Python Project Requirements

Project 1

Read a pdf file from a folder

Requirements

- 1. Store a PDF file in a folder called "/content"
- 2. Read PDF file from the folder
- Write the content to a text file called "output.txt"
- 4. Store this file under the "/content" folder

Error Handling

- 1. Take care of case where folder is not available
- 2. Take care of case where PDF file is not present in the content folder
- 3. Take care of case where the output.txt file is not available

Project 2

Traverse through folder tree and filter pdf files

Requirements

- 1. Add sub-folders called "One", "Two", "Three" under the folder called "/content"
- 2. Add PDF files under each of the sub-folders
- 3. Load all PDF files under the sub-folders and load the PDF content
- 4. Write the content to a text file called "output.txt" under each sub-folder respectively

Error Handling

- 5. Take care of case where folder is not available
- 6. Take care of case where PDF file is not present in a sub-folder
- 7. Take care of case where the output.txt file is not available in a sub-folder

Project 3

Read content from a particular page

Requirements

- 1. Update project 1 and update the reading of content
- 2. Take a page number as an input from command prompt
- 3. Read content of the page number provided and write to the output file

Error Handling

- 1. Take care of case where folder is not available
- 2. Take care of case where PDF file is not present in a sub-folder
- 3. Take care of case where the output.txt file is not available in a sub-folder

Project 4

Read regular expression from a config file and extract content

Requirements

- 1. Update project 3
- 2. Add support for a configuration file
- 3. In the configuration file set a config with key "regex" and value some regular expression that will match a part of the content in the PDF
- 4. Update code to extract only the content matching the regular expression
- 5. Write to the output file

Error Handling

- 1. Take care of case where folder is not available
- 2. Take care of case where PDF file is not present in a sub-folder
- Take care of case where the output.txt file is not available in a sub-folder
- 4. Take care of case where no configuration file is available
- 5. Take care of the case where configuration file does not have the regular expression

Project 5

Store extracted questions in mysql

Requirements

- 1. Update project 4 and add support for database
- 2. Create a database to store the following
 - a. Subject Name

- b. Question Text
- c. Answer options
- d. Chapter name
- 3. Load a PDF containing questions
- 4. Extract each question as per a regular expression
- 5. Store each question in the database

Error Handling

- 1. Take care of case where database is not available
- 2. Take care of case where table is not available
- 3. Take care of any error handling in DB operations

Project 6

Load all questions from a chapter

Requirements

- Update project 5 and add support for taking a chapter name as input in the command line
- 2. Load all questions from the input chapter
- 3. Print all questions on the console

Error Handling

- 1. Take care of case where empty string is provided as input from command line
- Take care of case where there are no questions corresponding to the provided chapter name

Project 7

Load RSS content and then extract content from each link. Do this in multiple threads

Requirements

- 1. Load an RSS xml file (Format: https://www.w3schools.com/xml/xml_rss.asp)
- 2. Loop through each link
- 3. Extract content from each link and write to "output.txt"
- 4. Execute reading from multiple links in parallel

Error Handling

- 1. Take care of case where no RSS xml file is available
- 2. Take care of case where xml file is empty