

ABSTRACT

Our scholarship portal for postgraduate students transforms the landscape of higher education by providing a centralized platform tailored specifically for those pursuing advanced degrees. Utilizing Java servlets, JSP, HTML, CSS, and MSQ~~L~~, this portal delivers a seamless user experience and a comprehensive range of features designed to streamline the search for postgraduate scholarships. At the core of our portal is an extensive database of scholarship opportunities exclusively curated for postgraduate students across various fields of study and eligibility criteria. With a user-friendly interface, students can effortlessly navigate through these opportunities, ensuring accessibility for all users. Critical to the portal's functionality is its utilization of advanced algorithms to provide personalized scholarship recommendations based on individual academic backgrounds, interests, and qualifications. This personalized approach enhances the efficiency of scholarship discovery and application processes, empowering students to pursue opportunities aligned with their aspirations.

Additionally, the portal incorporates an intuitive application tracker, allowing students to monitor the real-time status of their scholarship applications. This transparency fosters trust and accountability, enhancing the overall user experience.

Complementing these features is a robust resource center equipped with guides, tips, and tools tailored specifically for postgraduate students to craft compelling scholarship applications. Interactive forums and discussion boards further facilitate a vibrant community where users can seek advice, share experiences, and build valuable connections. By leveraging cutting-edge technologies and innovative features, our scholarship portal for postgraduate students serves as a catalyst for academic excellence and empowerment. It narrows the gap between deserving postgraduate students and life-changing educational opportunities, thereby driving positive societal impact and fostering a brighter future for generations to come.

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1. Introduction

Opportunity Nest: Empowering Students through College Scholarship Management is a groundbreaking project designed to revolutionize how college students navigate and access scholarship opportunities. At its core, our initiative seeks to streamline the often daunting process of finding, applying for, and managing scholarships, making it easier and more accessible for students from all backgrounds to pursue their educational goals. By leveraging cutting-edge technology and user-centric design principles, Opportunity Nest serves as a centralized hub where students can discover, apply for, and track scholarships seamlessly.

Our platform offers a user-friendly interface tailored specifically for college students, providing features such as personalized recommendations, real-time application tracking, and a comprehensive resource center. Through personalized recommendations, students can easily identify scholarships that align with their academic interests and qualifications. The real-time application tracking feature ensures transparency and accountability, allowing students to monitor the status of their applications and deadlines effortlessly. Additionally, our resource center offers valuable guides, tips, and tools to assist students in crafting compelling scholarship applications, empowering them to succeed academically and financially.

Built with HTML, CSS, and JavaScript on the frontend and powered by Java servlets and JSP on the backend, Opportunity Nest ensures a seamless and intuitive user experience. MySQL serves as the backbone for efficient database management, enabling the smooth storage and retrieval of user data and scholarship information. As a developer working on the backend of Opportunity Nest, you play a pivotal role in architecting robust server-side components that handle data processing, logic implementation, and database interactions. Your expertise ensures that Opportunity Nest remains a reliable and efficient platform, empowering students to navigate the scholarship landscape with ease and confidence.

2. Languages

- JAVA
- HTML
- CSS
- SQL
- JavaScript
- XML

➤ **2.1 JAVA: Java** is a versatile and widely-used programming language known for its platform independence and object-oriented nature. It is commonly used for developing various types of applications, including web, mobile, desktop, and enterprise systems. Key technologies in the Java ecosystem include JDBC Driver, Java Servlets, Java Server Pages, and core Java components.

- **Servlets:-** Purpose: Refers to Java classes handling HTTP requests and responses in server-side applications.
- **JSP (Java Server Pages):-** Purpose: Describes a technology allowing embedding of Java code within HTML pages for dynamic content generation.
- **JDBC Driver:-** Purpose: Refers to a software component enabling Java applications to interact with databases using the JDBC API.

➤ **2.2 HTML:** HTML is a markup language used to create the structure and content of web pages. It consists of a series of elements or tags that define the layout, text, images, links, and other elements on a webpage. HTML provides a standardized way to describe the structure of information on the web, enabling web browsers to render content appropriately for users.

➤ **2.3 CSS:** CSS (Cascading Style Sheets) is a styling language used to control the presentation and layout of web pages. It works alongside HTML to define the visual appearance of elements on a webpage, including colors, fonts, spacing, and layout. CSS uses a series of rules or selectors to target HTML elements and apply styling properties

to them. By separating the content and presentation layers, CSS allows for greater flexibility and consistency in the design of web pages.

- **2.4 SQL:** SQL is a language used for managing and manipulating relational databases. It provides a standardized way to interact with databases, allowing users to perform tasks such as querying data, inserting, updating, and deleting records, creating and modifying database schema, and controlling access to data. SQL is widely used by database management systems such as MySQL, PostgreSQL, Oracle Database, SQL Server, and others.
- **2.5 JavaScript:** JavaScript is a versatile programming language commonly used for web development. It runs on web browsers, enabling developers to create interactive and dynamic content on web pages. JavaScript is often utilized for form validation, allowing developers to ensure that user input meets specified criteria before it is submitted to a server. By implementing validation logic in JavaScript, developers can provide real-time feedback to users, improving the overall user experience and data integrity of web forms.
- **2.6 XML:** XML (eXtensible Markup Language) is a markup language designed to store and transport structured data in a format that is both human-readable and machine-readable. It provides a standardized way to represent hierarchical data structures using tags, similar to HTML. XML documents consist of elements, attributes, and text organized in a hierarchical structure. XML is commonly used for data interchange between different systems, configuration files, and in various web technologies such as SOAP (Simple Object Access Protocol) and RSS (Really Simple Syndication).

3. Software Requirement Specification

3.1 Introduction

- **3.1.1 Purpose:** The purpose of this document is to outline the requirements for the development of "Opportunity Nest: Empowering Students through College Scholarship Management." This web-based mini project aims to streamline the process of accessing and managing scholarship opportunities for postgraduate students, particularly those enrolled in PG colleges affiliated with Sant Gadge Baba Amravati University, Amravati.
- **3.1.2 Scope:** Opportunity Nest will serve as a centralized platform for postgraduate students to discover, apply for, and manage scholarships specific to their academic pursuits. The system will prioritize user-friendly navigation, personalized scholarship recommendations, and seamless integration with PG colleges affiliated with Sant Gadge Baba Amravati University, Amravati.
- **3.1.3 Overview:** Developed using a Rapid Application Development (RAD) approach, Opportunity Nest will leverage a stack of technologies including HTML, CSS, JavaScript, Java (for backend), MySQL (for database management), and any other relevant technologies identified by the development team. The project will be executed by a developer team consisting of 4 students, who will also handle white box testing. Black box testing will be conducted by users and end-users, with user acceptance testing planned for the final phase. The project's duration is set at 3 months with a budget of 1000 rupees.

3.2 Functional Requirements

- **3.2.1 User Registration and Profile Creation:** Users can register on the platform by providing basic information such as name, email, and password. Upon registration, users can create profiles with academic backgrounds, interests, and PG college affiliation.

- **3.2.2 Scholarship Search Functionality:** The system should feature a search engine allowing users to explore scholarships based on criteria such as field of study, eligibility requirements, and scholarship amount.
- **3.2.3 Personalized Recommendations:** Advanced algorithms will generate personalized scholarship recommendations based on user profiles, academic history, and interests.
- **3.2.4 Application Management:** Students can track the status of their scholarship applications, receive notifications about deadlines, and submit required documents through the platform.
- **3.2.5 Integration with Sant Gadge Baba Amravati University, Amravati:**

Opportunity Nest will integrate seamlessly with PG colleges affiliated with Sant Gadge Baba Amravati University, Amravati, allowing for the exchange of relevant scholarship information and updates.

3.3 Non-functional Requirements

- **3.3.1 User-friendly Navigation:** The user interface should be intuitive and accessible, facilitating easy navigation for all users.
- **3.3.2 Performance:** The system should handle concurrent user loads efficiently, providing fast response times.

➤ 3.3.3 Security:

User data should be securely stored and protected against unauthorized access.

➤ 3.3.4 Reliability:

The system should be highly available with minimal downtime for maintenance.

➤ 3.4. Glossary

RAD: Rapid Application Development

PG: Postgraduate

4. System Requirements

➤ 4.1 Hardware Requirements:

