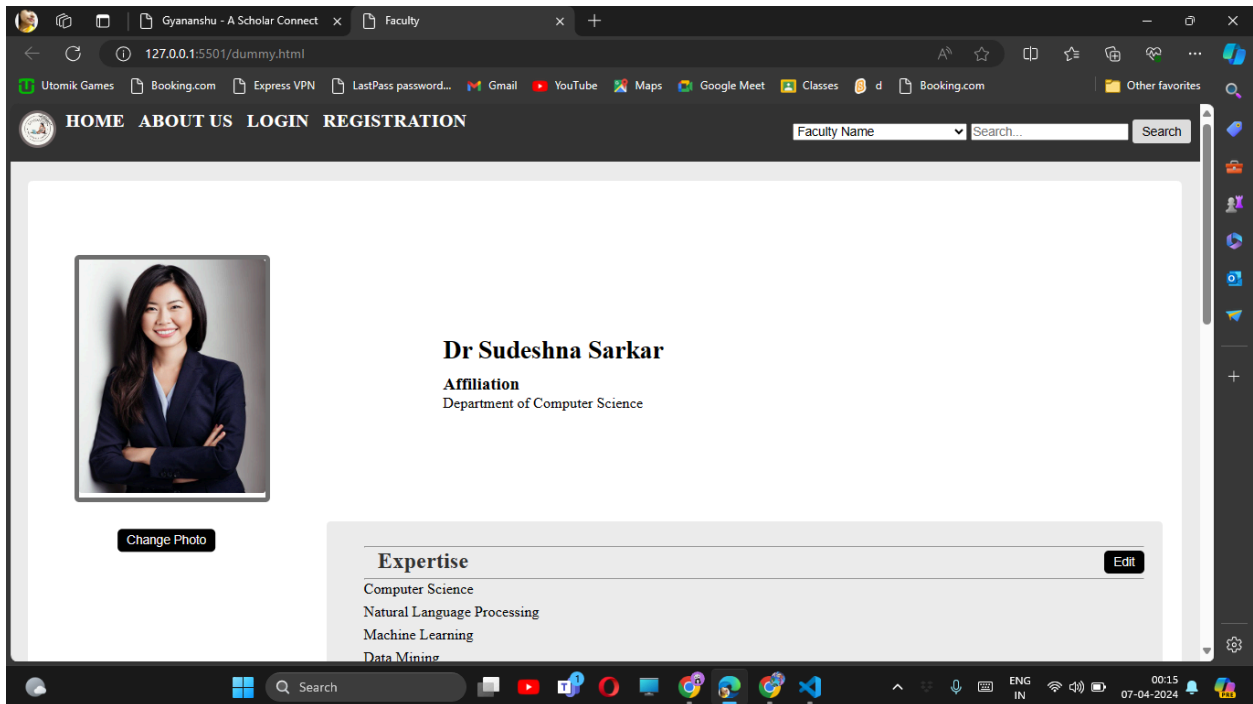
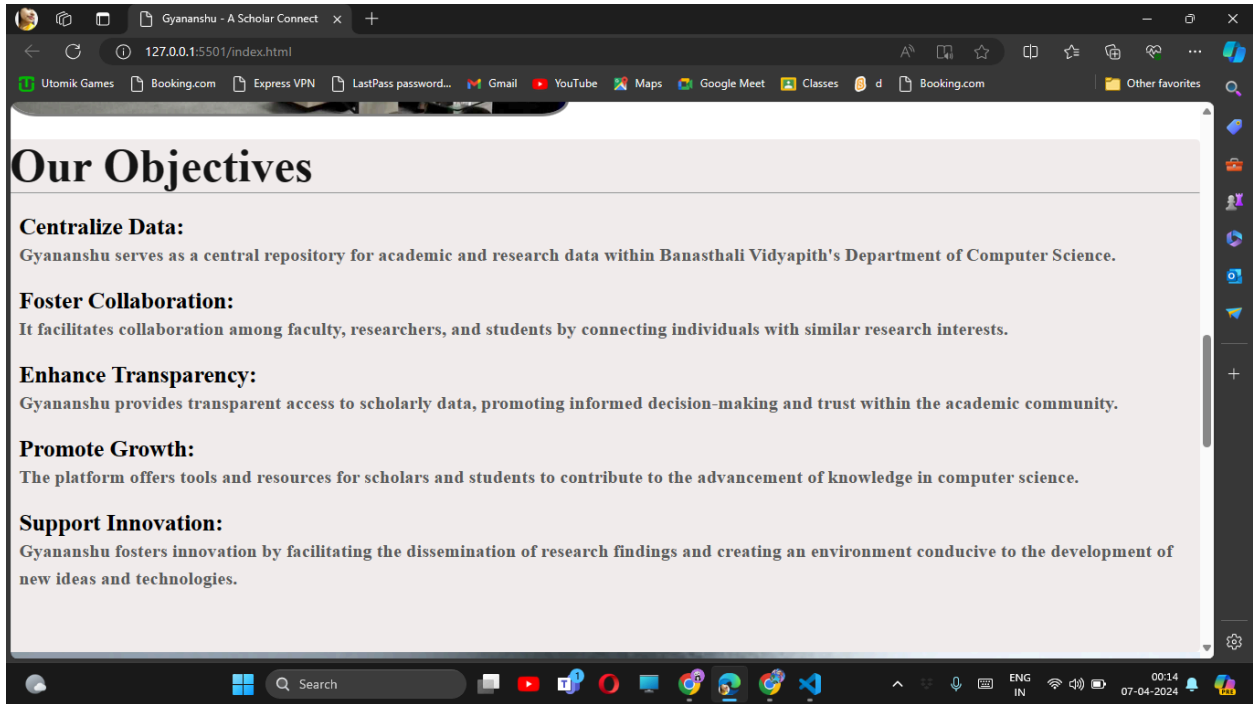

```
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login Page</title>
  <link rel="stylesheet" href="login.css">
</head>
<body>
  <div class="login-container">
