Electronic Assignment Cover Sheet

Please fill out and attach as the first page of Assignment.

Student (s) Number as per your student card:

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Course Title: Information Systems with Computing

Lecturer Name: Paul Laird

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Online Book Search using Web Services

By

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1 Introduction

In the past few decades the use of hard copy of the books has been complete nil. The young generation prefers softcopy over hardcopy any day of the week. But some people with old principles prefer hardcopy of the books. A few decades ago publish of the book was tedious work like sales of the books, popularity etc... Even if author could publish his own book he had to spend his own money, if he went to publisher they would see whether the book is profitable or not. So, some books may not have been published because of these reasons, but now that is all null and void. Authors can now publish books online and charge. Or they can release a small chapter and according to that they could see whether they could move onto the printing hardcopy.

As the publishing has become so easy many authors published their unpublished works mostly free, because this reason the web is flooded with many books with similar names with contents very different, so it has become very tedious job of finding required book. And now it is very easy to get duped because of the similar names to find the official book with the authentic author. So here I am comparing the ISBN[1] numbers of the Books between APIs repository to find the get the book. In this project we can also do a comparative study of the book APIs.

In this project I am aiming to do a search web application using two Book APIs where the info from both APIs will be displayed to do a comparison, to authenticate the book you have searched.

[1] ISBN - International Standard Book Number

2 Research Background

2.1 Aims

The main goal of the research is to understand the working of web services, and how to utilise them in the web application or other applications. Consume the REST APIs in the web application development. Final aim is to develop a web application that could search the book through a key word using the Google Book API, and display the result. When a particular book is clicked, then the ISBN of that book is used to find the corresponding book from another book API “Open Library” and it will show the corresponding book info, and we can compare both information sources for the authenticity.

2.2 Objectives

2.2.1 Usage of REST APIs.

API manual are provided by the “Google Books” and “Open Library” for its usage in the web application development. Both pf the APIs are free and open Source they do not require any form of the authentication for the execution. Just a java script command and the Jason data can be obtained, then its all about the handling tof the Jason data. But the parameter for the both APIs are different, for Google Books API Google Developers, 2018) there is no Specification. But for the Open Library API (Openlibrary.org, 2018) the search can be done with the ISBN only, so it is not so flexible to use. Below diagram shows the working of the REST APIs (Pitkäniemi, 2016) (Pattamsetti, 2017).

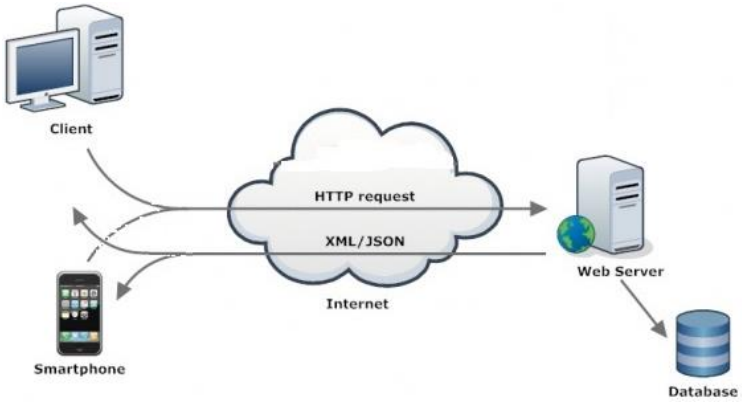

Figure 1: Conceptual diagram of RESTful Webservices

2.2.2 Platform for the Web Application

I have developed a Progressive Web Application, for the front end using Bootsstrap CSS because the frame-work be used for any platform or devise. And the APIs are called using JavaScripting dynamically at the search time.

2.2.3 Authentication of the ISBN

The searched and selected Book is checked against the Open library API for the verification of the ISBN for the authentic book.

2.2.4 Deployment of the Web Application

In Git Hub we can deploy the Web application with ease, they have the documentation with easy steps for deployment of the repository with the Web application.

3 Project Design

4 Conclusion

References

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Appendix