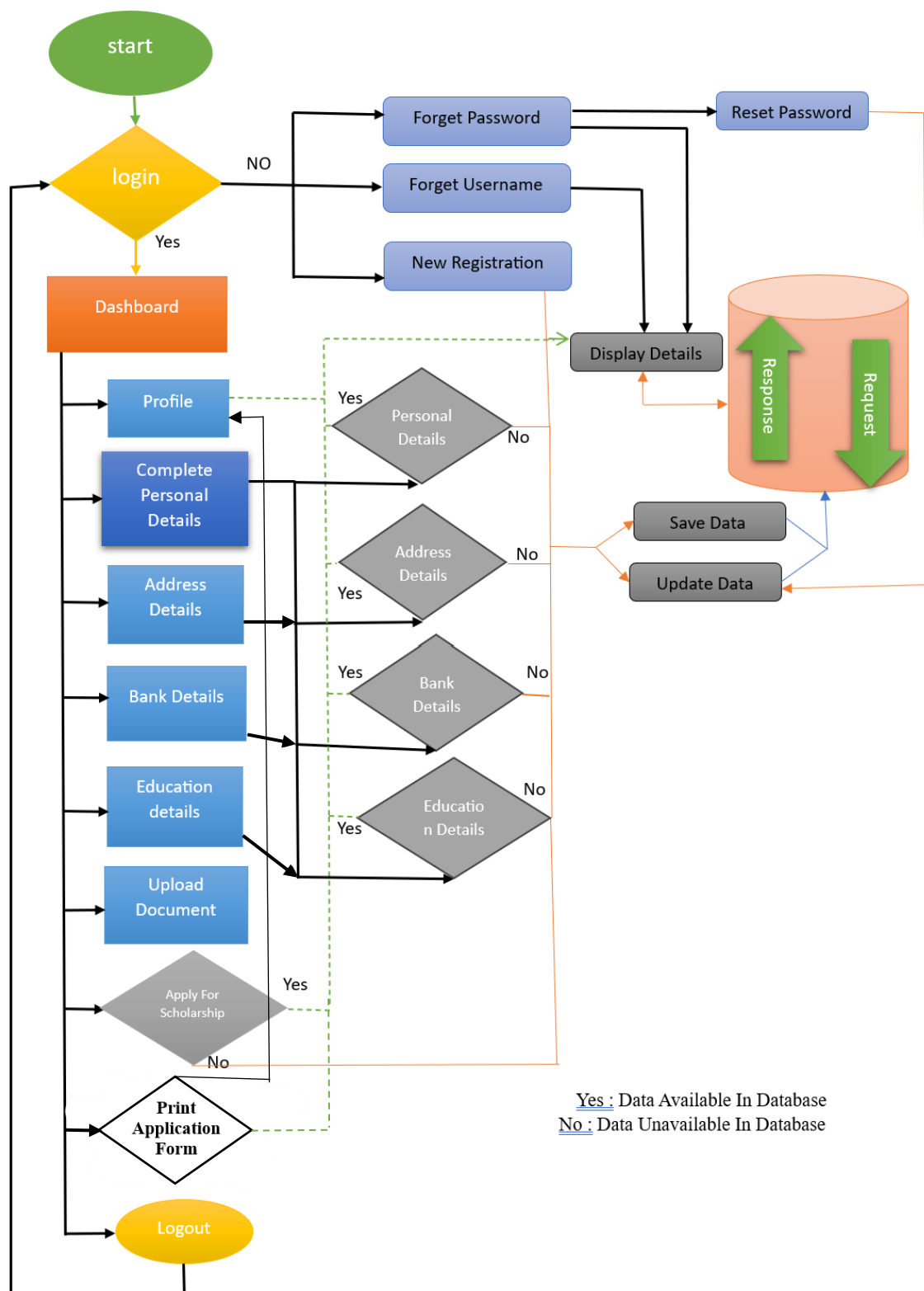
- ✓ Processor: Central Processing Unit
- ✓ Memory (RAM): Primary Storage
- ✓ Storage (HDD/SSD): Secondary Storage
- ✓ Output Device: Display, Monitor
- ✓ Input Devices: Keyboard Mouse
- ✓ Internet Connectivity

➤ 4.2 Software Requirements:

- Operating System
 - ✓ Windows: Microsoft Windows

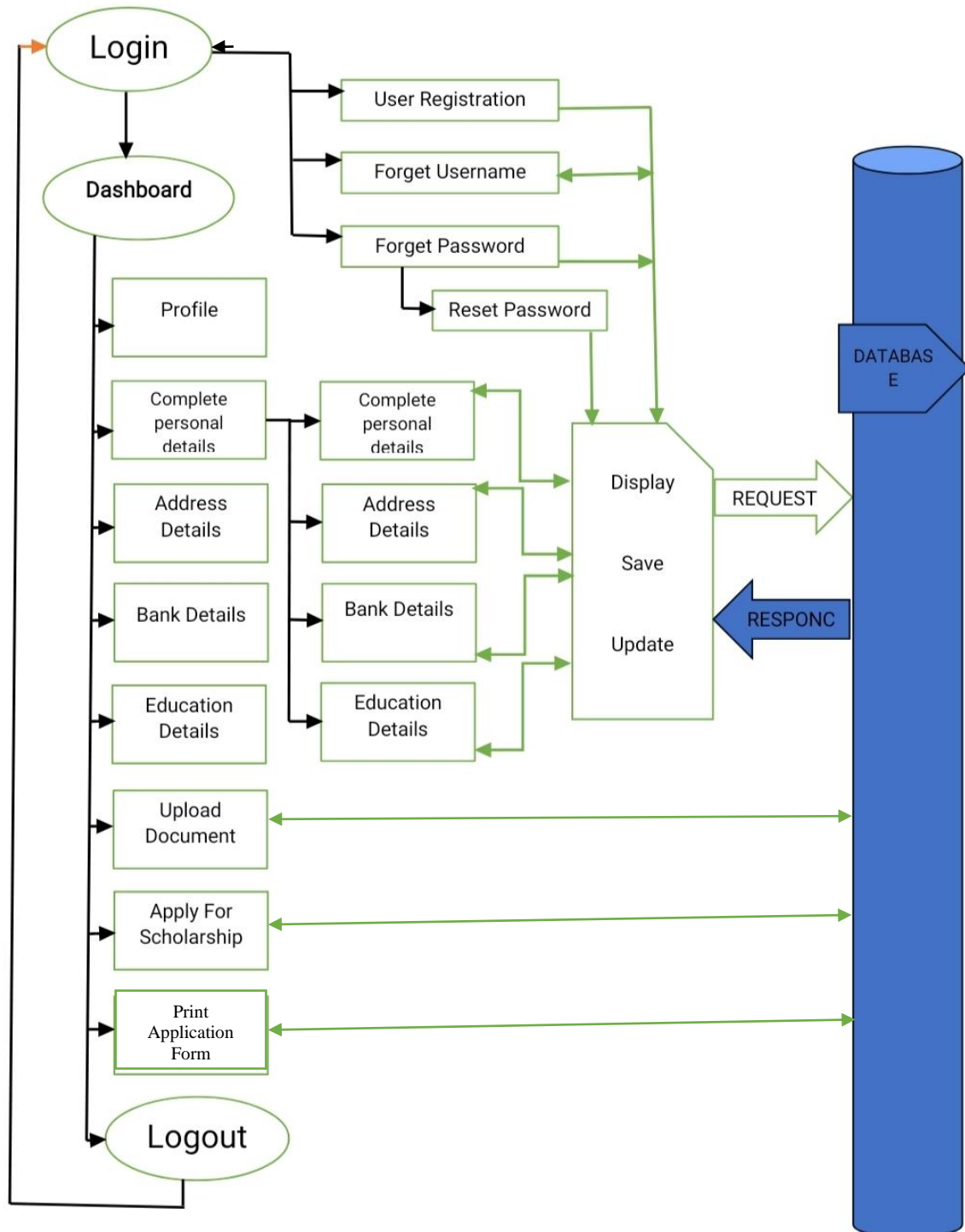
- ✓ macOS: Apple macOS (formerly Mac OS X)
- ✓ Linux: Ubuntu, Fedora, Debian, CentOS, Arch Linux, etc.
- **Development Environment:**
 - ✓ JetBrains IntelliJ IDEA
 - ✓ **Eclipse IDE**
 - ✓ Microsoft Visual Studio Code
 - ✓ NetBeans
- **Programming Languages:**
 - ✓ **Java** (for backend development)
 - ✓ **HTML, CSS, JavaScript** (for frontend development)
 - ✓ **SQL** (for database management and interaction)
- **Database Management System (DBMS):**
 - ✓ **MySQL**
 - ✓ PostgreSQL
 - ✓ SQLite
 - ✓ Oracle Database
- **Web Server:** Apache Tomcat, Jetty, or any other servlet container for deploying and testing web applications developed with Java Servlets and JSP.
- **Browser:** Latest versions of popular web browsers such as Google Chrome, Mozilla Firefox, or Microsoft Edge for testing web applications and ensuring cross-browser compatibility.

5. Flowchart



6. DFD

Data Flow Diagram



7. Project Description

The **Opportunity Nest: Empowering Students through College Scholarship Management** for Postgraduate Students is a mini digital project aimed at providing a simplified solution for postgraduate students to access financial aid opportunities. As the costs of advanced studies continue to rise, many postgraduate students face challenges in funding their education. This project addresses the need for a centralized platform where PG students can easily search for, apply to, and manage scholarship applications.

This Portal is an innovative digital platform designed to streamline the scholarship application process, connecting deserving students with opportunities for financial aid. With user-friendly features and comprehensive database management, the portal aims to bridge the gap between scholarship providers and aspiring scholars, fostering academic excellence and inclusivity.

This mini project is valuable resource for individuals pursuing advanced studies, offering tailored financial aid opportunities based on specific criteria such as income, caste, merit, and hostel residency status. With its user-friendly interface, personalized recommendations, and comprehensive features, the portal strives to make the scholarship application process more efficient and equitable for postgraduate students. Our mini project is dedicated to PG colleges in **Sant Gadge Baba Amravati University, Amravati**.

7.1 Features:

- **User Registration and Profile Creation:** Signing up for the Scholarship Portal is quick and simple. Just provide some basic information, create a username and password, and you're ready to go! Once registered, you can personalize your profile by adding details about your academic achievements, extracurricular activities, and financial need. This helps us match you with scholarships that best fit your qualifications and goals.
- **Scholarship Search Functionality:** The portal offers a robust search engine, allowing students to browse through a diverse range of scholarships based on criteria such as field of study, academic merit, and demographic background. Application Management: Through the portal, students can efficiently manage their scholarship applications, tracking deadlines, submitting required documents, and receiving updates on the status of their applications in real-time.

- **Personalized Recommendations:** Using advanced algorithms, the portal generates personalized scholarship recommendations for students, matching them with opportunities that align with their academic goals and interests.
- **Project Modules:** This project contains different modules that use to get the complete information of students and store it into the database also use to track the status of the user application that several modules are

- Registration form
- Login Page
- Forgot Username
- Forgot Password
- Reset Password
- Profile
- Complete Personal Detail
- Address Detail
- Bank Detail
- Student Education
- Upload Documents
- Apply for Scholarship
- Print Application Form
- Logout

These are the different modules with different functionalities, purpose and goals.