    <form class="login-form" method="post" action="login.php">

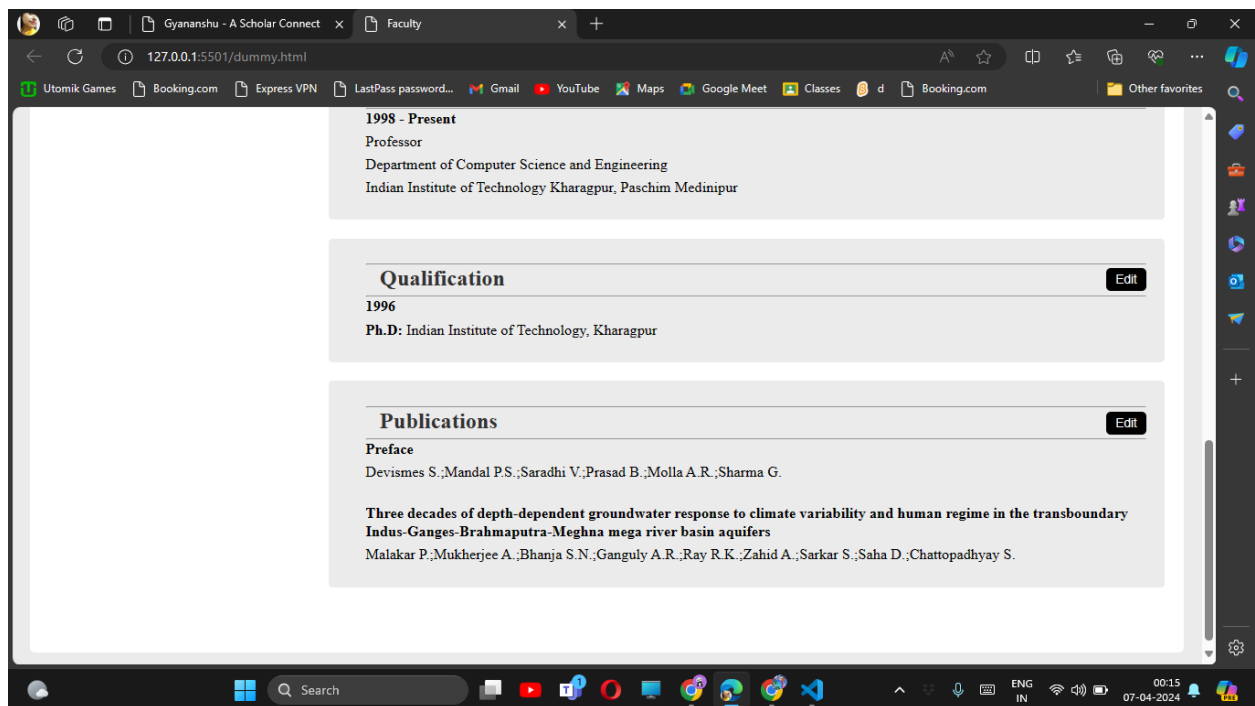
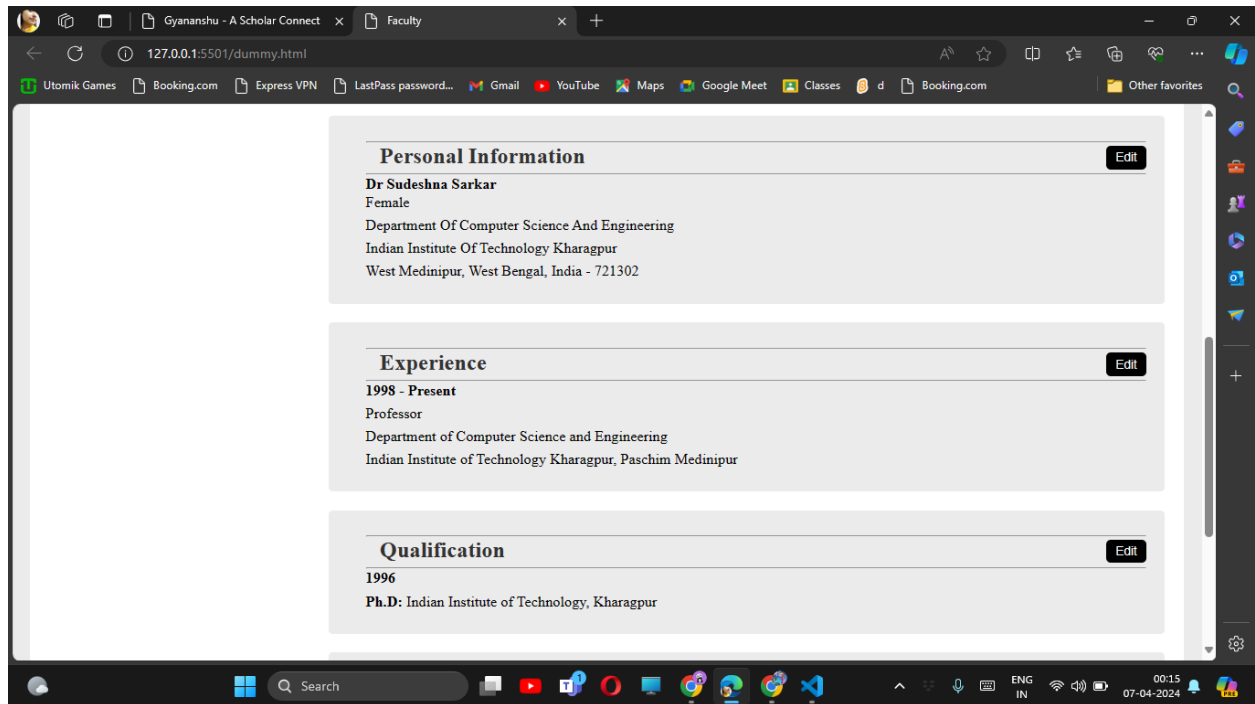
      <h2>Login</h2>
      <div class="form-group">
        <label for="email">Email Address:</label>
        <input type="email" id="email" name="email" required>
