Tablegen

TableGenerator Documentation

Introduction:

The `TableGenerator` class is designed to automate the process of creating personalized letters in Word documents. It takes a template Word document and a list of people as input, fills in the details in a table within the document, and saves the result as a new Word document and a PDF file.

Class Initialization:

- `TableGenerator(template_path, people)` : Initializes the `TableGenerator` class with the path to a Word document template (`template_path`) and a list of people's information (`people`).

Methods:

1. `insert_people_into_table()` : This method inserts information about people into the table in the Word document.

   - It replaces placeholders like `{Sno}` , `{name}` , `{SID}` , and `{hostel}` in the table with actual values from the `people` list.

   - The table is assumed to be the first table in the document.

2. `add_rows()` : Adds rows to the table based on the number of people in the `people` list.

   - It ensures that there are enough rows in the table to accommodate all the people.

3. `fill_rows()` : Fills the table with placeholders for information (e.g., `{Sno}` , `{name}` , etc.).

   - This sets up the structure of the table with placeholders before actual data insertion.

4. `save_as_docx(output_path)` : Saves the modified Word document as a new file with the specified `output_path` .

5. `run()` : Combines all the steps necessary to generate the Word document.

   - Calls `add_rows()` , `fill_rows()` , and `insert_people_into_table()` in sequence.

- Then, it saves the modified document using `save_as_docx()`.

Running the Script:

The `main()` function demonstrates how to use the `TableGenerator` class.

- Specify the path to your template Word document (`template_path`).

- Prepare a list of people with their information (`people`) in the format shown in the example.

- Create an instance of `TableGenerator` with the template and people.

- Call the `run()` method to generate the modified Word document.

- Finally, the script converts the Word document to a PDF using the `docx2pdf` library.