The main aim of the scholarship management system is to streamline and automate the scholarship process within colleges. It offers an efficient, dependable, and user-friendly platform for scholarship management. The primary objective is to empower students by providing easy access to scholarship opportunities, application processes, and status updates. Additionally, it aims to simplify the scholarship management process for both students and administrators, ultimately increasing the number of students who can benefit from financial aid to pursue their education. Overall, this mini project is designed to empower students to overcome financial barriers and achieve their educational aspirations.

7.2 Testing Overview:

Our testing process for the project involved a comprehensive evaluation of the product's functionality and performance. We conducted tests with various end users and stakeholders to ensure that all aspects of the product met their requirements and expectations. The testing phase covered both functional (Black Box Testing) and non-functional (White Box Testing) requirements, ensuring that the product not only worked as intended but also performed optimally under different conditions.

➤ Testing Process:

- **Unit Testing:**

We began our testing process with unit testing, where individual components and functions of the product were tested in isolation. This helped identify and address any issues at the smallest level of granularity, ensuring the overall integrity of the product.

- **Integration Testing:**

Following unit testing, we conducted integration testing to verify the interaction between different modules and components of the product. This helped ensure that all parts of the product worked together seamlessly as a cohesive whole.

- **System Testing:**

System testing involved testing the entire system as a whole to validate its compliance with functional and non-functional requirements. We evaluated the product's performance, reliability, scalability, and security under various scenarios and conditions.

- **User Acceptance Testing (UAT):**

User acceptance testing was conducted based on the project guidelines and requirements. We involved real end users and stakeholders to evaluate the product's usability, functionality, and overall satisfaction. Feedback from UAT helped us make necessary adjustments to improve the product's user experience.

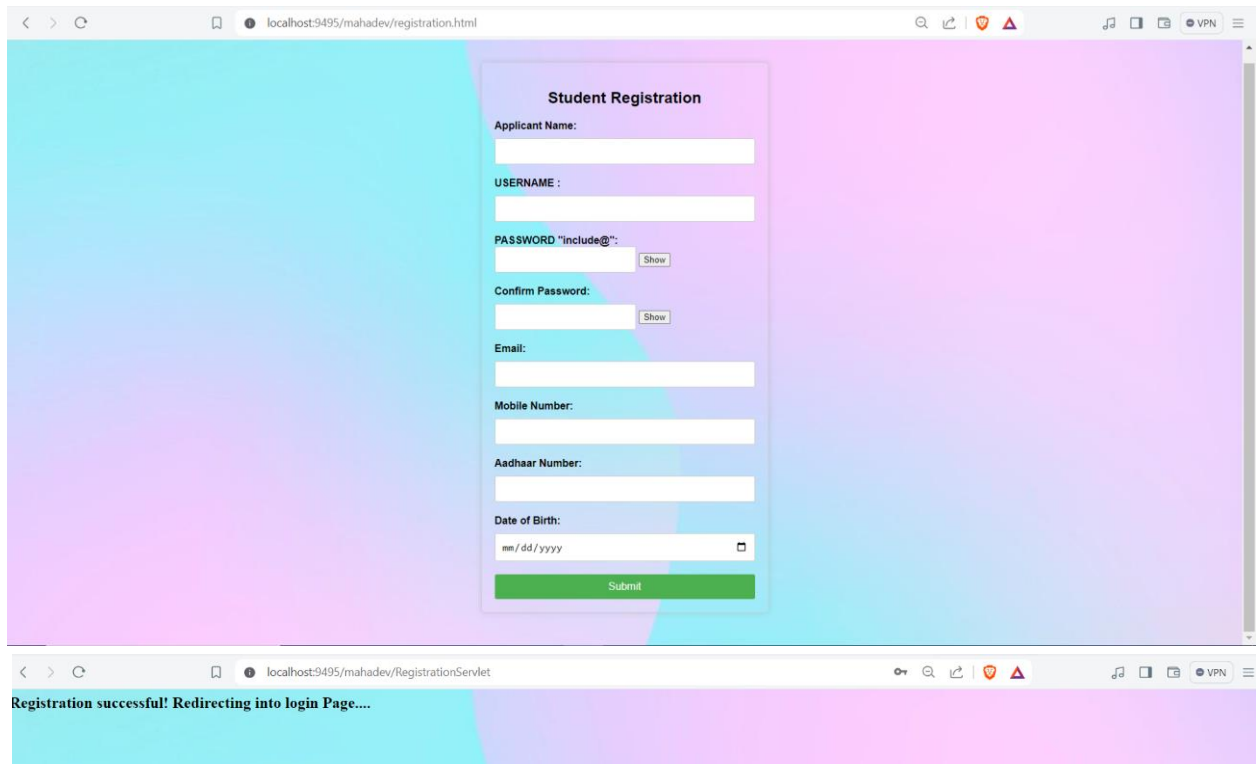
By following this testing process, we were able to thoroughly assess the product's capabilities and address any issues or concerns before deployment. This ensured that the final product met the expectations of both end users and stakeholders, resulting in a successful project outcome.

9. Result Discussion

Upon completion of the project and thorough testing, Opportunity Nest: Empowering Students through College Scholarship Management has successfully achieved its objectives of providing a user-friendly platform for postgraduate students to access and manage scholarship opportunities. The implemented modules, including User Registration and Profile Creation, Scholarship Search Functionality, Personalized Recommendations, Application Management, and Integration with Sant Gadge Baba Amravati University, Amravati, have been meticulously designed and executed to meet the specific needs of the target users. The project has effectively streamlined the scholarship management process, facilitating easier navigation, application, and management of scholarships for students enrolled in PG colleges affiliated with Sant Gadge Baba Amravati University, Amravati.

The user-friendly navigation and intuitive interface have contributed significantly to the overall success of the project, ensuring that users can effortlessly access and utilize the various features offered by Opportunity Nest. Through rigorous testing, including white box testing by the development team and black box testing by users and end-users, the project has demonstrated robustness, reliability, and security. User acceptance testing has confirmed that Opportunity Nest meets the expectations and requirements of its stakeholders, paving the way for its successful deployment and adoption. In conclusion, Opportunity Nest represents a significant milestone in empowering postgraduate students to pursue their educational aspirations through simplified access to scholarship opportunities.

Project screenshots



The top screenshot displays a web browser window at the URL `localhost:9495/mahadev/registration.html`. It features a 'Student Registration' form with the following fields: 'Applicant Name:', 'USERNAME:', 'PASSWORD "include@":' (with a 'Show' toggle), 'Confirm Password:' (with a 'Show' toggle), 'Email:', 'Mobile Number:', 'Aadhaar Number:', and 'Date of Birth:' (with a date picker). A green 'Submit' button is at the bottom. The background is a light purple gradient.

The bottom screenshot shows the same browser window at the URL `localhost:9495/mahadev/RegistrationServlet`. It displays a message: 'Registration successful! Redirecting into login Page....' on a light blue background.

8.1 Student Registration Form

This page serves as a pivotal interface for collecting student registration information. This HTML form is thoughtfully designed to ensure ease of use and clear identification of input fields. Each field, including applicant name, username, password, confirm password, email, mobile number, Aadhaar number, and date of birth, is neatly labeled for clarity. Notably, the password fields feature a convenient toggle button, allowing users to effortlessly show or hide their password entries. When the form is submitted, the data is sent to the server via the POST method, with the form's action attribute specifying the destination URL.

Project Name:-OpportunityNest:Empowering Students through College Scholarship Management

Student Login

USERNAME:

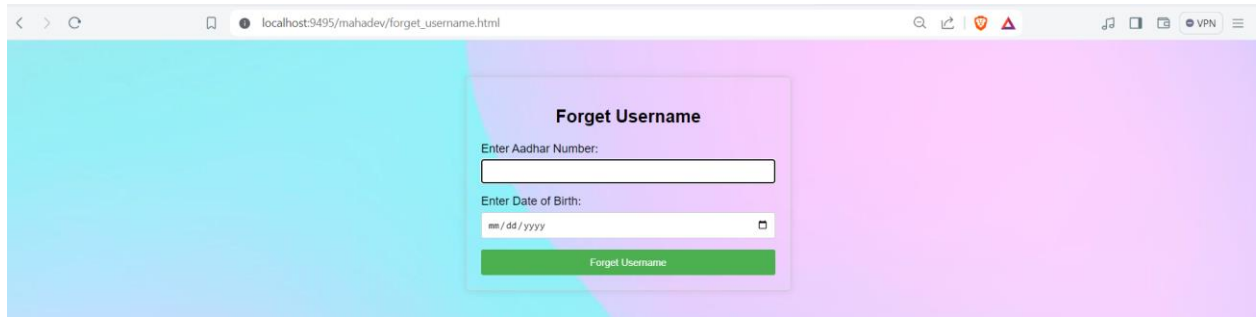
Password:

Captcha

Verify Captcha for login

8.2 Student Login

The HTML form serves as the gateway for collecting student login information. It features input fields for username and password, essential for authentication purposes. Notably, a captcha feature adds an extra layer of security, requiring users to correctly input a randomly generated string of characters. A dedicated button allows users to verify the captcha before proceeding with the login process. The login button is intelligently designed to be initially hidden, becoming visible only after successful captcha verification, enhancing security measures. In addition to the login functionality, the form provides convenient options for new registration, forgotten password, and forgotten username. Each option is linked to its respective page, ensuring seamless navigation for users encountering login-related issues. We also have feedback button so the user can mail us and he can share his experience about the portal.

A screenshot of a web browser showing a form titled "Forget Username". The form is centered on a light purple background with a light blue gradient on the left. It contains two input fields: "Enter Aadhar Number:" and "Enter Date of Birth:". Below the date field is a green button labeled "Forget Username". The browser's address bar shows "localhost:9495/mahadev/forget_username.html".

8.3 Forget Username

This page facilitates username recovery by providing input fields for users to enter their Aadhaar number and date of birth. Both fields are mandatory for verification purposes. Upon submission, the data is sent to the server-side script "ForgetUsernameServlet" using the POST method for further processing.

