**INTERNSHIP: PROJECT REPORT**

------------------------------------------------------------------------------------------------------------------------------------------

|  |  |
| --- | --- |
| Internship Project Title | RIO 45 - Design Document for a Responsive Question Creation Web App with Plagiarism |
| Project Title | Question Creation Web App with Plagiarism |
| Name of the Company | TCS iON |
| Name of the Industry Mentor | Nilesh Haridas |
| Name of the Institute | B. P. Poddar Institute of Management and Technology, Kolkata |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Start Date | End Date | Total Effort (hrs.) | Project Environment | Tools used |
| 21-07-2021 |  |  | Windows 10 OS, MERN Stack, Web-browser | MS Office, Paint, Visual-paradigm, Figma |
| Project Synopsis:  In this project we are going to design a responsive web application that will allow the Subject Matter Experts to enter questions and stores those in a database after doing a plagiarism validation using Google Search API services.  This web application will have a user-friendly interface for entering questions with a form like structure where validation will be integrated. Also, it will check the question texts and options along with picture if there is any plagiarism with the previous database of questions and also with the internet if there is any exposed content. It will show report of different matching percentages for both type of matches and based on that report the SME (user) can confirm or modify or reject any question to continue further steps. There will be another additional user confirmation option if user want to add a question with more than 50% match into the database. | | | | |
| What is Plagiarism – Description:  Plagiarism is presenting someone else’s work or ideas as your own, with or without their consent, by incorporating it into your work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition. Plagiarism may be intentional or reckless, or unintentional. Under the regulations for examinations, intentional or reckless plagiarism is a disciplinary offence.  In this project we are going to design a web application that will prevent the unintentional plagiarisms while setting up questions by Subject Matter Experts into the database so that there are less repetition of questions from previous questions and also to prevent from entering questions those are exposed in the internet which can be easily found by students during exams and the chances of malpractice will increase eventually. That is why plagiarism check is very crucial while making questions as well. | | | | |
| Solution Approach:  To implement the web application which integrates plagiarism check and adding questions to the database, at first, we have to create a login interface for the Subject Matter Expert so that no one else can use the application for inserting questions into the system.  Then we have to make the interface of the question entering screen which will be like a form structure. Where the SME will be able to enter questions.  After that we have to take data from the form (which the SMEs will enter) and connect it with the database. After taking data (here the questions) from the SME, we have to validate matching with the database as well as the internet. At first, we will implement a search function which will search the question entered by the SME in the database, and if it finds some match, it will store the matching percentage. Then we have to implement google search API to search the question in google to find any similar question that already exist. If there is any similar question on the internet, calculate the matching percentage and store that.  Then we have to create a report page in our web application. There we have to fetch the matching percentage in both cases those we have stored previously and show it to the user. Multiple options will be in that page, like- ‘Reject’, ‘Go Back and Modify Question’, ‘Proceed’. If the SME clicks ‘Proceed’ even after the matching percentage exceeds a certain limit defined by the organization (here 50%, but it may be change with time, so better to have an option where the value can be changed), show a warning and pop the option to ‘Go Back and Modify Question’ and provide another option to ‘Proceed Anyway’. If the matching percentage is less than 50%, then don’t show any warning.  If the user clicks ‘Go Back and Modify Question’, then redirect him/her to the question-entering form page so that they can modify their previously entered question. If the user clicks ‘Reject’, then redirect to a new form (not the form he previously filled) so that he/she can add a new question. And if the user clicks ‘Proceed’ or ‘Proceed Anyway’, then connect to the database and add the question to the database and simultaneously direct the user to a new page. This page will contain two options- ‘Finish’ and ‘Enter Another question’. If the SME clicks ‘Finish’, the application will close and display a ‘Successful’ page. | | | | |
| Assumptions: | | | | |
| Project Diagrams: | | | | |
| Algorithms: | | | | |
| Outcome: | | | | |
| Exceptions considered: | | | | |
| Enhancement Scope: | | | | |
| Link to Code and executable file:  Not applicable for the current internship as it is only based on the Design Document. | | | | |