PythonIRSystem

# Description

PythonIRSystem is a custom-built Information Retrieval (IR) system designed to efficiently index and retrieve documents based on user queries. This project is implemented in Python and utilizes various NLP techniques for text processing, including tokenization, stemming, and stop word removal.

# Features

* Text Preprocessing: Cleans and prepares text data for indexing.
* Inverted Indexing: Efficiently stores document information for quick retrieval.
* Query Processing: Handles user queries and finds relevant documents.
* Stop Word Elimination: Improves query relevance by removing unnecessary words.
* Ranking Algorithm: Ranks the retrieved documents based on their relevance to the query.

# Installation

To set up the PythonIRSystem on your local machine, follow these steps:

* Clone the repository: git clone https://github.com/yourusername/PythonIRSystem.git
* Navigate to the project directory: cd PythonIRSystem
* Install the required dependencies: pip install -r requirements.txt

# Usage

To run the IR system, execute the main script from the command line:

* python my\_ir\_system.py

# Task Description

(provided with a txt file with different fables, task it so extract each story from it and save it as its title name, tasks includes stop word removal, inverted indexing, query processing, and so on)