**COMP 455 - Group Project**

**Proposal:**

The main aims is to develop a user-friendly application or system that allows quickly and easily search through a wide range of items. The main feature will be a powerful search system designed to deliver fast and relevant results, ensuring that users can efficiently explore the diverse catalog.

**Submission Requirements:**

**Requirements (Functional and Non-functional):**

* Implement a flexible search functionality for various attributes, such as titles, categories, and keywords.
* Enable dynamic filtering options based on multiple criteria, ensuring adaptability to different datasets.
* Implement sorting options for search results to enhance user experience.
* Integrate a scalable search engine to handle a growing catalog of items efficiently.
* Performance: Achieve fast and efficient search result retrieval, emphasizing response time.
* Usability: Design an intuitive and user-friendly interface for seamless navigation.
* Scalability: Ensure the application can scale to handle large and diverse datasets.

**Design:** The design section includes a data flow diagram illustrating the flow of data and interactions between various components of the Search and Explore Platform application.

**Implementation:** Provide detailed codes in the appendix. The code is well-commented, organized, and structured for clarity and ease of understanding.

**Conclusion:** Summarize the findings with clear information.

**System or Application :** working system with all the Requirements.

**References:** Include a detail list of all the references with working links to view.

**Appendix:** The appendix should include additional supporting materials such as detailed code snippets, sample input/output data, or any other relevant information that enhances the understanding of the project.

**Data references: Please chose the datasets from the following resources:**

<https://openlibrary.org/developers/api>

<https://www.kaggle.com/datasets>