**Key Stakeholders and Their Roles**

1. **College Dean**

* Oversees the entire appointment process.
* Approves eligible applications.
* Evaluates candidates for both college-level and department-level positions.
* Announces final results.

1. **Department Heads**

* Evaluate candidates for college-level positions.
* Assign scores based on evaluation criteria.

1. **Department Council (DC) Members**

* Evaluate candidates for department-level positions.
* Assign scores based on evaluation criteria.

1. **Eligible Faculty Members**

* Submit applications for internal academic positions.
* Participate in presentations as part of the evaluation process.

1. **IT Support Staff**

* Maintain and ensure the functionality of the Automated Internal Academic Position Appointment Management System.
* Provide technical support and training to users.

**Functional Requirements of the System**

1. **User Authentication**

* Secure login for eligible faculty members, deans, and council members.

1. **Vacancy Management**

* Create, update, and delete job postings.
* Display active vacancies to eligible applicants.

1. **Application Submission**

* Allow applicants to submit applications and upload documents.

1. **Application Screening**

* Automate the eligibility screening process based on predefined criteria.

1. **Evaluation Process**

* Facilitate candidate presentations.
* Support score assignment by evaluators.

1. **Result Management**

* Calculate total scores for candidates.
* Announce results and store them securely.

1. **Reporting and Analytics**

* Generate reports on applications, evaluations, and results.

1. **User Notifications**

* Notify applicants about the status of their applications and evaluation results.

**Measures for Scalability**

1. **Modular Architecture**

* Design the system using a modular approach to easily add new position types.

1. **Dynamic Role Management**

* Implement role-based access control to accommodate various stakeholder roles.

1. **Flexible Evaluation Criteria**

* Allow customization of evaluation criteria and scoring weights for different positions.

1. **API Integration**

* Use APIs to integrate with other systems for data exchange and functionality.

1. **Data Management Framework**

* Employ a robust database design that supports the addition of new entities and relationships.

**Entities and Attributes**

1. **Applicant**

* Attributes: ApplicantID (PK), Name, Email, Degree, ExperienceYears, CV, ApplicationStatus

1. **Position**

* Attributes: PositionID (PK), Title, Description, Qualifications, Deadline

1. **Application**

* Attributes: ApplicationID (PK), ApplicantID (FK), PositionID (FK), SubmissionDate, Status

1. **Evaluation**

* Attributes: EvaluationID (PK), ApplicationID (FK), EvaluatorID (FK), Score, Comments

1. **Evaluator**

* Attributes: EvaluatorID (PK), Name, Role (Department Head, DC Member, Dean)

1. **Result**

* Attributes: ResultID (PK), PositionID (FK), WinnerID (FK), AnnouncementDate

**Relationships Between Entities**

* **Applicant** to **Application**: One-to-Many (An applicant can submit multiple applications)
* **Position** to **Application**: One-to-Many (A position can have multiple applications)
* **Application** to **Evaluation**: One-to-Many (An application can have multiple evaluations)
* **Evaluator** to **Evaluation**: One-to-Many (An evaluator can evaluate multiple applications)
* **Position** to **Result**: One-to-One (Each position has one result)

**List of Required Tables for the Relational Database**

1. **Applicants**

* Primary Key: ApplicantID
* Fields: Name, Email, Degree, ExperienceYears, CV, ApplicationStatus

1. **Positions**

* Primary Key: PositionID
* Fields: Title, Description, Qualifications, Deadline

1. **Applications**

* Primary Key: ApplicationID
* Foreign Keys: ApplicantID, PositionID
* Fields: SubmissionDate, Status

1. **Evaluations**

* Primary Key: EvaluationID
* Foreign Keys: ApplicationID, EvaluatorID
* Fields: Score, Comments

1. **Evaluators**

* Primary Key: EvaluatorID
* Fields: Name, Role

1. **Results**

* Primary Key: ResultID
* Foreign Key: PositionID, WinnerID
* Fields: AnnouncementDate

**Primary Keys, Foreign Keys, and Other Fields**

* **Applicants Table**
* Primary Key: ApplicantID
* **Positions Table**
* Primary Key: PositionID
* **Applications Table**
* Primary Key: ApplicationID
* Foreign Keys: ApplicantID (references Applicants), PositionID (references Positions)
* **Evaluations Table**
* Primary Key: EvaluationID
* Foreign Keys: ApplicationID (references Applications), EvaluatorID (references Evaluators)
* **Evaluators Table**
* Primary Key: EvaluatorID
* **Results Table**
* Primary Key: ResultID
* Foreign Keys: PositionID (references Positions), WinnerID (references Applicants)

The **Automated Internal Academic Position Appointment Management System** is a web-based platform designed to streamline and automate the process of appointing faculty members to internal academic positions within a college or university. Here’s a clearer breakdown of the system's purpose, features, and functionality:

### Purpose

The system aims to improve the efficiency, transparency, and fairness of the appointment process for academic positions. By digitizing the current manual procedures, it reduces administrative workload, minimizes errors, and enhances data management.

### Key Features

1. **Vacancy Announcement**
   * The College Dean can post job vacancies, detailing job descriptions, qualifications, and deadlines. This information is accessible to all eligible faculty members.
2. **Application Submission**
   * Eligible faculty members can submit their applications digitally. They upload necessary documents (CVs, research publications, etc.) directly through the system, making the process efficient and organized.
3. **Screening Process**
   * The system assists the Dean in screening applications against predefined eligibility criteria. It helps identify qualified candidates by automating initial checks.
4. **Presentation Phase**
   * Selected candidates present their plans and vision during a formal session, which is an essential part of the evaluation process.
5. **Evaluation Process**
   * The evaluation of candidates is conducted by the Department Council (for departmental positions) and the Dean, using a defined scoring system that ensures fairness and consistency.
6. **Result Announcement**
   * After evaluations, the system calculates total scores for each candidate. The Dean announces the final results, documenting the decisions securely within the system for future reference.

### Workflow Overview

The system follows a structured workflow:

1. **Announcement**: Job vacancies are posted by the Dean.
2. **Applications**: Faculty members submit their applications.
3. **Screening**: Applications are screened and approved electronically.
4. **Presentations**: Candidates present their qualifications and plans.
5. **Evaluation**: Candidates are evaluated based on scores assigned by the Department Council and the Dean.
6. **Results**: Final results are calculated and announced.

### Benefits

* **Efficiency**: Automates repetitive tasks, saving time for both applicants and evaluators.
* **Transparency**: Provides clear and documented processes that can be reviewed later.
* **Fairness**: Standardized evaluation criteria ensure all candidates are assessed equally.
* **Data Management**: Centralized storage of applicant information enhances security and accessibility.

### Conclusion

Overall, this system is a comprehensive solution that integrates various stages of the academic appointment process into a single platform, making it easier to manage and execute while ensuring fairness and efficiency. It serves both the administrative staff and faculty members, improving communication and streamlining operations related to academic appointments.