



IT314 - Software Engineering

Group No. 33

Online Faculty Staff Directory for Multi University

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Online Faculty Staff Directory for Multi University

Online faculty staff directory empowers users to easily view college faculty details. Students can easily view different college faculty details anywhere required at any time as this application is handy. This system is built with an effective graphical user interface which enables user friendliness. Users can search faculty details and view their respective details such as name department, courses, area of expertise, and professional interest. This system reduced the time and cost of the user. Here there are two entities who will access this system i.e. admin and student. Admin is authorized to add and manage all the faculty details. Users don't require any registration or login to access this system. Users can directly search for faculty and view their details. Data in the database is maintained securely without any maintenance cost.

This online faculty staff directory is a useful tool for students, as it allows them to easily access and view important information about their college faculty. The ability to search for faculty members by name, department, courses, and other details makes it quick and convenient for students to find the information they need. Additionally, the system being accessible without the need for registration or login adds to its ease of use. The admin role is also important, as it gives authorized individuals the ability to manage and add faculty details to the database. This helps ensure that the information is accurate and up to date. The secure maintenance of data in the database is also a key aspect, as it helps protect sensitive information and maintain the integrity of the system. Overall, this online faculty staff directory has the potential to improve the efficiency and accessibility of information for students, while also reducing costs and saving time.

Need for the solution:

There are several reasons why an online faculty staff directory solution could be necessary:

- **Improved Accessibility:** This solution enables students to obtain crucial details about their college faculty from any location and at any moment with ease. This is especially beneficial for students who are not physically present on campus or who require access to the information outside of regular office hours. Additionally, students can connect with faculty members from other institutions if they seek research supervision or guidance. The system also serves as a centralized and readily available source of information for students to expand their knowledge about prospective professors and the courses they will be instructing and also their field of expertise.
- **Better Data management:** Software can aid in the more efficient collection and storage of data. Compared to print directories, online databases are frequently simpler to update and can be refreshed in real-time, guaranteeing that the information remains accurate and latest.
- **Time-saving:** Students can quickly and easily locate faculty members by searching for their name, department, courses, and other relevant details, thanks to the convenient search feature. This saves students time compared to visiting the college in person or searching through alternative sources. Typically, users must log in or reach out directly to obtain information about college staff, which can be inconvenient. However, this system allows users to access the information they need with just a few clicks, saving them time.
- **Convenient:** For those seeking basic information about faculty and staff, the system does not necessitate registration or login.
- **Improved efficiency:** This solution helps to enhance the overall efficiency of the college and its systems by centralizing information about college faculty in a single, readily accessible location.

- **Easy Sharing:** An online directory can be conveniently shared with external stakeholders such as prospective students, parents, alumni, and other members of the community. This can aid in promoting the institution and its faculty to a broader audience.
- **Improved Communication:** With access to a directory, stakeholders can promptly identify and reach out to the appropriate individual for a specific inquiry or issue, enhancing overall communication and collaboration.
- **Enhanced Professional Development for faculties:** A centralized directory makes it easier to identify potential collaborators and experts in a specific field, promoting professional development and growth.
- **Streamlined HR Procedures for Institutions:** By providing a central location for all relevant data, an online directory helps streamline HR procedures including onboarding, performance reviews, and personnel updates.

Features:

There will be two roles:

1. Admin
2. User (Student/Faculty)

Features for Admin:

- Admin would have the access to add/edit/delete the user's details in the database.
- The admin should have the ability to manage the users of the system, including adding, editing, and deleting user accounts as needed.
- The admin should have the ability to backup and restore the data in the system, including the ability to restore the data in the event of a system failure or data loss.
- Admin could also make certain kinds of details visible for selected sets of people or he/she could make it public.
- Admin could approve courses/resources/grants to faculties.
- Then Admin would update the requested/changed information from faculties to be visible to the end-user.
- The admin should have the ability to provide support to users of the system, including answering questions and resolving issues as needed.
- The admin should have the ability to generate reports on the use of the system, including information on the most-searched for faculty members, the most active users, and any errors or issues that have arisen.

Features for faculty:

- Faculty members should have the ability to view and update their personal profile, including their name, department, courses, area of expertise, and professional interests.
- Faculty members should have the ability to view and update their contact information, including their email address, phone number, and office location.
- Faculties should have the ability to see the number of their profile visits.
- Faculty members should have the ability to communicate with students, either through the system or through other communication tools, such as email.
- Faculties should also have the ability to upload their research work & academic material, in order to share them with the community.
- Faculty members should have the ability to view their feedback and evaluations from students (belonging to the same institute they work in), including ratings and comments on their teaching style and the material they use for teaching.

