URM APPLICATION

Group 5

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Introduction to the Project:

The project's objective is to create a website that meets the requirements of academia, URM candidates, recruiters, and DEI officers. For PhD programs, postdoctoral jobs, and teaching vacancies, the website will offer a platform for academic institutions to access a list of possible URM candidates. Candidates from URM will have the chance to look up relevant universities and submit applications for faculty or postdoctoral positions. Recruiters can use the website to find qualified individuals, and DEI officers will be helped by it in identifying institutions and universities that lack diversity.

The homepage, registration and login process, academia dashboard, URM candidate profiles, search and filter choices, communication and collaboration tools, and a feedback and review system are some of the website's key features and elements. All these components come together to produce a complete platform that enables interaction, job searching, and collaboration between academia and URM candidates.

System Overview:

The URM Application consists of a website with multiple roles and features to facilitate the connection between academia and URM candidates. The main roles in the system are:

Academia: A list of possible URM candidates is accessible to academics, who can also register an account and edit their profile. They can use a messaging system to communicate with candidates, store or save candidates for later, and leave feedback and evaluations on candidates they have connected with.

URM Candidates: Candidates that identify as URMs can make a profile that highlights their skills and interests. Along with a personal statement or cover letter, they are also able to attach their resume or CV. They can change the information in their profile, make their profile accessible to academics, receive notifications, reply to messages and queries, and share their feedback on the website.

Recruiters: Recruiters can use the website to search for potential URM candidates and connect with them for recruitment purposes. They can utilize the search and filter options to narrow down the list of candidates based on specific requirements. Recruiters can contact candidates directly through the messaging system or email and evaluate their suitability for positions. The feedback

and review system can help recruiters make informed decisions and improve the overall quality of the candidate database.

DEI Officers: Diversity, Equity, and Inclusion officers can leverage the website to identify colleges and universities where diversity is lacking. They can explore potential institutions and use the platform to promote diversity initiatives and collaborations. DEI officers can play a crucial role in bridging the gap in representation by actively engaging with the website's features and connecting with relevant stakeholders.

Key Features and Functionalities:

The URM Application offers several features and functionalities to meet the needs of its users:

Homepage: The homepage provides an overview of the website's purpose and services. It includes a clear call to action for each role, prompting them to sign up or log in to access relevant information.

Registration and Login: The website incorporates a registration and login system for academics, URM candidates, recruiters, and DEI officers. The registration process gathers basic information and specific details relevant to each role.

Dashboards: Each role has its own dashboard, serving as a central hub for accessing the website's features. Academia and recruiters can search for URM candidates, view candidate profiles, save candidates for future reference, and communicate with candidates. URM candidates can manage their profile, respond to inquiries, and receive notifications. DEI officers can access a potential list of colleges and universities lacking diversity.

URM Candidate Profiles: The website hosts a searchable database of potential URM candidates. Candidate profiles include basic information, educational background, research experience, publications, personal statements, and optional contact information.

Search and Filter Options: Academia and recruiters have access to search and filter options to refine the list of potential URM candidates based on specific requirements. Filters may include education level, research experience, publications, field of study, and demographic information.

Communication and Collaboration Tools: The website provides messaging systems for academics, recruiters, and URM candidates to communicate and discuss opportunities or collaborations.

Feedback and Review System: Academia and recruiters can leave feedback and reviews on URM candidates they have interacted with. This system helps improve the quality of the candidate database and builds trust between users.

Creative Additions for later phases:

In the later phases of the project, some useful creative additions can be considered to enhance the user experience and improve the functionality of the website:

1. Calendar and Scheduling Functionality:



Including a calendar and scheduling tools might make it easier to schedule academic interviews and meetings with URM candidates. Users can send meeting requests, view one other's availability, and get alerts for upcoming events.

2. Social Media Sharing:



Giving URM applicants the ability to share their profiles and accomplishments on social media can increase their visibility and chances of being found by academics and recruiters.

