Interactive Query Builder for FAQs and Automated Workflow Management System

Deepak Kandpal[1], Shubham Jain[2], Ashish Mishra[3], Bipin Kumar Rai[4]

[1] Dept. of Information Technology, ABESIT, Ghaziabad,

[2,3] Dept. of Computer science and Engineering, ABESIT, Ghaziabad,

[4] Associate Professor, Dept. of Information Technology Engineering,

ABESIT, Ghaziabad, Uttar Pradesh, India.

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Abstract - *The scheme of the skill India mission by government of India is facing a lot of problems in its sector called the Skill Council For Green Jobs (SCGJ) because of the tedious process of maintaining & storing information about the batches of the students enrolled in the Skill Council for Green Jobs program, cumbersome process of manually obtaining the data and the statistics related to the SCGJ program, manual affiliation of the training and assessment bodies under the Skill Council for Green Jobs program. This paper focuses on the digitization of the skill India ecosystem by providing this web portal, senior leaders of the Skill Council for Green Jobs and government would be able to receive the most accurate data regarding the students enrolled trained in the skill India mission and making the valuable strategies for the organization. This web portal has an algorithm-based assignment of batches so that the system remains transparent which is the need of the hour. This web portal will also automate affiliation process of Training Partner (TP) and Assessment Body (AB) which was a process that use to take more time and also it will make the interaction of the private bodies easier with Skill Council for Green Jobs.*

Key Words: **SCGJ, Training Partner, Assessment Body, Web portal**

1. INTRODUCTION

The module for this web portal will be working on 'Interactive query builder for FAQs AND Automated Workflow Management System' and in this module we would be working to ease out the work of managing the registrations for the assessment body and training partner and answering the most frequently asked questions of skill council for green jobs. The modules can be further explained as Interactive query builder for FAQs and this module contains the most frequently asked question by the government to the Skill Council for Green Jobs officials and also by Chief Executive Officer (CEO) of Skill Council for Green Jobs about how much candidates have been trained in different states, how many candidates have been certified and many others question that are needed to be answered in quick time. This module will make work of official easy as they would be able to answer such question by just clicking on this module and it is also of utmost important to the Skill Council for Green Jobs as earlier this work was done by

manual calculations and it will improve the transparency in the Skill Council for Green Jobs ecosystem. The data of the different trainings going across different states of India and details regarding it will be maintained in the database and that data will be reflected in these questions prepared by our team. Automated Workflow Management System module will manage the registration of the training partners and assessment bodies for Skill Council for Green Jobs. The training partners and assessment bodies need to register themselves with the Skill Council for Green Jobs before giving trainings to the students and this whole process is automated in the proposed web portal. The training partners and assessment bodies fills their details while creating their profiles and all these details appears on this module in a pdf file on the basis of which the Skill Council for Green Jobs admin will take the decision whether the certain institution fulfil the criteria to be a training partner or the assessment body. When the application is having all the relevant information to be a training partner or assessment body the application is being approved by the Skill Council for Green Jobs admin otherwise it is being rejected by the admin. This will save time of registration and also will improve the transparency in the system.

2. EXISTING SYSTEM

The Skill Council for Green Jobs works through a manual process and this process is carried out by affiliating the training partners which will train the students enrolled in the Skill Council for Green Jobs program and the training includes the 26 Qualification Packs or the syllabus of the training named as Waste treatment plant helper, Rooftop Solar Grid Engineer, Solar PV Installer etc. Skill Council for Green Jobs aims at skilling 200 million individuals in the country by 2022 thereby making India a hub for Skilled Workforce. It also aims at increasing power capacity to 175GW by 2022. Skill Council for Green Jobs also affiliate the Assessment bodies for the assessment of the students which has gone through the training and then the certificates are issued for the students which passes the final exam. The process is done manually for the affiliation of the training partners and the assessment bodies which had some loopholes as the system can assign any organization for the training and assessment process without giving any reason for the selection or rejection which led to the chaos in the

process of communication between the organizations and Skill Council for Green Jobs and also this system is less transparent as no one is accountable for the decision taken at the Skill Council for Green Jobs.

