council_analytics

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CHAPTER

ONE

LLM_RAG PACKAGE

1.1 Submodules

1.2 Ilm_rag.query module

```
class llm_rag.query.RAG_LLM
    Bases: object
    configure_query_engine(index) → RetrieverQueryEngine
    display_prompt_dict(prompts_dict)
    huggingface_login()
    init_embedding_model(embed_name)
    init_llm_model(llm_name, token)
    load_index_storage(index_dir)
    query_rag_llm(user_query)
```

1.3 Ilm_rag.web_app module

1.4 Module contents

CHAPTER

TWO

PREPROCESSING PACKAGE

2.1 Submodules

2.2 preprocessing.download module

```
preprocessing.download.download_pdf(idx, verbose=False)
preprocessing.download.request_pdf(idx, verbose=False)
```

Request the PDF file from the municipal council website. Returns the content of the file if it's a PDF, otherwise None.

2.3 preprocessing.embedding module

```
preprocessing.embedding.initVectorStore(embedding_model)
preprocessing.embedding.initialize_embedding_model()
preprocessing.embedding.load_txt_files(directory)
preprocessing.embedding.load_txt_files_nextcloud(start_idx, end_idx)
```

2.4 preprocessing.extractor module

```
preprocessing.extractor.extract_text(doc)
preprocessing.extractor.save_text(text: str, fout: str)
```

2.5 preprocessing.preprocessing module

```
preprocessing.preprocessing.download_from_nextcloud(folder, filename)
preprocessing.preprocessing.parallel_process_pdf(args)
    A helper function to process the PDFs in parallel.
preprocessing.preprocessing.process_pdf(idx, verbose=False)
```

Process the PDF by downloading, uploading to Nextcloud, extracting text, and uploading the text file to Nextcloud.

 $\label{local_preprocessing.preprocessing.upload_to_nextcloud} (\textit{folder}, \textit{filename}, \textit{content_type='binary'}, \\ \textit{verbose=False})$

Upload the given content (PDF or text data) to Nextcloud. If content_type is 'text', it will upload the content as text (encoded in utf-8), otherwise it will treat it as binary content.

2.6 Module contents

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