A screenshot of a web browser showing a success message. The message is displayed on a light purple background with a light blue gradient on the left. It reads "Your username is: good" and "Redirecting into Login Page in 5 sec....". The browser's address bar shows "localhost:9495/mahadev/ForgetUsernameServlet".

8.3.1 Shows Username

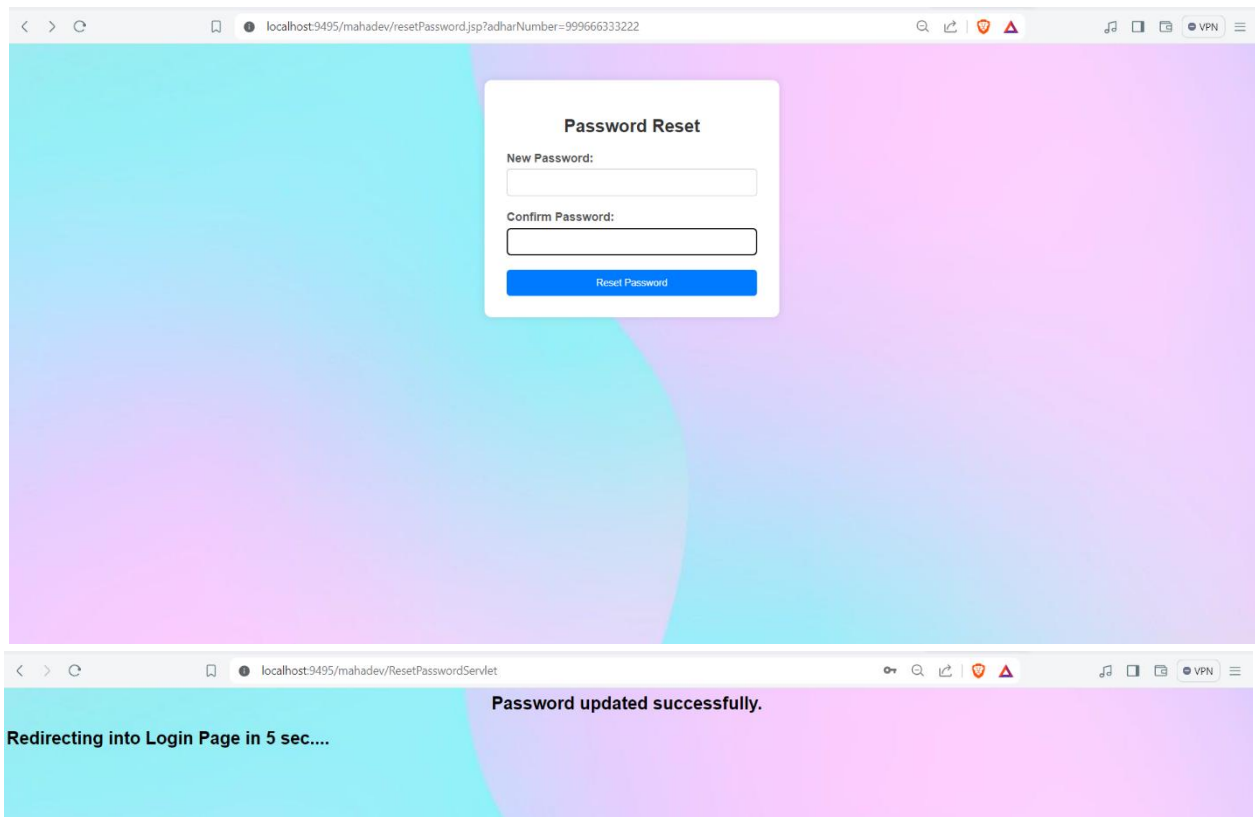
If the details provided are accurate and successfully verified, this page will promptly display the username of the user.

The screenshot shows a web browser window with the address bar displaying 'localhost:9495/mahadev/forget_password.html'. The page has a light purple and blue gradient background. A white form titled 'Forget Password' is centered. It contains three input fields: 'Enter Username:' with the value 'good', 'Enter Aadhar Number:' with the value '999666333222', and 'Enter Date of Birth:' with the value '04 / 11 / 2002'. A green 'Submit' button is at the bottom of the form.

The screenshot shows the same web browser window after submission. The address bar now displays 'localhost:9495/mahadev/ForgetPasswordServlet'. The page shows a success message: 'Your password is: Good@1234' and 'Redirecting to login page in 5 seconds...'. A blue 'Reset Password' button is visible below the message.

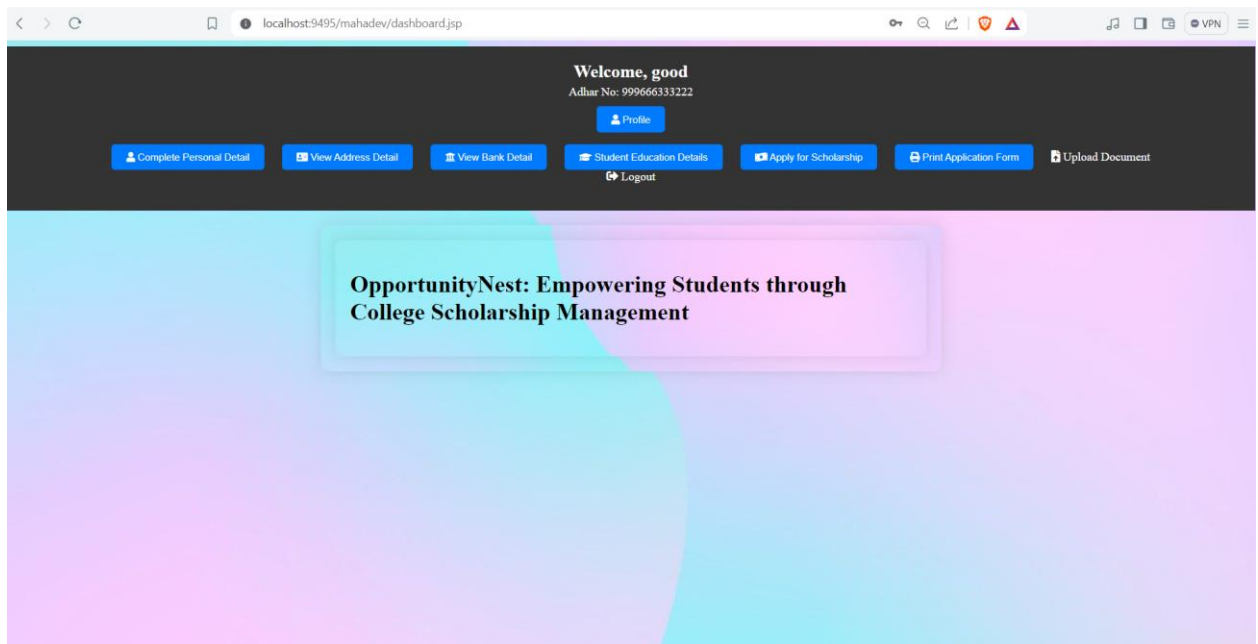
8.4 Forget Password

This page facilitates password recovery by providing input fields for users to enter their username, Aadhar number, and date of birth. All fields are mandatory for verification. Upon submission, the data is securely sent to the server-side script "ForgetPasswordServlet" using the POST method for further processing. Backend processing for password recovery is managed by the servlet named "ForgetPasswordServlet".



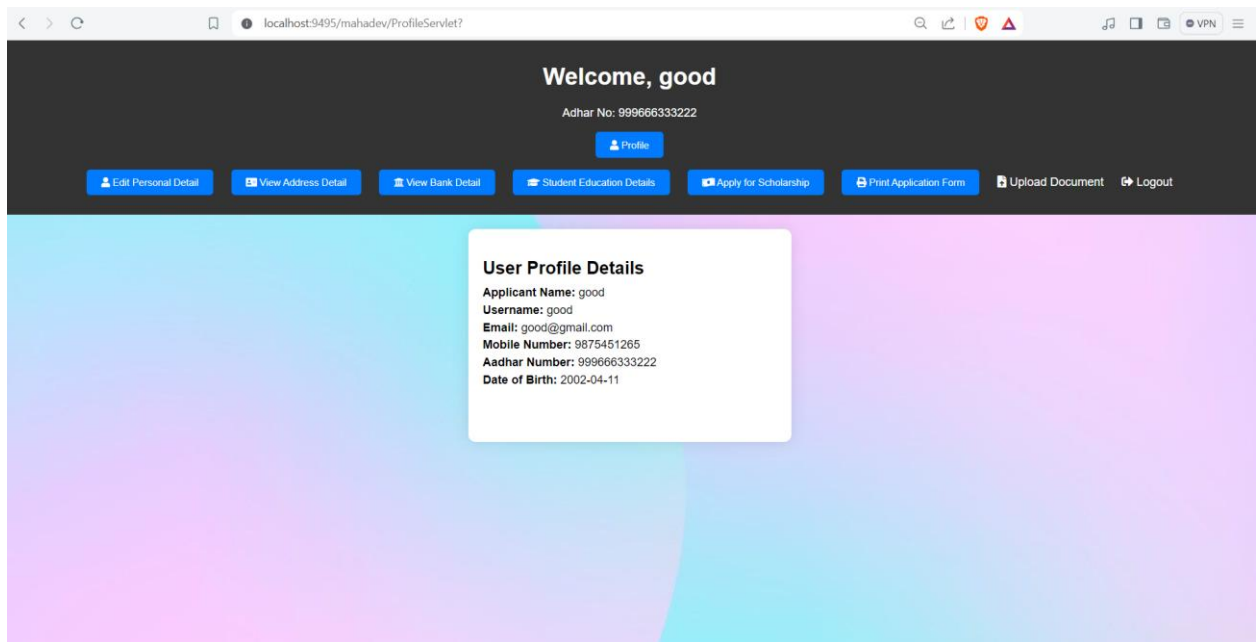
8.5 Reset Password

This page allows users to input and confirm their new passwords. Additionally, the "adharNumber" parameter is retrieved from the request and populated as a hidden input field, ensuring that the page identifies which user's password is being reset. Upon submission, the new password data is securely sent to the server-side servlet named "ResetPasswordServlet" using the POST method for processing. The form's action attribute specifies the URL to which the new password data will be submitted for resetting. Backend processing for password resetting is managed by the servlet named "ResetPasswordServlet".



