

Idea/Approach Details

Ministry Category : **Ministry of HRD**

Problem code: **#MHRD9**

Current AICTE Application No : **1-3325294847**

Problem Statement : **Matching the Specialist knowledge with requirements**

Today every work is getting more and more specialized and there are specialists who can do the job much more efficiently and fast. For example today I have a requirement of translating (subtitle) 100 hours of educational videos into four languages, within two weeks. This is a work that can be done in our country without much difficulty. But I do not know people who can do that. In today's fast world where things are to be done yesterday, the number of such requirements across the country would be immense. Here again the issue is of matching of the work requirement with the people who can do the work. In many cases working from remote would be possible. As Government would be one of the major work generator the system should be usable by the Government.

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Idea Overview:

In MHRD, There are many job vacancies and people who are expert at doing those jobs are waiting for the right job. But there is no system that finds people's skill and matches the right jobs for their skills. This leads to the following problems:

1. Assigning wrong job to the wrong person
2. The candidate may not be aware of the particular job process
3. The Job will be more prone to errors without specialists
4. Taking too much time to finish the job
5. Costs that include training a person to perform the job

Our Idea is to match the jobs with the specialists with more knowledgeable database and more efficient algorithm for matching using a web application.

Job Applicant Perspective:

1. Register to the portal and update the skills.
2. Wait for the Job Posting or Notifications from MHRD for openings based on their skill
3. Apply for posted Jobs

MHRD Perspective:

1. Search for Registered candidates that matches the skills required for the current Job opening and sends out notification via email and SMS (Through the web portal)
2. Post the Job to the Top N Candidates that matches the skill required for the Job Opening.

Technology Stack:

Framework: Django (Python)

Front End: Angular 2

Database: MySQL

Approach: Machine Learning based Classification of Skills

Idea/Approach Details

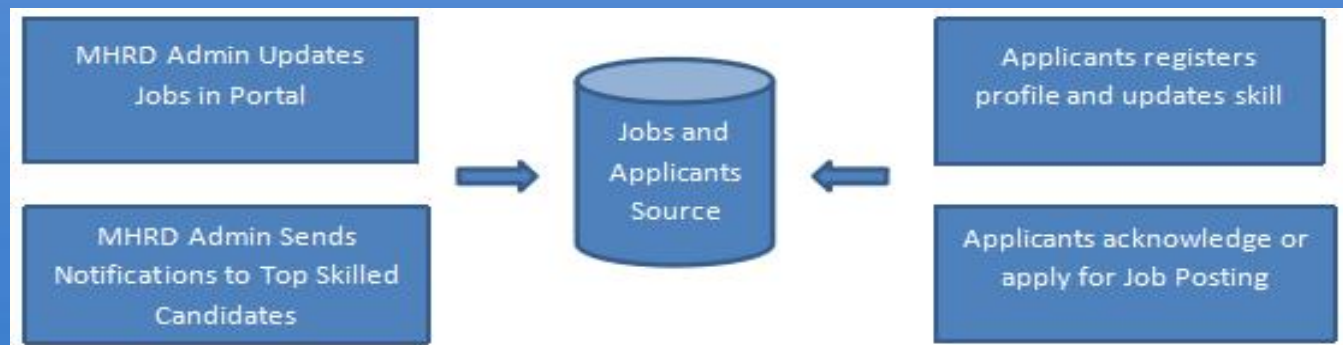
Use cases:

1. A web application which provides an abstract interface between the candidate and the human resource department
2. The web application is controlled by the Human Resource Department
3. The department officials can post the job requirements.
4. The recommender system will match the requirement with the specialist's profile and recommends the best specialist for that particular job.
5. The specialist can register and update their profiles. They can apply for the available jobs.
6. This Application can match the job requirement with the specialist based on their qualification.
7. This application provides a pool of information about the vacancies and specialist.
8. This application allows the HRD or the hiring ministry to provide feedbacks and rating on a user profile for the work.

Job Specialists are matched based on:

1. Experience
2. Number of matching skills
3. Current portal rating
4. Complexity of previous projects

Use Case Diagram:



Dependencies:

1. Internet connectivity is required since this is a web based application.
2. Periodic updates of job related information must be made by admin.
3. The monitoring committee of HRD has a major role since most of the activities is supervised by them.

Showstoppers:

1. Slow server may lead to slow loading of web pages.
2. Every user must register their details in the website for efficient working of the website.