      </div>
      <div class="form-group">
        <label for="password">Password:</label>
        <input type="password" id="password" name="password" required>

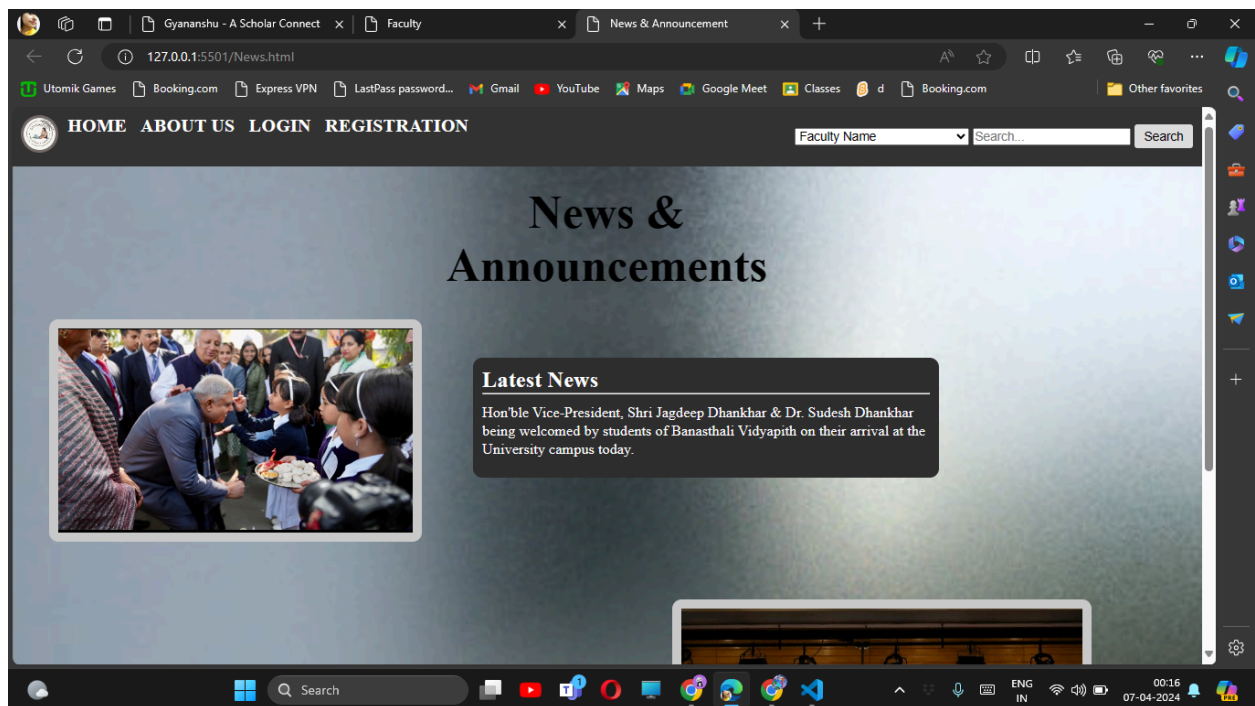
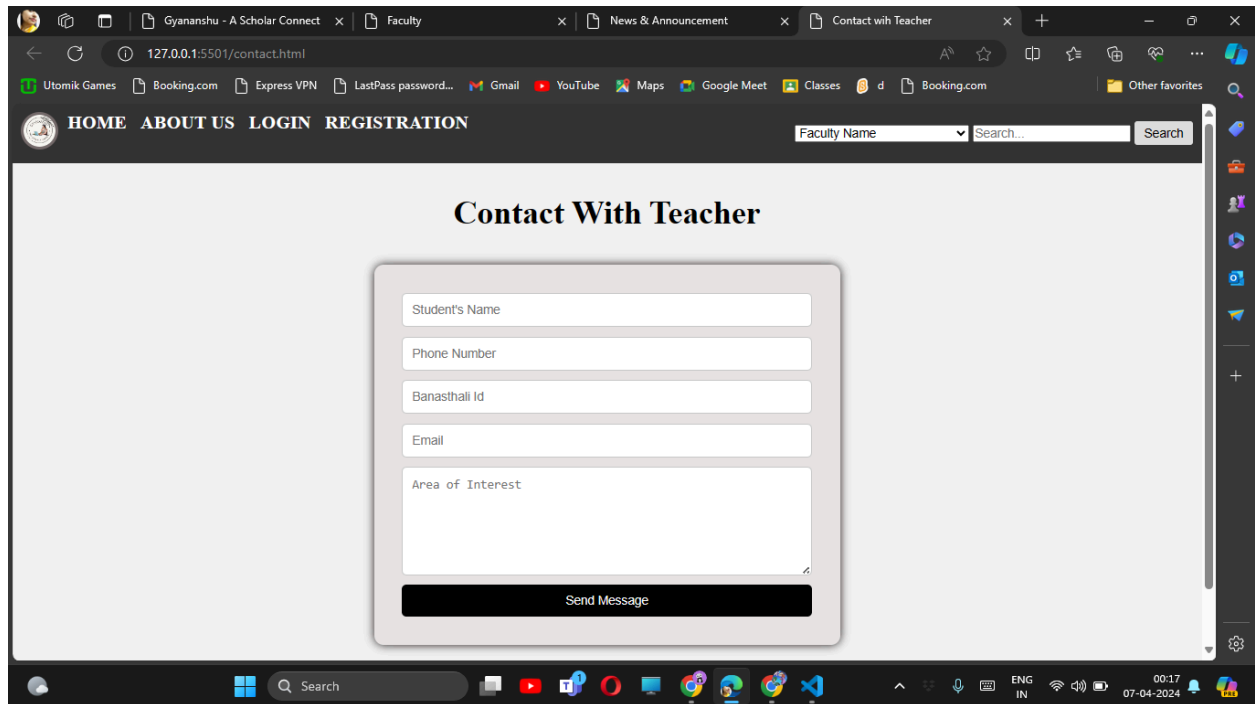
      </div>
      <button type="submit" class="btn" name="login_user">Login</button>
      <p class="forgot-password">Forgot your password? <a
href="forgot_password.php">Reset it</a>.</p>
      <p>Don't have an account? <a href="reg.php">Register</a></p>
    </form>
  </div>
</body>
</html>
```

