

URL Request

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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IIT Bombay
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Learning Objectives



Learning Objectives

- Pass the Foss and Language ids to the URL of Spoken Tutorial



Learning Objectives

- **Pass the Foss and Language ids to the URL of Spoken Tutorial**
- **Parse the response JSON data**



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- **Run the Kotlin App**



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- **Pass the Foss and Language ids to the URL of Spoken Tutorial**
- **Parse the response JSON data**
- **Run the Kotlin App**
- **Display the fetched data**



System Requirements



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To record this tutorial, I am using



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To record this tutorial, I am using

- **Ubuntu Linux 16.04 operating system**



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- **Android Studio version 3.x**



System Requirements

To record this tutorial, I am using

- **Ubuntu Linux 16.04** operating system
- **Android Studio version 3.x**
- **Android Phone with minimum of Android OS version 4.03**



Pre-requisites



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- Java programming language



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- **Java programming language**
- **Android Studio**



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Pre-requisites

- Java programming language
- Android Studio

If not, then go through the relevant tutorials on <https://spoken-tutorial.org>



Spoken Tutorial Server



Spoken Tutorial Server

- Spoken Tutorial project has a server which has an **API** made for a specific purpose



Spoken Tutorial Server

- **Spoken Tutorial project has a server which has an **API** made for a specific purpose**
- **It helps to fetch the video tutorials of a **FOSS** in a particular language**



Spoken Tutorial Server



Spoken Tutorial Server

- **Specific ids of a FOSS and language are passed to the server, to fetch the exact video**



API - Application Programming Interface



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- An **API** is the messenger that allows two software programs to communicate with each other



API - Application Programming Interface

- An **API** is the messenger that allows two software programs to communicate with each other
- It delivers the **request** to the provider and then delivers the **response** back to us



Spoken Tutorial - URL Format



Spoken Tutorial - URL Format

Spoken Tutorial URL format is shown below:

- https://spoken-tutorial.org/api/get_tutorials/fossID/languageID



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Spoken Tutorial - URL Format

Spoken Tutorial URL format is shown below:

- https://spoken-tutorial.org/api/get_tutorials/fossID/languageID

In this URL, instead of variables **fossID** and **languageID** we have to pass the actual ids



How to make a request to the URL?



How to make a request to the URL?

- Google provides **Volley** library which makes requesting a URL easy and faster



How to make a request to the URL?

- Google provides **Volley** library which makes requesting a URL easy and faster
- Volley is an HTTP library that makes networking for Android Apps easier



How to make a request to the URL?



How to make a request to the URL?

- **Volley is an external library**



How to make a request to the URL?

- **Volley is an external library**
- We need to add to our Android studio project so that necessary files are downloaded



JSON



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- JSON stands for **JavaScript Object Notation**



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- JSON is easy to read and write
- It is used to transmit data between a server and web application



JSON

- JSON stands for **JavaScript Object Notation**
- JSON is easy to read and write
- It is used to transmit data between a server and web application
- It is an alternative to XML



Assignment

- 1 **Disconnect the Internet/Wifi**
- 2 **Now run the app and search for the FOSS and language**
- 3 **Observe the error output**



Summary

In this tutorial we learnt to

- **Pass the Foss and Language ids to the URL of Spoken Tutorial**
- **Parse the response JSON data**
- **Run the Kotlin App**
- **Display the fetched data**



About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates on passing online test
- For more details, please write to contact@spoken-tutorial.org



Forum for specific questions

- Do you have questions in **THIS Spoken Tutorial?**
- Please visit <http://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- Someone from our team will answer them



Acknowledgements

- **Spoken Tutorial Project is a part of the Talk to a Teacher project**
- **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- **More information on this Mission is available at**

<http://spoken-tutorial.org/NMEICT-Intro>



Thank you

- The **Android app** and the script for this tutorial was contributed by **Abhishek Shah** (*FOSSEE Fellow 2018*)
- The video has been created by **Spoken Tutorial team, IIT Bombay**