Features for Students:

- Students should have the ability to search for faculty members based on criteria such as name, department, courses, and area of expertise.
- Students should have the ability to view detailed information about faculty members of their institutions, including their name, department, courses, area of expertise, and professional interests.
- However, students of other institutions only have a limited access to the information of faculties.
- Students should have the ability to communicate with their faculty members through the system such as email.
- Students should have the ability to provide feedback and evaluations to the faculty members belonging to their institute, including ratings and comments on their teaching style and academic material.

- Students should have the ability to access and download course materials, such as lectures, handouts & study material from their faculty members.

Functional Requirements:

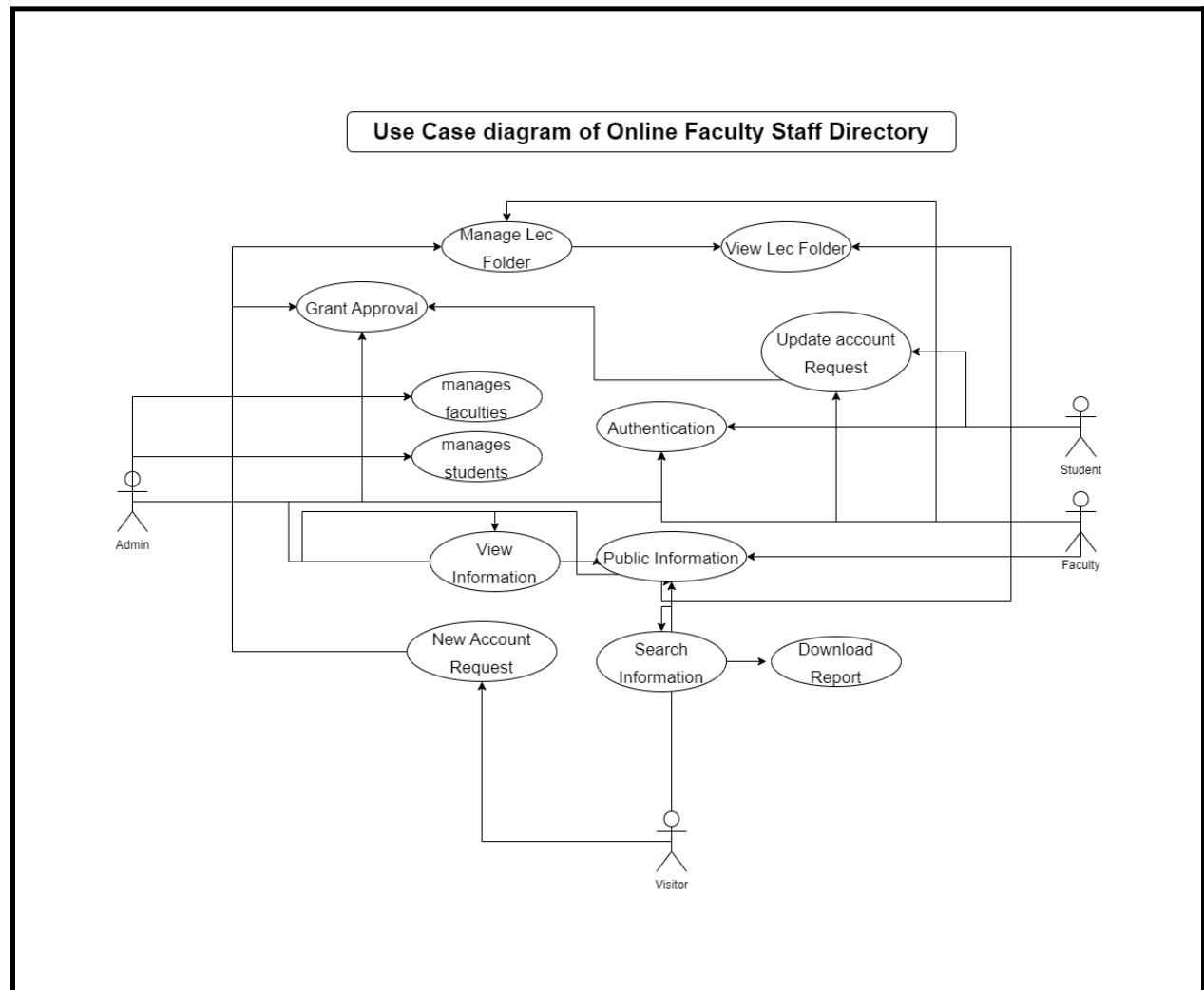
- The faculty must login in to the system in order to add or update his/her information.
- The faculty registration or update request from the faculty should be first approved by the admin before it is visible to the end-user.
- Students should only be given the view access to the system.
- The student should be able to obtain faculty information without logging into the system.
- Users should be able to search specific details by different filters such as name, university, department, Areas of Interest.
- Users can download the report of the results he/she has requested for.
- The system should have a backup system in place to protect against data loss.
- The directory should have a notification and alert system that allows administrators to send important updates and alerts to faculty.
- The system should include analytics and reporting capabilities to allow administrators to track usage and identify areas for improvement.