USER INTERFACES











Rajasthan Royals Vs Royal Challengers
(155) Selfish Boss is too Arogya
Gyananshu - A Scholar Connect
ChatGPT

localhost/gyananshu/searchresults.php



HOME ABOUT US LOGIN REGISTRATION

Faculty Name



Dr Anshuman Shastri

Director and Associate Professor

Automation


Expertise

- Machine Learning
- Cloud Computing
- Data Mining
- Algorithm

localhost/gyananshu/faculty1.php?faculty_id=10023

Get in touch

Type here to search



APPENDICES

The methodology for a “Gyananshu” software would involve several steps, those are:

Requirements gathering: This involves engaging with faculty members, students, and administrators to identify specific functionalities required, including user registration, search capabilities, content management features, and access control.

Data preprocessing: Initially, raw data, including user profiles, research work, publications, and conference details, will be collected and securely stored in the MySQL database. Upon user interactions, the system will employ server-side scripting (PHP) to process user requests, validate inputs, and execute Structured Query Language (SQL) queries for retrieving, updating, or deleting data. These requests will be handled by the backend server, utilizing appropriate algorithms for efficient data retrieval and modification. Once retrieved, the data will be processed according to user queries or system requirements, and the results will be dynamically generated and displayed through the user interface, developed using HTML, CSS.

System integration: The system integration steps involve the seamless combination of various components and modules into a unified, functional system. Firstly, the frontend components, developed using HTML, CSS, and JavaScript, will be integrated to create the user interface, ensuring responsive design and intuitive user interactions. Concurrently, the backend functionalities, implemented in PHP and interacting with the MySQL database.

