

Rajya Sabha Business Android Mobile Application

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Abstract: This paper tells about the in-depth description of the ‘RajyaSabha Business Application’ and how it has been implemented. It’s basically an informational app which provide useful dynamic updated information on various sectors/domains of the RajyaSabha. This paper will give you the detailed study about the technology used and how it has been implemented in our app to provide the user with such dynamic and updated content every time. This application is a one-step destination for all the information regarding internal affairs of RajyaSabha. This project is based on RSS feeds available on web portal.

Keywords: Android Studio, XML Parsing, JDK, XML, IDE, SGML, JRE

1 Introduction

RajyaSabha Business Application is an informational app which provides information regarding all the ongoing business and activities of RajyaSabha. This application is a one-step destination for all the information regarding internal affairs of RajyaSabha. This project is based on RSS feeds available on web portal. Till now there is such application which provides a common ground to the information seeker regarding details of the constitutional activities, ongoing business and past business in RajyaSabha. An individual need to visit different websites, need to scroll long pages in order to gain any information regarding our constitutional activities. Users will be provided with a simple interface from which information can be obtained regarding various Parliamentary business. Earlier, there were no such system or any means via which, it could have been possible to obtain all the array of information.

There were no such any system or any platform available. It was completely undiscovered and untouched. However, by properly performing the XML parsing on various links respectively for various sources, it has been possible for developing such system. By making the use of XML parsing, and performinit suitably on various XML links it Has become possible to propose such type of unique platform to obtain a wide array of information’s from one single system. User can obtain updated information regarding all the Parliamentary Business Items. They can also save it for offline viewing. Various item’s information always keep on updating dynamically in our application. Hence, it provides the user with the functionality to view the data more efficiently and it helps to make them stay updated. With the help of XML link provided at ‘data.gov.in’, further XML parsing has been done which provides up to date content directly in our application. It provides various Parliamentary Business Items like:

List of Business, Papers to be laid, Bulletin-I, Bulletin-II, Daily Synopsis, Notifications, Organization, Committees, Member List, Starred questions and Un-starred questions.

2 Related Literature Survey

2.1 JDK 8

The Java Development Kit (JDK) is an implementation of either one of the Java Platform, Standard Edition, Java Platform, Enterprise Edition, or Java Platform, Micro Edition platforms[1] released by Oracle Corporation in the form of a binary product aimed at Java developers on Solaris, Linux, mac OS or Windows. The JDK includes a private JVM and a few other resources to finish the develop-ment of a Java Application.[2] Since the introduction of the Java platform, it has been by far the most widely used Software Development Kit (SDK).

The Java Development Kit (JDK) is a software development environment used for developing Java applications and ap-plets. It includes the Java Runtime Environment (JRE), an interpreter/loader (java), a compiler (javac), an archive (jar), a documentation generator (javadoc) and other tools needed in Java development. People new to Java may be confused about whether to use the JRE or the JDK. To run Java applications and applets, simply download the JRE. However, to develop Java applications and applets as well as run them, the JDK is needed.

Java developers are initially presented with two JDK tools, java and javac. Both are run from the command prompt. Java source files are simple text files saved with an extension of .java. After writing and saving Java source code, the javac compiler is invoked to create .class files. Once the .class files are created, the

'java' command can be used to run the java program. For developers who wish to work in an integrated development environment (IDE), a JDK bundled with Net-beans can be downloaded from the Oracle website. Such IDEs speed up the development process by introducing point-and-click and drag-and-drop features for creating an application.

There are different JDKs for various platforms. The supported platforms include Windows, Linux and Solaris. Mac users need a different software development kit, which includes adaptations of some tools found in the JDK.

2.2 XML Parsing

In computing, Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human readable and machine-readable. The W3C's XML 1.0 Specification and several other related specifications all of them free open standards define XML. The design goals of XML emphasize simplicity, generality, and usability across the Internet. It is a textual data format with strong support via Unicode for different human languages. Although the design of XML focuses on documents, the language is widely used for the representation of arbitrary data structures such as those used in web services. Several schema systems exist to aid in the definition of XML-based languages, while programmers have developed many application programming interfaces (APIs) to aid the processing of XML data.

Extensible Markup Language (XML) is used to describe data. The XML standard is a flexible way to create information formats and electronically share structured data via the public Internet, as well as via corporate networks. XML code, a formal recommendation from the World Wide Web Consortium (W3C), is similar to Hypertext Markup Language (HTML).

Both XML and HTML contain markup symbols to describe page or file contents. HTML code describes Web page content (mainly text and graphic images) only in terms of how it is to be displayed and interacted with. XML data is known as self-describing or self-defining, meaning that the structure of the data is embedded with the data, thus when the data arrives there is no need to pre-build the structure to store the data; it is dynamically understood within the XML. The XML format can be used by any individual or group of individuals or companies that want to share information in a consistent way. XML is actually a simpler and easier-to-use subset of the Standard Generalized Markup Language (SGML), which is the standard to create a document structure.