3. PROPOSED SYSTEM

In order to provide a fillip to the objective of providing transparency, accuracy and reducing the complexity of work and to ensure that the entire procedure of operating is transparent and less complex, Skill Council for Green Jobs (SCGJ) realized the absence of a national platform which could capture and process this information and answers the most common queries required every now and then by Skill Council for Green Jobs. Hence, it became an imperative need to build a technology platform which can help the organization to get accurate statistics, maintain transparency and keep the process public friendly through a common platform. Through this tool, which is a web portal, senior leadership of the organization would be able to get more accurate statistics and information which will eventually help taking strategic decisions for the organization. Moreover, introducing an algorithm-based assignment of batches so as to bring more transparency into the ecosystem. Apart from data feeding and data analysis, this tool will also automate affiliation process of Training Partner and Assessment Body which was one of the most time-consuming process when it was done manually over the paper, which in turn will make interaction of Skill Council for Green Jobs with private bodies less time consuming. The process of developing the web portal will start with analyzing the affiliation form of Skill Council for Green Jobs where all the fields would be carefully analyzed and modification in the form would be done with the consent of Skill Council for Green Jobs, In order to make the application form more user friendly and to reduce the fields for unnecessary information the analysis of the application form will play a significant role towards the development of this platform. The methodology of these modules and the workflow brings the accuracy and transparency in the system and boost the process of Skill India mission and the methodology for the module Interactive Query Builder For FAQs includes the flowchart of the process along with the snapshot of the module and the methodology for the module Automated Workflow Management System includes the flowchart of the process along with the snapshot of the module
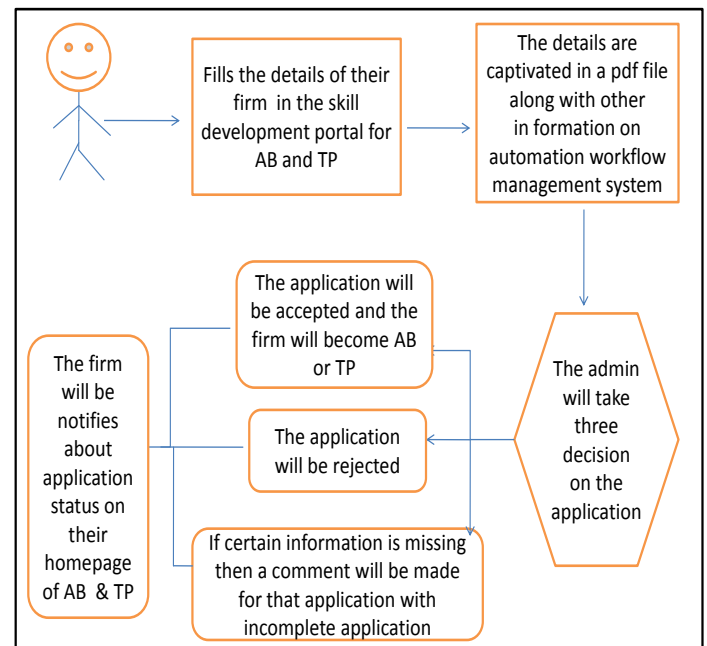

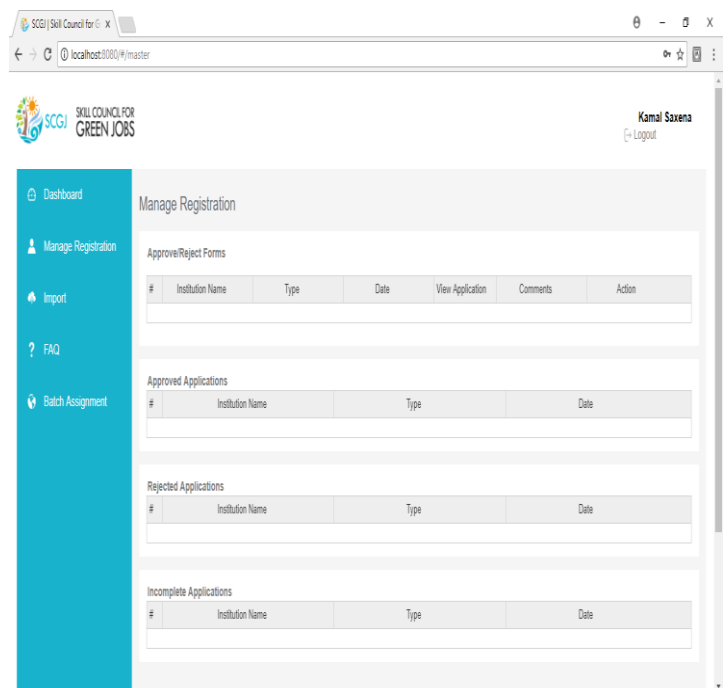fig 1. The flowchart of the Automated Workflow Management System module

