

# Online Book Search using Web Services

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**Abstract:** The idea of this project is to create a web application for book search, where we can search books using a single related word, the application displays the information of books searched. The application uses RESTful APIs for the book search function. The application will be designed using HTML and JavaScript.

## 1 Introduction

For the past few decades, popularity of worldwide communications has been increasing. The Internet paradigm has become a common factor for networking applications. Nowadays, almost everyone rely on information and communication technology (ICT) such as: web-shopping, online-databases, social networks are three notable examples. The most of ICT community been born from different needs. In fact, that the role of web services in business is considered most important. Many commercial firms use web services and other technologies to extend their capabilities. My application will use multiple REST APIs. Rest API has great layer flexibility, as the data is not tied to methods and resources. The Rest API design allows to build an API that meets our as well as the customer needs (MuleSoft, 2018). I am developing an web application in which we can find books using any key word.

## **2 Background**

### **2.1 HTML and JavaScript**

HTML Hypertext Markup Language it is the standard markup language for creating web pages and web applications. Along with Cascading Style Sheets (CSS) and JavaScript they form a triad of cornerstone technologies for the World Wide Web.

### **2.2 REST API**

The Rest API design is built in the manner that meets to the customer's needs. REST API can return XML, JSON, YAML or any other specific format on the client requests, unlike SOAP. Rest is a style of architecture that makes use of HTTP protocol to retrieve the data.

### **2.3 Google Book API**

The APIs in the Google Books API let you bring Google Books features to your site or application. The new Google Books API lets you perform programmatically most of the operations that you can do interactively on the Google Books website. The Embedded Viewer API lets you embed the content directly into your site using JavaScript code. (Google Developers, 2018)

## **3 Project Design**

### **3.1 Technologies Used**

There are many tools available for web application development. Below are the IDE and tools required for the development

1. Visual Studio Code
2. REST API's
3. Google Book Web service

The application will be in HTML and JavaScript. When the user enters the search word the RESTful web services will be consumed and the books names with the thumbnail of the books will be displayed on the page. Each books will have a link to go to next page for the more detailed info of the clicked book.

## **4 Challenges**

I am still trying to find other book API's for the project. If I am not able to find any then I will be using Google Books only. That would reduce the creativity factor by many points.

## **5 Conclusion**

This project will provide me with more knowledge and experience in how efficiently I could consume the RESTful web services in development. At the end I will have a better understanding of developing and implementing on present relevant technologies like web services to Enterprise Information Systems.

## **6 References**

Google Developers. (2018). Overview | Google Books APIs | Google Developers. [online] Available at: <https://developers.google.com/books/docs/overview> [Accessed 19 Aug. 2018].

MuleSoft. (2018). What is REST API Design? [online] Available at: <https://www.mulesoft.com/resources/api/what-is-rest-api-design> [Accessed 19 Aug. 2018].