The basic building block of an XML document is an element, defined by tags. An element has a beginning and an ending tag. All elements in an XML document are contained in an outermost element known as the root element. XML can also support nested elements, or elements within elements. This ability allows XML to support hierarchical structures. Element names describe the content of the element, and the structure describes the relationship between the elements. An XML document is considered to be "well formed" (that is, able to be read and understood by an XML parser) if its format complies with the XML specification, if it is properly marked up, and if elements are properly nested. XML also supports the ability to define attributes for elements and describe characteristics of the elements in the beginning tag of an element.

In computing, Extensible Markup Language (XML) is a markFor example, XML documents can be very simple, such as the following:

```
<? Xml version="1.0" standalone="yes"?>
<Conversation>
<Greeting>Hello, world! </greeting>
<Response>Stop the planet, I want to get off! </response>
</conversation>
```

Applications for XML are endless. For example, computer makers might agree upon a standard or common way to describe the information about a computer product (processor speed, memory size, and so forth) and then describe the product information format with XML code. Such a standard way of describing data would enable a user to send an intelligent agent (a program) to each computer maker's Web site, gather data, and then make a valid comparison.

2.3 Android Studio

Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development. It is available for download on Windows, macOS and Linux based operating systems. It is a replacement for the Eclipse Android Development Tools (ADT) as primary IDE for native Android application development. Android Studio is the official Integrated Development Environment (IDE) for Android app development, based on IntelliJIDEA . On top of IntelliJ's powerful code editor and developer tools, Android Studio offers even more features that enhance your productivity when building Android apps, such as:

- A flexible Gradle-based build system
- A fast and feature-rich emulator
- A unified environment where you can develop for all Android devices
- Instant Run to push changes to your running app without building a new APK
- Code templates and GitHub integration to help you build common app features and import sample code
- Extensive testing tools and frameworks
- Lint tools to catch performance, usability, version compatibility, and other problems
- C++ and NDK support
- Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine.

3 Proposed Approach

3.1 Parsing Xml Link Based on XML Parsing

XML stands for Extensible Mark-up Language. XML is a very popular format and commonly used for sharing data on the internet. This chapter explains how to parse the XML file and extract necessary information from it. Android provides three types of XML parsers which are DOM, SAX and XMLPullParser. Among all of them android recommend XMLPullParser because it is efficient and easy to use, So we are going to use XMLPullParser for parsing XML. The first step is to identify the fields in the XML data in which you are interested in. For example. In the XML given below we are interested in getting temperature only.

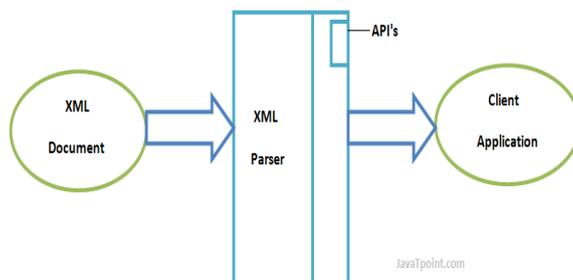


Fig. Example of abstraction

4 Implementation and result analysis

This is XML Data stored in the government portal

- BEFORE XML PARSING DATA



Fig. After XML parsed data

```
<?xml version='1.0'?><xml:base href='\"#\"'/><Members><Member><Sno>1</Sno><MPCode>![CDATA[1929]]><Party><![CDATA[IUML]]></Party><Partyname>![CDATA[Indian Union Muslim League]]></Partyname><PartyAddress><![CDATA[Peevees Mirage, Nilambur P.O., Malappuram District, Kerala, 679329]]></PartyAddress><Permanentphone><LocalAddress><![CDATA[402 - Swarna Jayanti Sadan DeLuxe, Mobile 9013181677, 9868181280]]></LocalAddress><Localphone><EmailID><![CDATA[wahab.pv@sansad.nic.]]></Localphone><MemberName><Gender><![CDATA[Male]]></Gender><Party><![CDATA[Abraham, Shri Joy]]></MemberName><Gender><![CDATA[Male]]></Gender><Party><![CDATA[Abraham, Shri Joy]]></Party></Member></Members></State><stateName><![CDATA[Kerala]]></stateName><PermanentAddress><![CDATA[Mazhuva
```

Fig. XML Data

• AFTER PARSING

Major Modules to be included –

- 1. List of Business
- 2. Members
- 3. Committee
- 4. Organizations
- 5. Papers to be laid
- 6. Starred Questions
- 7. Unstarred Questions
- 8. Daily Synopsis
- 9. Bulletin 1
- 10. Bulletin 2