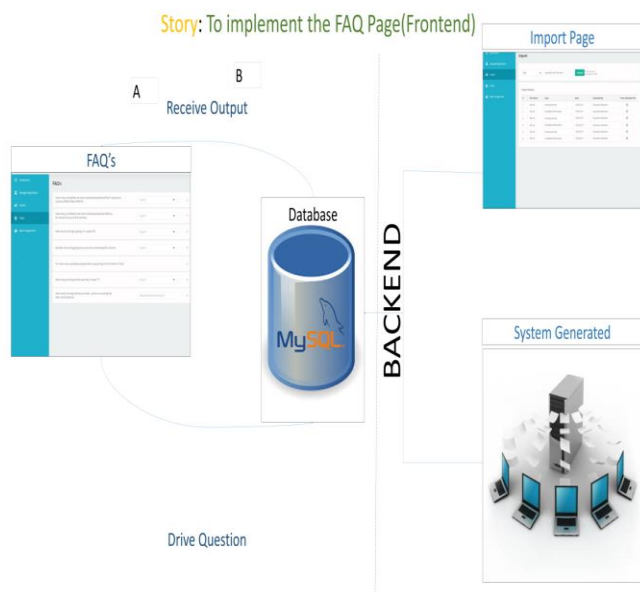Fig 2. The screenshot of the Automated Workflow Management System module

Fig 3.The flowchart of the Interactive Query Builder for FAQS module

Fig 4. The screenshot of Interactive Query Builder For FAQS module

4. PROBLEM STATEMENT

The problem they are facing are the tedious process of going through all the papers to give the information to the government, the data calculated manually is not always correct with different people giving different information regarding a question asked , there is false information that can be added manually easily as there is no check on the data

entered on papers, the registration process of training partners and assessment bodies is done by Skill Council for Green Jobs official by reading all the details in the form filled by the applicants and on the basis of which the application is approved or rejected . The applicants are informed about their application status via phone calls or when they comes to the Skill Council for Green Jobs office and all this is leading to increased time of the registration process, no transparency in the system as no one is accountable for the decision taken, the application status is not cleared for the applicants for a long time, no explanations are given to the applicants as to why their application was rejected or accepted, there is a lot of chaos and confusion in the registration process and records are not maintained properly.

5. CONCLUSIONS

This research paper aims at finding the drawbacks in the manual system of Skill Council For Green Jobs which is resulted in tedious process of assigning a training partners and assessment bodies and developing a digital system that is more transparent which will help the government to achieve better results in skilling the people and achieving the target of skilling 200 million individuals in the country by 2022 thereby making India a hub for Skilled Workforce and this web portal will bring transparency in the system, less time consumption and improved system and better future.

6. TECHNOLOGY STACK

Here we used Html and CSS for the front end development and Java8, Maven for the backend development. We also used some project management tools like JIRA and Confluence.
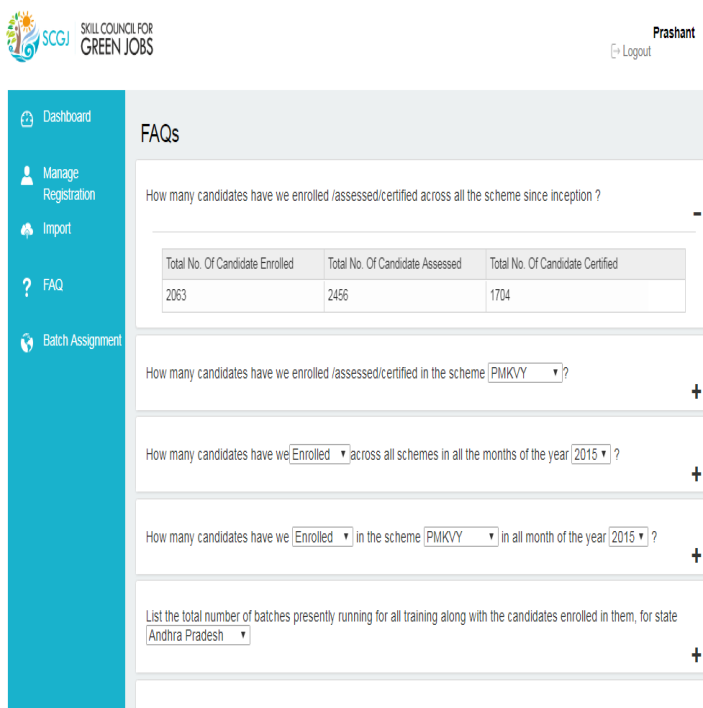
Fig 5. Technology stack

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