3. Analytics and Reporting:

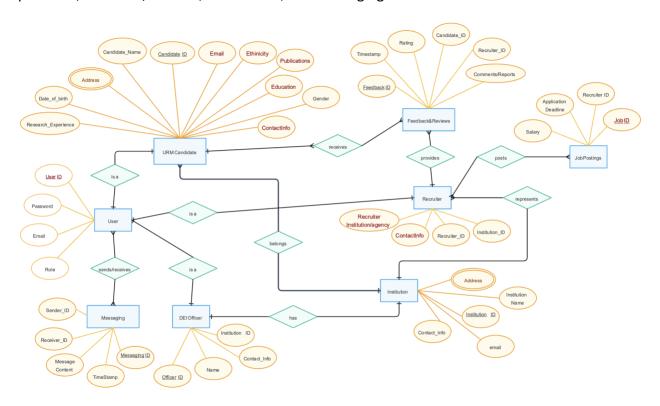


Implementing analytics and reporting capabilities can offer useful insights into how well the platform is used. Making educated decisions for future enhancements will be made easier with the use of data on user activity, successful matches, and user feedback that can be gathered and presented in a complete and visible style.

Including these creative additions can enhance the overall functionality and user experience of the website, making it more attractive and effective for both academics and URM candidates.

Entity-Relationship Diagram:

An Entity-Relationship Diagram (ERD) is created to illustrate the database design and relationships between entities in the system. The ERD considers entities such as academia, URM candidates, positions, feedback/reviews, universities, and messaging.



The entity relationships for the Underrepresented Minority (URM) data management are analyzed as follows:

- 1. User URM candidate Relationship:
 - The Relationship is One-to-One because each user can be identified as a URM candidate, and each URM candidate corresponds to one user.
- 2. User Recruiter Relationship:
 - The Relationship is one-to-one because each user can be identified as a Recruiter, and each Recruiter corresponds to one user.
- 3. User DEI Officer Relationship:
 - The Relationship is one-to-one because each user can be identified as a DEI officer, and each DEI officer corresponds to one user.
- 4. User Messaging Relationship:
 - The Relationship is Many-to-Many because each User can send and receive messages to/from other users and each user can exchange messages with multiple users.
- 5. URM candidate Institution Relationship:
 - The Relationship is Many-to-One. Each URM candidate belongs to one institution, and each institution can have multiple URM candidates.

- 6. URM candidate Feedback/Reviews Relationship:
 - The Relationship is One-to-Many. Each URM candidate can receive feedback from multiple recruiters, and each feedback is associated with one URM candidate.
- 7. Recruiter- Feedback/reviews Relationship:
 - The Relationship is One-to-Many. Each recruiter can provide feedback on multiple URM candidates, and each URM candidate can receive feedback from multiple recruiters.
- 8. Recruiter- Job postings Relationship:
 - The Relationship is One-to-Many. Each recruiter can post multiple job openings, and each job posting is associated with one recruiter.
- 9. Recruiter-Institution Relationship:
 - The Relationship is Many-to-one because each recruiter represents one institution, and each institution can have multiple recruiters.
- 10. Institution DEI officer Relationship:
 - The Relationship is One-to-One because each institution has one DEI officer, and each DEI officer is associated with one institution.

By following the proposed ERD design and incorporating the suggested creative additions, the URM Application website can provide a comprehensive and user-friendly platform for academia, URM candidates, recruiters, and DEI officers to connect, search for candidates or positions, and collaborate towards increasing diversity and inclusion in academia.

Technologies to use:

- 1. HTML
- 2. CSS
- 3. Java
- 4. Java Script
- 5. Jsp & Servlets

In conclusion, it is clear from the project's description that a website connecting academics, URM candidates, recruiters, and DEI officers will be created. Both the components of the website and the team members' responsibilities are detailed. The report also highlights potential creative additions for later phases, such as social media sharing and data analytics. Additionally, the ERD and its justifications are discussed, emphasizing the need for accurate representation of entities and relationships in accordance with the website's design.