**PROJECT TITLE**

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**Student: First Name, Last Name**

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# Introduction

## What is python?

Python is a programming language that provides a simple syntax, an extensive standard library, and platform-independence, making it easy to write and read code even for beginners.

## What this project aims to?

The aim of this project was to create a Python-based application that can search Wikipedia and return information about a specific page or search term. This application is designed to provide an easy and efficient way to gather information from one of the world's most popular online encyclopedias. The application takes user input, either a specific URL or a search term, and uses web scraping techniques to retrieve the relevant information from the Wikipedia page.

# Methodology

To implement this application, we utilized the following tools and technologies:

* Python programming language
* Requests module for making HTTP requests to Wikipedia
* BeautifulSoup library for parsing HTML content from Wikipedia pages
* html2text library to remove HTML tags and convert the text into plain text
* argparse module for parsing command-line arguments
* Git version control system to manage code changes

The application has two modes of operation: URL mode and search mode. In URL mode, the user inputs a specific Wikipedia URL and the application retrieves the page content using HTTP requests. In search mode, the user inputs a search term and the application constructs the appropriate URL to search Wikipedia and retrieve the content.

Once the page content has been retrieved, the application uses BeautifulSoup to parse the HTML content and extract the page title and first paragraph. The html2text library is then used to convert the page content from HTML to plain text format.

# Results

The application successfully retrieves and displays the title and first paragraph of the requested Wikipedia page. The user can input a URL or a search term, and the application will provide the relevant information. This application provides an efficient way to gather information from Wikipedia without having to navigate to the page manually.

# Discussion

The application was developed using a variety of Python libraries and modules, which made the development process easier and more efficient. BeautifulSoup and html2text were particularly useful in parsing and converting the HTML content to plain text format.

While the application is functional, there are some limitations to the approach. The application relies on web scraping techniques, which can be slow and unreliable if the Wikipedia page is structured in a non-standard way. Additionally, the application only retrieves the title and first paragraph of the page, which may not provide enough information for some users.

# Conclusion

In conclusion, the developed application provides a convenient and efficient way to retrieve information from Wikipedia. The use of Python libraries and modules made the development process smoother and more streamlined. However, there are limitations to the approach, and further development could be done to enhance the functionality and reliability of the application.

# Bibliography

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