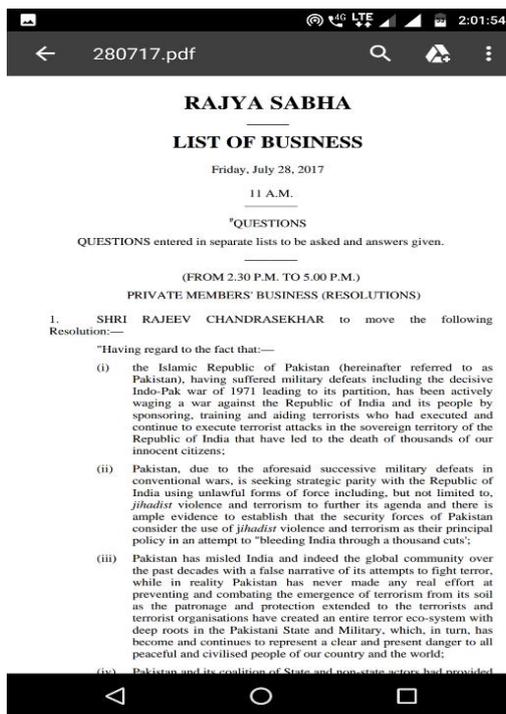


Fig. Details showing List of Business

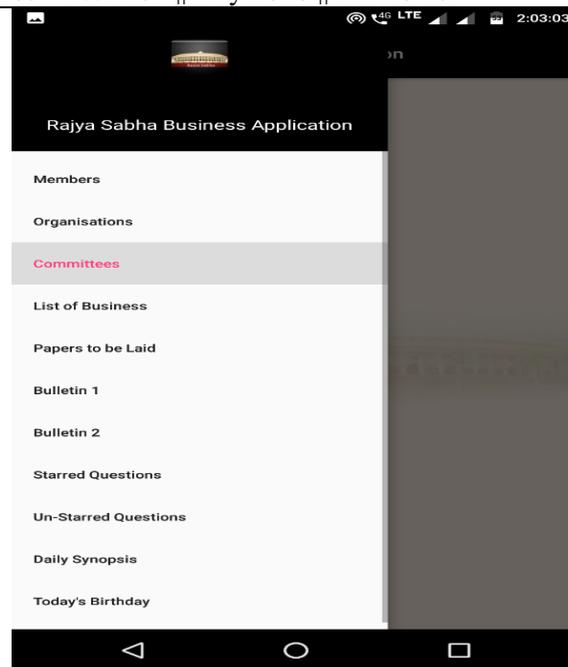


Fig. App Home Screen

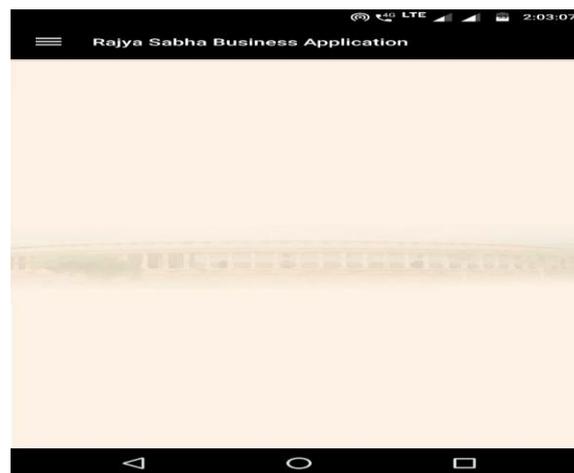


Fig. Navigation Drawer Panel

5 Conclusion

'RajyaSabha Business Application' is a one stop destination for gaining information regarding all the activities and internal affairs of RajyaSabha. Till now then, there was no such platform where any information seeker could obtain all the information's regarding our constitutional activities at one place. With the help of XML link provided at 'data.gov.in', further XML parsing has been done which provides up to date content directly in our application.

It provides various Parliamentary Business Items like: List of Business, Papers to be laid, Bulletin-I, Bulletin-II, Daily Synopsis, Notifications, Organization, Committees, Member List, Starred questions and Un-starred questions.

User can obtain updated information regarding all the Parliamentary Business Items. They can also save it for offline viewing. Various item's information always keep on updating dynamically in our application. Hence, it provides the user with the functionality to view the data more efficiently and it helps to make them stay updated.

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Garima Pandey received her M. Tech degree in computer science and engineering from Utter Pradesh Technical University, Lucknow in 2014. Currently working as Assistant Professor in IPEC, Ghaziabad. Her main area of interest are Android, Machine Learning, Pattern Recognition, Soft Computing. She has got 8 years of teaching experience and has got various membership with professional societies like IEEE, ACM, IAENG.



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