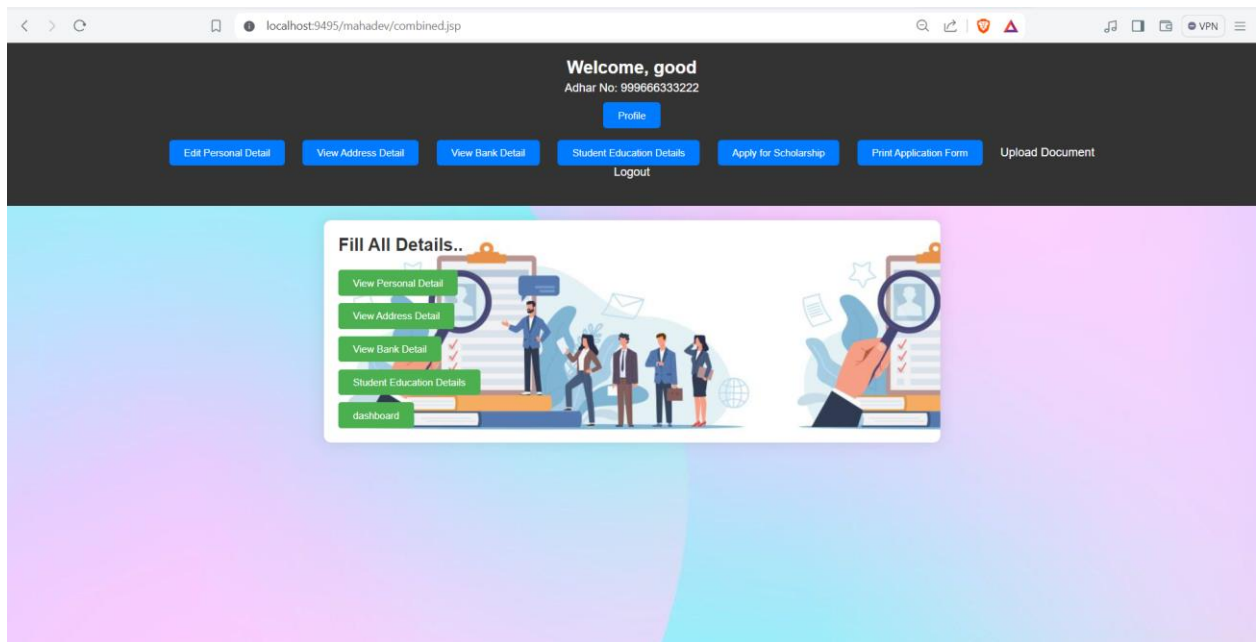
8.6 Dashboard

This page includes the header section, which prominently displays user information, such as the username and Aadhar number, obtained from the session and also shows the name of the project. A button allows users to navigate to their profile page. Navigation options include viewing address details, bank details, student education details, applying for a scholarship, printing application forms, and uploading documents. Additionally, users can log out from the session for security purposes.



8.7 User Profile Details

This page shows the profile details of the currently login user upon clicking the "Profile" button, the form triggers submission, prompting the "ProfileServlet" to retrieve user profile details from the database. The servlet then dynamically generates HTML content to display the retrieved profile information.



8.8 User Details

This page include each button within the "button-group" div represents a distinct action. The action associated with each button is specified by the "action" attribute of the respective form tag. Upon clicking a button, the associated form submits a request to the corresponding servlet, as defined in the "action" attribute.

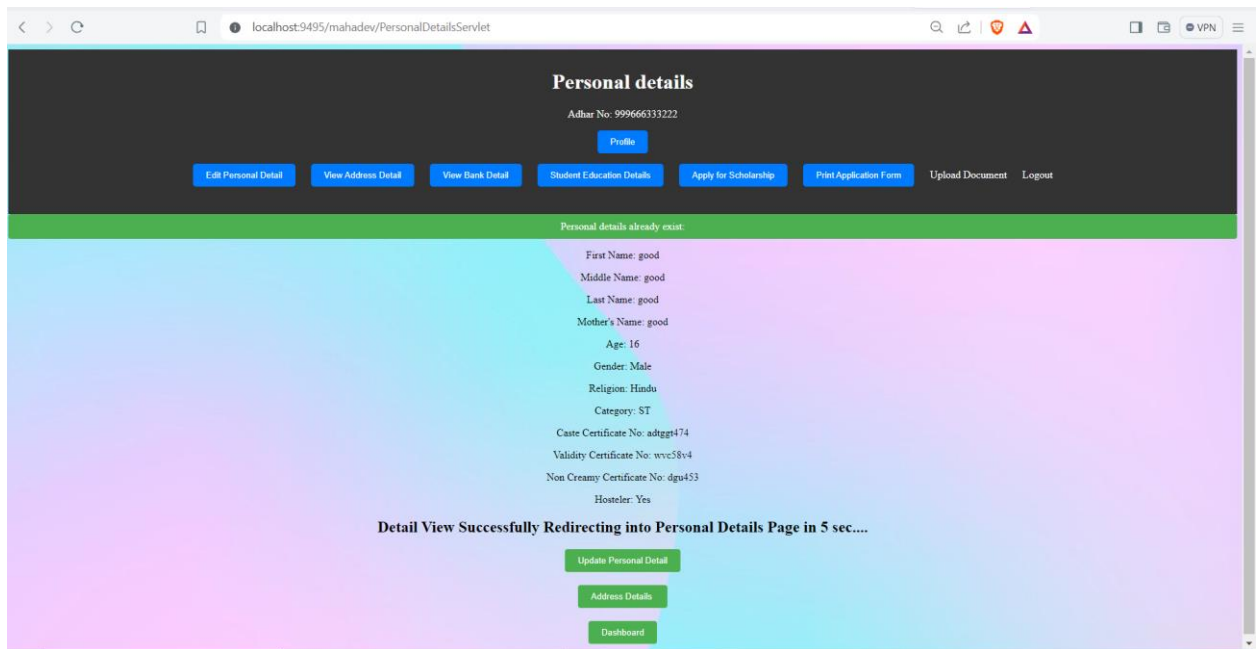
The top screenshot displays the 'personal_details_form.jsp' page. It features a dark header with the text 'Welcome, good' and 'Adhar No: 999666333222'. Below this is a 'Profile' button. A navigation bar contains buttons for 'Edit Personal Detail', 'View Address Detail', 'View Bank Detail', 'Student Education Details', 'Apply for Scholarship', 'Print Application Form', and 'Upload Document'. The main content area, titled 'Please Fill Personal Details', contains the following form fields:

- First Name:
- Middle Name:
- Last Name:
- Mother's Name:
- Age:
- Gender:
- Religion:
- Category:
- Caste Certificate No:
- Validity Certificate No:
- Non Creamy Certificate No:
- Hosteler:

The bottom screenshot shows the 'InsertPersonalDetailsServlet' page. It displays a message 'Personal details SAVE Successfully.' and a red banner stating 'Redirecting into Personal Details Page in 5 sec....'.

8.9 Fill Personal Details

This page includes input fields for first name, middle name, last name, mother's name, age, gender, religion, category, caste certificate number, validity certificate number, non-creamy certificate number, and hosteler status. Upon submission, data is sent to the "InsertPersonalDetailsServlet" for processing and insertion into the database.



8.10 View Personal Details

In the main content area, users are presented with a detailed view of their personal information, provided it already exists within the database. This includes essential details such as first name, middle name, last name, mother's name, age, gender, religion, category/caste, along with relevant certificate numbers and hosteler status. Moreover, intuitive buttons are strategically placed to enable users to update personal details, or navigate back to the dashboard with ease. A subtle message assures users of a successful detail view, with automatic redirection to the personal details page after a brief delay, enhancing user experience and ensuring seamless interaction.

The first screenshot shows a web browser at `localhost:9495/mahadev/update_personal_details_form.jsp?`. The page has a dark header with the text "Welcome, good" and "Adhar No: 999666333222". Below this is a "Profile" button. A navigation bar contains buttons for "Edit Personal Detail", "View Address Detail", "View Bank Detail", "Student Education Details", "Apply for Scholarship", "Print Application Form", and "Upload Document". A "Logout" button is centered below the navigation bar. The main form area has a light blue and purple background and contains the following fields: "First Name:", "Middle Name:", "Last Name:", "Mother's Name:", "Age:", "Gender:" (with a dropdown menu showing "Male"), "Religion:" (with a dropdown menu showing "Hindu"), "Category:" (with a dropdown menu showing "General"), "Caste Certificate No:", "Validity Certificate No:", "Non Creamy Certificate No:", and "Hosteler:" (with a dropdown menu showing "Yes"). An "Update" button is at the bottom of the form.

The second screenshot shows a success message: "Detail updated successfully. Successfully Redirecting into Personal Details Page in 5 sec....". The browser address bar shows `localhost:9495/mahadev/PersonalDetailsServlet1`.