User interface design: The User Interface (UI) design steps encompass a user-centered approach to create an intuitive and visually appealing interface. Beginning with wireframing and prototyping, the layout and navigation flow of the portal will be conceptualized, emphasizing user experience and accessibility. Design elements, including color schemes, typography, and interactive components, will be carefully chosen to reflect the academic nature of the platform. Responsive design principles will be applied, ensuring the portal's usability across various devices and screen sizes.

Testing and Validation: The testing and validation steps are pivotal to ensure the system's functionality, security, and user experience. Unit testing will be conducted to validate individual components, modules, and database interactions, ensuring they perform as intended. Integration testing will follow, validating the seamless collaboration among different modules.

Deployment: A systematic approach will be followed to transition the application from development to a live, accessible environment. Initially, the deployment environment will be prepared, including configuring servers, databases, and necessary security protocols. A backup and rollback plan will be in place to address unforeseen issues during deployment. Monitoring tools will be implemented to track system performance, ensuring optimal functionality post-deployment.

Frontend Technologies:

HTML (Hypertext Markup Language): HTML provides the basic structure and content of the web pages. It is used for creating elements such as headings, paragraphs, links, and forms.

CSS (Cascading Style Sheets): CSS is used for styling the HTML elements. It controls the layout, colors, and fonts, ensuring a visually appealing and consistent user interface.

Backend Technologies:

PHP (Hypertext Preprocessor): PHP is a server-side scripting language that can handle form data, interact with databases, and perform various server-side tasks. It can be embedded in HTML code.

MySQL Database: MySQL is a popular relational database management system. It's used to store and manage structured data efficiently, making it suitable for applications that involve a lot of data, such as academic platforms.

phpMyAdmin: phpMyAdmin is a web-based tool written in PHP, used for managing MySQL databases. It provides an intuitive interface for managing databases, tables, and data records.

Backend Algorithms and Methods:

CRUD Operations: CRUD stands for Create, Read, Update, and Delete. CRUD operations are fundamental database operations performed on data. PHP scripts can be written to execute CRUD operations on the MySQL database, allowing users to interact with academic data.

Authentication and Authorization: Algorithms for user authentication (verifying user identities) and authorization (determining user access rights) are crucial for data security. Techniques like password hashing can be used for secure user authentication.

SQL Queries: SQL (Structured Query Language) is used to communicate with the MySQL database. Various SQL queries (SELECT, INSERT, UPDATE, DELETE) are crafted in PHP scripts to retrieve, add, modify, or delete data from the database based on user interactions.

SRS: Software Requirements Specification

CSV: Comma-Separated Values

SQL: Structured Query Language

PDF: Portable Document Format

HTTPS: Hypertext Transfer Protocol Secure

HTML: Hypertext Markup Language

CSS: Cascading Style Sheets

JS: JavaScript

DBMS: Database Management System

URL: Uniform Resource Locator

SDS- Software Design Specification

DFD- Data Flow Diagram

API: Application Programming Interface

GUI: Graphical User Interface

HTTPS: Hypertext Transfer Protocol Secure

XML: Extensible Markup Language

URL: Uniform Resource Locator

DNS: Domain Name System

REFERENCES:

"Scopus - Abstract and Citation Database." [Online]. Available: <https://www.scopus.com>. [Accessed: October 11, 2023].

"Vidwan - Expert Database of Scientists and Faculty of India." [Online]. Available: <https://vidwan.inflibnet.ac.in/>. [Accessed: October 11, 2023].

[1] R. S. Pressman, "Software Engineering: A Practitioner's Approach," 7th ed. McGraw-Hill Education, 2014.

[2] K. K. Agarwal, "Software Engineering and Testing: An Introduction," Alpha Science International, 2009.

[3]"Banasthali Vidyapith Official Website." [Online]. Available: <https://www.banasthali.org>. [Accessed: October 18, 2023].

[4]"IEEE Xplore Digital Library." [Online]. Available: <https://ieeexplore.ieee.org>. [Accessed: October 19, 2023].