|  |  |  |  |
| --- | --- | --- | --- |
| ID | Requirements | Description | Status |
| HLR\_01 | Search Data | Able to search data corresponding to a particular keyword | Implemented |
| HLR\_02 | Read Data | Read Data from sheet | Implemented |
| HLR\_03 | Write Data | Write data to sheet | Implemented |
| HLR\_04 | Easy accessible | Easy to handle and user friendly | Implemented |

**HIGH LEVEL REQUIREMENTS:**

**LOW LEVEL REQUIREMENTS:**

|  |  |  |  |
| --- | --- | --- | --- |
| ID | Requirements | Description | Status |
| LLR\_01 | Search Data from different sheets of single xlsx file | Able to search data corresponding to a particular keyword in multiple xlsx sheets | Implemented |
| LLR\_02 | Read Data from all the sheets | Read Data from different sheets of single xlsx file | Implemented |
| LLR\_03 | Write Data to a master sheet as per the user input | Write data to a single master sheet as per the user input, after reading all the sheets | Implemented |
| LLR\_04 | Printing Data | Reading the data and printing to console as well as writing data after printing to the console | Implemented |

Introduction:

The code implemented, has considered the basic requirement of reading and writing data with user friendly environment.

Defining the implementation:

The designed code is used to read and write data. An excel sheet has been made manually which consists of 5 sheets and 1 master sheet. Here we are searching details of an individual corresponding to a particular name and registration number in all the 5 sub-sheets. Once the data has been fetched from the sub sheets then it will be printed to the master sheet. The whole implementation is used to read a file for better searching and writing. The code makes the study easier in the field of data science where lots and lots of data needs extraction.

**SWOT ANALYSIS:**

|  |  |
| --- | --- |
| **Strength:**   * High Accuracy * Reading data * Writing data | **Weakness:**   * Sometimes overwriting of data occurs * Difficulty in reading huge data in a single sheet |
| **Opportunities:**   * Has a great advantage in the field of Data Science. * Advantageous in merging multiple sheets | **Threats:**   * Data merging to a single sheet can lead to security issues |

**4W1H:**

**Who** **:** Basically used in research field and data science fields where large data needs manipulation and extraction.

**What :** Xlsx file or CSV file with python code to read and write data

**When :** Used when large data needs to manipulated and extracted.

**Where :** In Research and technical fields

**How :** User friendly and easily accessible.