8.11 Update Personal Detail

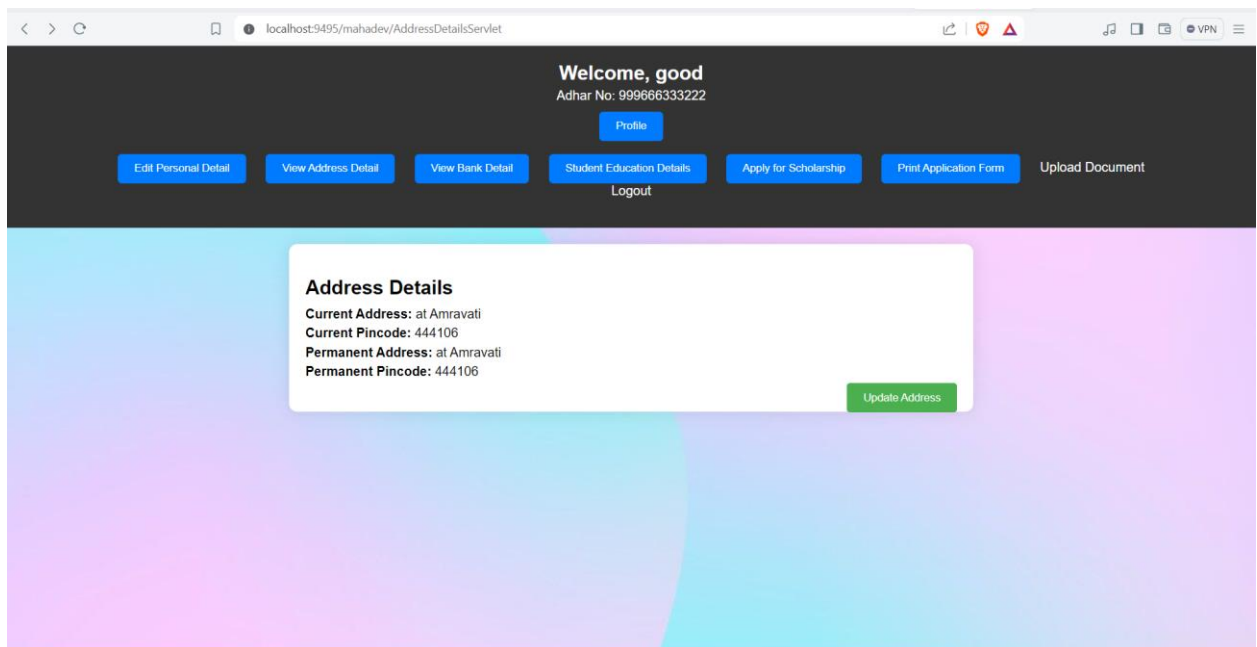
This page is useful for updating personal details of currently login user it include features input fields meticulously designed for capturing essential information such as the user's first name, middle name, last name, mother's name, age, gender, religion, category/caste, along with fields for caste certificate number, validity certificate number, non-creamy certificate number, and hosteler status. A submit button is thoughtfully provided, enabling users to seamlessly update their personal details with ease and efficiency. After the details are updated successfully it will redirect automatically to personal detail page after 5 sec.

The screenshot shows a web browser at `localhost:9495/mahadev/enter_address.jsp`. The page has the same header and navigation bar as the previous screenshot. The main form area has a light blue and purple background and contains the following fields: "Current Address", "Pincode", "Same as Current Address" (with a checkbox), "Permanent Address", and "Permanent Pincode". A green "Save" button is at the bottom of the form.



8.12 Address Details

This page presents a form designed for users to input their address details. The form includes fields for the current address and its pincode. Additionally, there is an option to mark the address as "Same as Current Address" using a checkbox. If selected, it automatically fills the permanent address and pincode fields but disables them for editing. The primary purpose of this page is to facilitate users in providing their address information conveniently. Upon submission of the form, the entered data is sent to the "EnterAddressServlet" for saving data in the database. After the data is saved successfully it show the message 'Address Saved Successfully' and it will automatically redirect to the personal details after 5 sec.



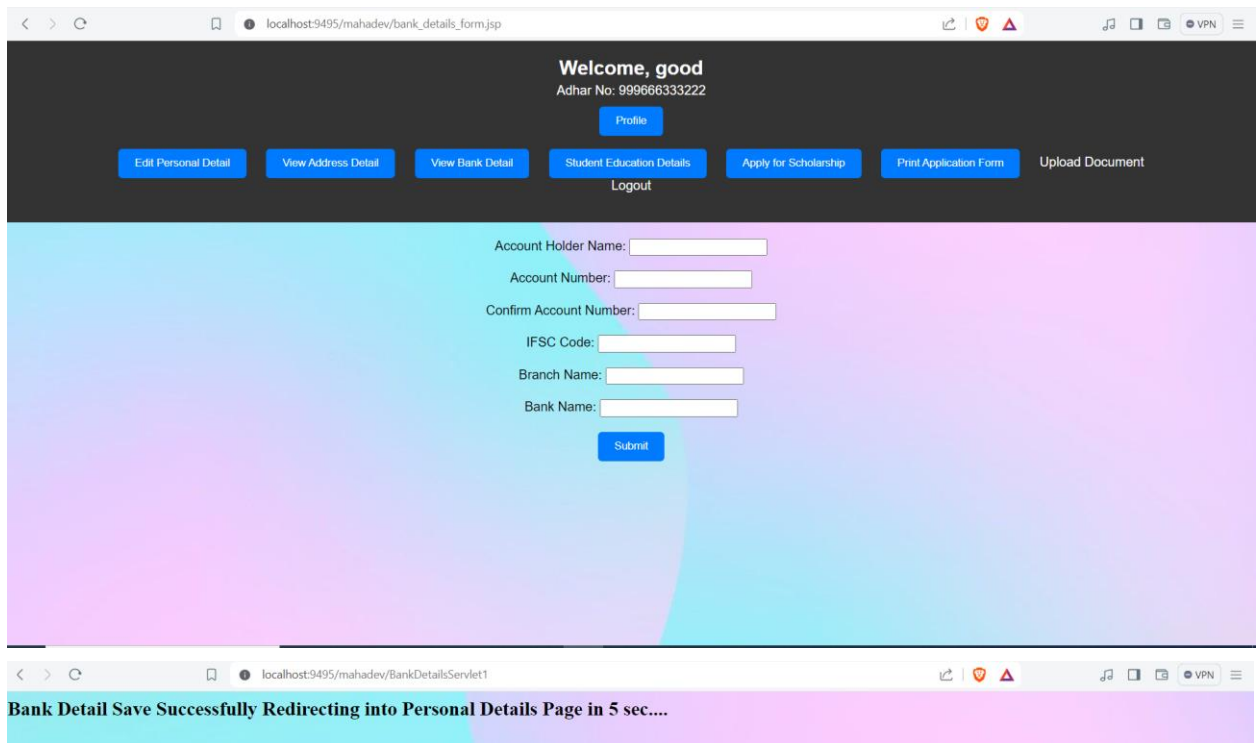
8.13 Address Details

This page, providing a snapshot of the current user's address information sourced directly from the database. While the page lacks visible form fields, it acts as a conduit for retrieving and presenting the user's address details. Leveraging backend connectivity, the page dynamically fetches and displays this crucial information, ensuring accuracy and real-time reflection of the user's stored data. Through this interface, users can seamlessly access and review their address details, fostering a user-centric approach to data management within the application. Also the user can update their address by clicking on the 'Update Address' button.

The image shows two screenshots of a web application. The top screenshot is the 'Update Address' form, which is a white modal box centered on a dark blue header and a light blue/purple gradient background. The header contains a welcome message 'Welcome, good' and 'Adhar No: 999666333222', along with a 'Profile' button and a row of navigation buttons: 'Edit Personal Detail', 'View Address Detail', 'View Bank Detail', 'Student Education Details', 'Apply for Scholarship', 'Print Application Form', and 'Upload Document'. Below these is a 'Logout' button. The form itself has fields for 'Current Address', 'Pincode', a checkbox for 'Same as Current Address', 'Permanent Address', and 'Permanent Pincode'. An 'Update' button is at the bottom right of the form. The bottom screenshot shows a success message 'Address details updated successfully.' in a blue banner, with a sub-message 'Redirecting to Personal Details Page...' below it. The browser address bar for both screenshots shows 'localhost:9495/mahadev/UpdateAddress.jsp' and 'localhost:9495/mahadev/UpdateAddressServlet'.

8.14 Update Address Details

The page interface is a form meticulously crafted for updating address details, featuring fields for the current address, pin code, and an option to indicate whether the permanent address aligns with the current one. Enhancing user experience, JavaScript functionality is incorporated to automatically populate permanent address details based on the current address if the corresponding checkbox remains unchecked. Upon submission, the form seamlessly transmits the entered data to the "UpdateAddressServlet" via the POST method, facilitating swift and accurate updating of address information within the application's backend infrastructure. Also when the address is successfully updated it will show the message and redirect to the personal detail dashboard after 5 sec.



The screenshot displays a web browser window with the URL `localhost:9495/mahadev/bank_details_form.jsp`. The page features a dark header with the text "Welcome, good" and "Adhar No: 999666333222". Below this, there is a "Profile" button and a row of navigation buttons: "Edit Personal Detail", "View Address Detail", "View Bank Detail", "Student Education Details", "Apply for Scholarship", "Print Application Form", and "Upload Document". A "Logout" link is also present. The main content area has a light blue and purple gradient background and contains a form for entering bank details. The form fields are: "Account Holder Name:", "Account Number:", "Confirm Account Number:", "IFSC Code:", "Branch Name:", and "Bank Name:". A "Submit" button is located below the form fields. At the bottom of the browser window, a success message is displayed: "Bank Detail Save Successfully Redirecting into Personal Details Page in 5 sec...."

8.15 Bank details

Displayed is the "User Bank Details" page, designed as a user-friendly platform for inputting and submitting bank detail securely. The core feature of the page is a meticulously crafted form, providing users with a structured interface to input their bank details accurately. This form incorporates validation mechanisms to ensure the integrity of the entered data, particularly checking if the account numbers match before submission, thus enhancing data accuracy. Leveraging JavaScript functionality, users receive immediate feedback upon successful submission, with a displayed success message and automatic redirection after a brief delay of 3 seconds.