Non- Functional Requirements:

- **Performance** : The system should have fast and reliable performance with quick page load time and capacity to handle large traffic.
- **Portability**: The software should be portable and usable on desktop as well as mobile devices.
- **Security**: The system should be secure and should only protect sensitive data.
- **Reliability**: The system should be reliable and consistently available with minimum downtime and technical issues.

- **Scalability:** The system should be able to store and work with a large database of faculties and staff
- **User friendliness:** The system should be easy to use, with a user-friendly interface which requires less(minimal) training.
- **Usability:** The system should have a user-friendly interface and users should be able to use the software with ease.
- **Privacy :** The system should have appropriate settings for controlling what information is visible to the public and also ensure that faculty and staff members have control over their personal and professional information.
- **Responsiveness:** Irrespective of the platform on which it is running, The system should be responsive.
- **Availability:** The system should be available 24/7 to all the users. Also during maintenance the system should be available within a few hours.
- **Support:** The system should be responsive with access to technical assistance and updates as needed.

Use Case Diagram:



- The system is designed to provide a secure and efficient way to manage access to resources on a faculty management platform. The platform is intended to serve as a tool for students, faculty members, and visitors to access and share information in an organized manner.
- Visitors are able to access public information without the need for authentication. This information could include general information about the platform, its purpose, and any other relevant details that would be useful to a visitor.
- Faculty members and students, on the other hand, require authentication in order to access additional resources. Once they have logged in, faculty members are able to update the lecture folder, making changes and adding new information as necessary. Students, on the other hand, can only view the lecture folder and access the information contained within it.
- Users are able to request updates to their account, such as changing their username, password, or other personal information. The administrator is responsible for reviewing these requests and either approving or rejecting them. This ensures that only legitimate changes are made to the accounts and helps to maintain the security and integrity of the platform.
- The administrator also plays a crucial role in managing the students and faculty members on the platform. They are responsible for adding new users, removing inactive ones, and ensuring that everyone has the appropriate level of access for their role. This helps to ensure that the platform remains organized and that everyone is able to access the information they need.
- Normal visitors can request an account from the administrator, who will review the request and either approve or reject it. This allows visitors to become students or faculty members if they are interested in accessing additional resources and contributing to the platform.

Process Model: Agile

We will be using the Agile Model for the development of an Online Faculty Staff Directory system.

Justification:

- Agile is a flexible, iterative software development method that emphasizes collaboration, customer involvement, and rapid delivery of working software. The Agile approach is well-suited to the development of complex, rapidly evolving software projects, such as the online faculty staff directory system.
- Agile places a strong emphasis on frequent customer feedback and input throughout the development process, as well as close communication between the development team and the client. This enables a more client-centered approach to development, guaranteeing that the final product satisfies the client's requirements and expectations.
- Agile puts the release of functional software ahead of in-depth documentation or careful preparation. This allows the development team to concentrate on producing usable software as soon as possible, which can assist shorten the time it takes for the finished product to reach the market.
- Agile is intended to be adaptable, enabling the product to be changed and improved while it is being built. This enables the development team to react fast to altering specifications or customer input, resulting in the best possible end product.
- With frequent meetings and communication between the development team, the client, and any other stakeholders, agile places a strong emphasis on cooperation and teamwork. By fostering a feeling of collective ownership and accountability for the end result, this makes sure that everyone is working towards a single objective.

In conclusion, the Agile model is an excellent option for the creation of the online faculty staff directory system since it offers a flexible, team-based, and customer-focused approach to software development.