8.16 Update Bank Details

This page serves as a dedicated platform for users to conveniently update their bank information within the application. This form provides fields for inputting essential information such as the account holder name, account number, IFSC code, branch name, and bank name, ensuring comprehensive coverage of pertinent banking details. Additionally, a hidden field discreetly stores the user's Aadhar number for streamlined identification purposes. In essence, the "Update Bank Details" page empowers users to effortlessly manage and update their crucial financial information, ensuring accuracy and security within the application's ecosystem. Leveraging JavaScript functionality, users receive immediate feedback upon successful submission, with a displayed success message and automatic redirection after a brief delay of 5 seconds.

The first screenshot shows a message: "Education details do not exist for the current user Redirecting 3 sec to fill Educatin details".

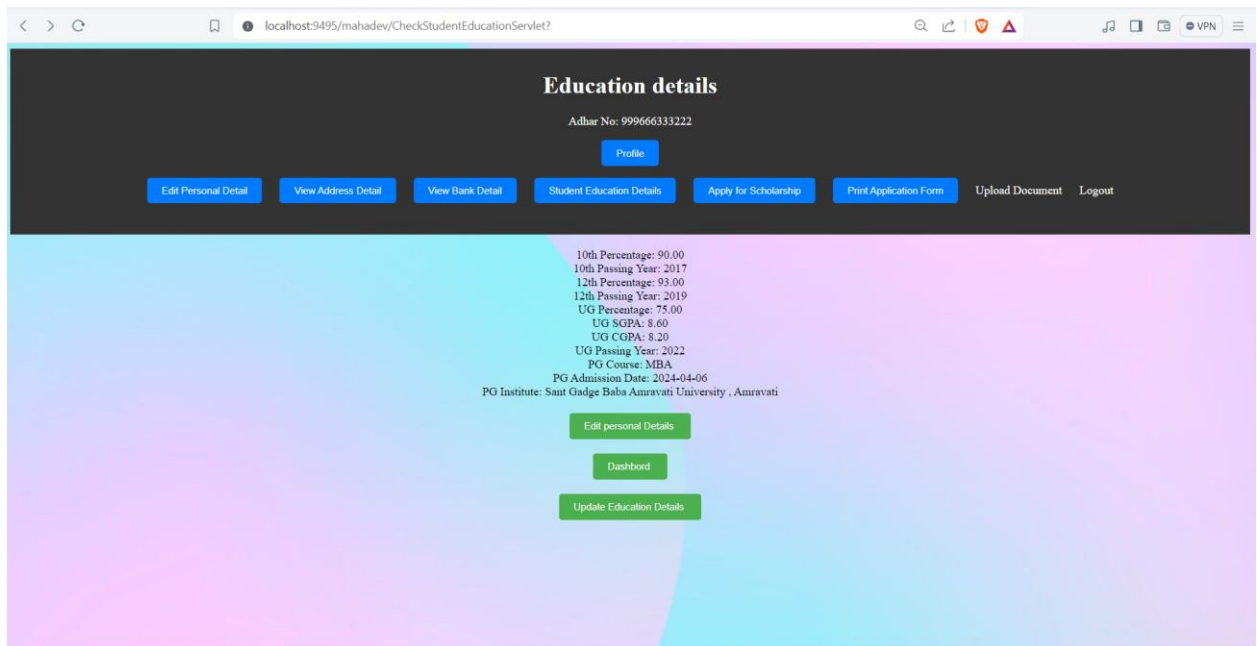
The second screenshot shows the "Enter Education Details" form. The form includes the following fields:

- 10th Percentage:
- 10th Passing Year:
- 12th Percentage:
- 12th Passing Year:
- UG Percentage:
- UG Last Sem SGPA:
- UG CGPA:
- UG Passing Year:
- PG Course:
- PG Admission Date:
- PG Institute:

The third screenshot shows a message: "Education details saved successfully Redirecting into 5 sec".

8.17 Education Details

This page serves as a comprehensive platform for users to input their educational history within the application. Structured fields cater to recording details of the user's 10th, 12th, undergraduate (UG), and postgraduate (PG) education. Users have to input percentages, passing years, course information, admission dates, and institute details for their PG studies. A dropdown menu simplifies the selection of the PG institute. To ensure data accuracy, client-side form validation using JavaScript is implemented. Users can conveniently submit their entered details using the "Save" button, contributing to a seamless and user-friendly experience within the application. Leveraging JavaScript functionality, users receive immediate feedback upon successful submission, with a displayed success message and automatic redirection after a brief delay of 5 seconds.



8.18 Shows Education Details

This page offers users a concise view of their educational history within the application. In the event that education details are available, the page neatly displays them for easy reference and review. However, if no education details are found, the page prompts the user to input them, ensuring completeness of their profile. Upon prompt, a redirection occurs after a brief delay of 3 seconds, guiding users to the appropriate section for entering their educational information. This user-centric approach streamlines the process of managing educational details within the application, promoting completeness and accuracy of user profiles.

localhost:9495/mahadev/UpdateEducationDetails.jsp?

Welcome, good
Adhar No: 999666333222

Profile

Edit Personal Detail View Address Detail View Bank Detail Student Education Details Apply for Scholarship Print Application Form Upload Document

Logout

Update Education Details

10th Percentage:

10th Passing Year:

12th Percentage:

12th Passing Year:

UG Percentage:

UG Last Sem SGPA:

UG CGPA:

UG Passing Year:

PG Course:

PG Admission Date:

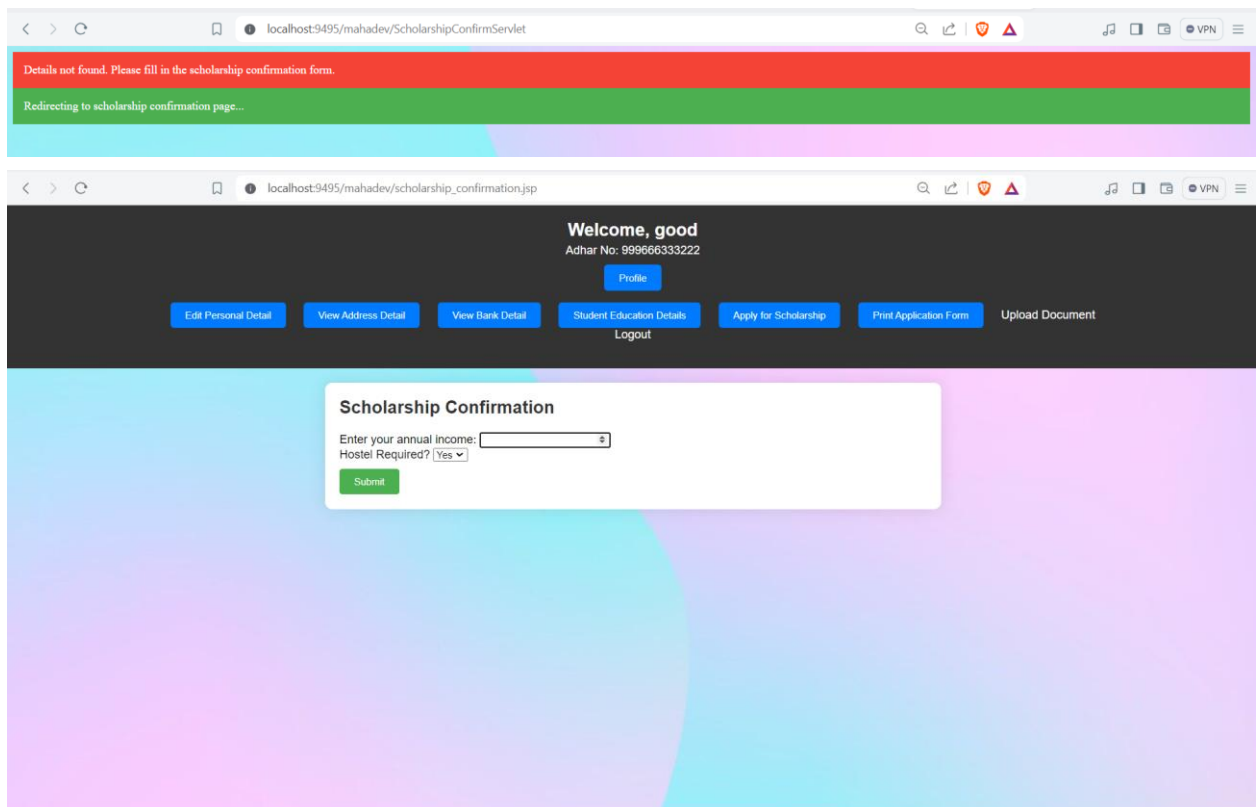
PG Institute:

Sant Gadge Baba Amravati University, Amravati
Srija College of Engineering and Technology, Amravati
PR Pote Patil Education and Welfare Trusts Group of Institutions College of Architecture, Amravati

Education details updated successfully. Redirecting into 5 sec

8.19 Update Education Details

This page functionality is a comprehensive form for updating education details, covering fields for 10th, 12th, undergraduate (UG), and postgraduate (PG) education. To ensure data accuracy, a JavaScript function named "validateForm()" is implemented for form validation. This function validates percentage and passing year fields, alerting users if the percentage is less than 35 or if the passing year is not a 4-digit integer. Finally, a submit button allows users to save the updated details seamlessly, contributing to a user-friendly and efficient experience within the application. Leveraging JavaScript functionality, users receive immediate feedback upon successful submission, with a displayed success message and automatic redirection after a brief delay of 5 seconds.



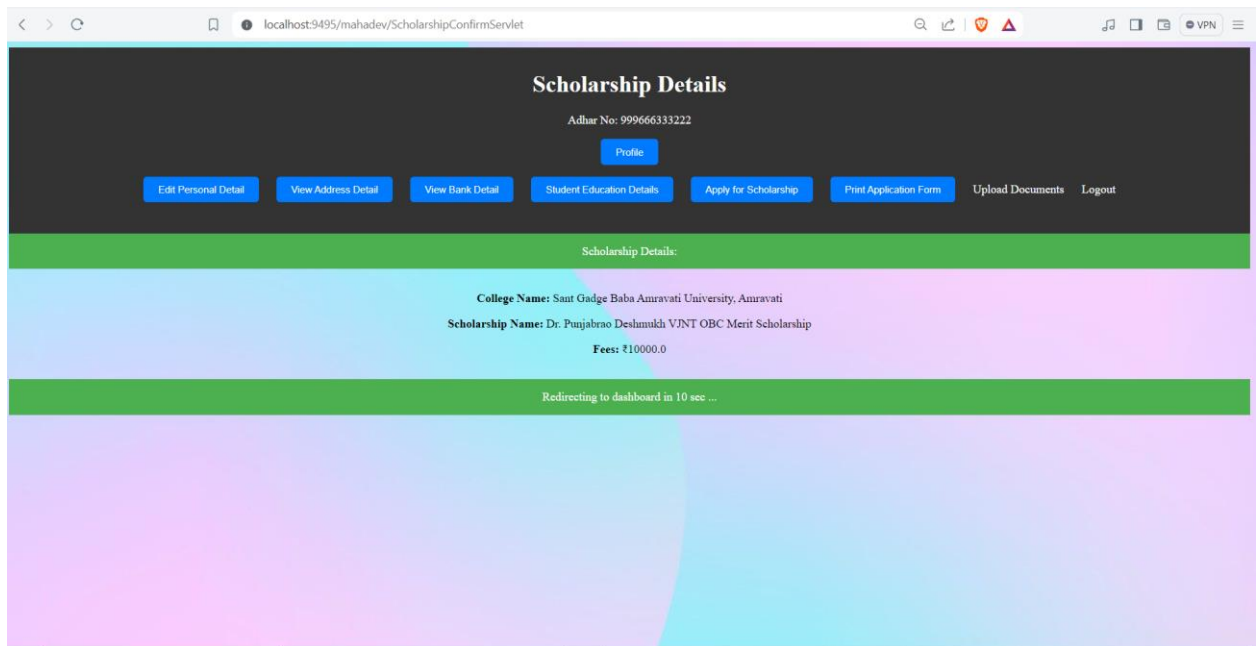
8.20 Scholarship Confirmation

This page is a form tailored for confirming scholarship details. This form incorporates fields for inputting annual income and indicating hostel requirement. To maintain data accuracy, a JavaScript function named "validateForm()" is implemented for form validation. This function specifically validates the annual income field to ensure it falls within the range of 1 to 600,000. Upon completion, users can effortlessly confirm their scholarship details using the submit button, thereby facilitating a smooth and efficient confirmation process within the application.

The screenshot displays a web application interface. The top navigation bar is dark grey with the text "Welcome, good" and "Adhar No: 99966633222". Below this, there is a "Profile" button and a row of buttons: "Edit Personal Detail", "View Address Detail", "View Bank Detail", "Student Education Details", "Apply for Scholarship", "Print Application Form", and "Upload Document". A "Logout" link is also present. The main content area features a "Scholarship Details Form" with the following fields: "College Name" (dropdown menu), "Caste" (dropdown menu), "Scholarship Name" (dropdown menu), and "Fees (Hostel + College Fees)" (text input). A green "Save" button is at the bottom of the form. Below the form, a blue banner displays the message "Scholarship details Save successfully." and "Redirecting into Complete Personal Details Page in 2 sec....". The browser's address bar shows "localhost:9495/mahadev/Scholarship.jsp" and "localhost:9495/mahadev/ScholarshipDetailsServlet".

8.21 Scholarship Details

This page functionality is a comprehensive form for entering scholarship details, encompassing fields for college name, caste, scholarship name, and fees. Leveraging JavaScript, the page dynamically populates scholarship options based on the selected caste, providing users with tailored choices for scholarship selection. Furthermore, options for caste and scholarship are dynamically updated based on the user's selections, ensuring relevance and accuracy throughout the data entry process. This user-centric approach simplifies the task of entering scholarship details, enhancing the overall user experience within the application.



8.22 Scholarship Details

In the event that scholarship details are found, the servlet proceeds to display user information and navigation options. Following this, it initiates a redirection to the dashboard page after a brief delay of 10 seconds, allowing users time to review their confirmed scholarship details. Conversely, if scholarship details are not found, the servlet presents an error message to the user. Subsequently, it redirects them to the scholarship confirmation page after a delay of 5 seconds, facilitating prompt resolution of the issue.

localhost:9495/mahadev/upload_documents.jsp

Welcome, good
Aadhar No: 999666333222

Profile

Edit Personal Detail View Address Detail View Bank Detail Student Education Details Apply for Scholarship Print Application Form Upload Document

Logout

Upload Documents

Aadhar Card: No file chosen

Admission Letter/CAP: No file chosen

10th Marksheet: No file chosen

12th Marksheet: No file chosen

UG Marksheet: No file chosen

Photo: No file chosen

Signature: No file chosen

Income Certificate: No file chosen

Non-Creamy Layer Certificate: No file chosen

Validity Certificate: No file chosen

Transfer Certificate (TC): No file chosen

8.23 Upload Document

This page serves as a crucial platform within the application for users to upload various essential documents. Featuring user information and navigation options in the header section, the page ensures seamless accessibility and personalization. Users can conveniently upload documents such as their Aadhar Card, mark sheets, admission letter, and more, with each document having its dedicated file input field. To maintain data integrity, the page specifies accepted file formats for each document, enhancing user experience and document management. Utilizing the POST method, document data is securely transmitted to the "UploadDocumentServlet" for processing and storage.

Scholarship Details..
good (Application Number 999666333222)

Personal Details

First Name	nice
Middle Name	nice
Last Name	nice
Mother's Name	nice
Age	25
Gender	Male
Religion	Hindu
Category	General

Address Details

Current Address	At Mumbai
Current Pincode	444103
Permanent Address	At Mumbai
Permanent Pincode	444103

Bank Details

Account Holder Name	rajat
Account Number	456444
IFSC Code	fsd
Branch Name	amravati
Bank Name	sbi

Student Education Details

Tenth Percentage	96.00
Tenth Passing Year	2018
Twelfth Percentage	90.00
Twelfth Passing Year	2020
UG Percentage	76.00
UG SGPA	8.54
UG CGPA	8.10
UG Passing Year	2023
PG Course	MCA
PG Admission Date	2023-04-06
PG Institute	PR Pote Patil Education and Welfare Trusts Group of Institutions College of Architecture, Amravati

Scholarship Details

College Name	Sant Gadge Baba Amravati University, Amravati
Scholarship Name	Dr. Punjabrao Deshmukh VJNT OBC Merit Scholarship
Fees	10000.00

[Print this page](#)

8.24 Print Application

This page serves as a comprehensive platform for displaying crucial user information relevant to the scholarship application process. This user-centric page includes detailed sections for personal details, address details, bank details, student education details, and scholarship-specific information. To ensure dynamic content presentation, the page utilizes JSP (JavaServer Pages) technology to dynamically fetch and display data retrieved from the server. Each section is meticulously separated and labeled for clarity, facilitating ease of navigation and comprehension for users. Personalization is achieved through the use of session attributes, which dynamically populate the user's name and application number within the interface. A notable feature of the page is the provision of a print button, allowing users to easily generate a printed copy of their application details.

9. Conclusion

In conclusion, **Opportunity Nest: Empowering Students through College Scholarship Management** stands as a testament to the transformative power of technology in facilitating educational opportunities. Through meticulous development and testing, we have created a centralized platform that simplifies the complex process of accessing and managing scholarships for postgraduate students. The project's user-friendly interface, personalized features, and seamless integration with Sant Gadge Baba Amravati University, Amravati, have successfully addressed the specific needs of our target audience.

Opportunity Nest represents more than just a software solution; it embodies our commitment to empowering students to pursue their educational aspirations without the burden of financial constraints. By providing a comprehensive resource center, real-time application tracking, and personalized recommendations, we have equipped students with the tools they need to succeed academically and beyond.

As we conclude this project, we look forward to the positive impact it will have on the lives of countless students, helping them unlock their full potential and achieve their dreams. Opportunity Nest is not just a project; it is a beacon of hope and opportunity for the future generations of scholars.

10 Future Scope

The **Opportunity Nest: Empowering Students through College Scholarship Management** System lays a strong foundation for further advancements and enhancements in the realm of scholarship management and educational support. Some potential future scope areas include:

- **Expansion of Scholarship Offerings:** Opportunity Nest can be expanded to offer scholarships for all levels of education, including undergraduate, postgraduate, primary school, college students, and internship participants across all colleges. This inclusive approach ensures that students from diverse educational backgrounds, ranging from primary school to higher education and internship programs, have access to financial aid opportunities. By broadening the scope of scholarship offerings, Opportunity Nest aims to support students at every stage of their educational journey and empower them to achieve their academic and career goals.
- **Integration with External Systems:** Integration with external systems such as financial aid databases, job portals, and academic repositories can provide students with a more comprehensive support ecosystem.
- **Mobile Application Development:** Developing a mobile application version of Opportunity Nest would extend its accessibility and usability, allowing students to access scholarship information and manage applications on-the-go.
- **Integration with DG Locker:** Integrating with DG Locker, a digital document storage platform used by both government and private sectors, can streamline the management of all profile documents and personal details for students. This integration will enhance security, accessibility, and ease of use, ensuring that users can securely manage their documents and personal information across various platforms.

11. Reference

<https://www.geeksforgeeks.org/>
<https://www.w3schools.com/>
<https://www.javatpoint.com/>
<https://mahadbt.maharashtra.gov.in/login/login>
<https://scholarships.gov.in/>