

Request-Response Cycle in a Flask web app

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Siddhartha Sarkar

11 August 2018



Learning Objectives

In this tutorial, we will learn



Learning Objectives

In this tutorial, we will learn

- **About the request-response cycle in Flask**



Learning Objectives

In this tutorial, we will learn

- **About the request-response cycle in Flask**
- **Different attributes of the request object**



Learning Objectives

In this tutorial, we will learn

- **About the request-response cycle in Flask**
- **Different attributes of the request object**
- **Different types of request data**



Learning Objectives

In this tutorial, we will learn

- **About the request-response cycle in Flask**
- **Different attributes of the request object**
- **Different types of request data**
- **Several HTTP response codes**



System Requirements



System Requirements

- **Ubuntu Linux 16.04 OS**



System Requirements

- **Ubuntu Linux 16.04 OS**
- **Python 3.5.2**



System Requirements

- **Ubuntu Linux 16.04 OS**
- **Python 3.5.2**
- **Atom text editor 1.22.1**



System Requirements

- **Ubuntu Linux 16.04 OS**
- **Python 3.5.2**
- **Atom text editor 1.22.1**
- **Firefox Web Browser**



Pre-requisites

- You should have working knowledge of Linux commands, basic Python programming and HTML syntax



Pre-requisites

- You should have working knowledge of Linux commands, basic Python programming and HTML syntax
- If not, then please go through the corresponding tutorials on <http://spoken-tutorial.org>



The request object

- Flask app instance **has to process the received** request



The request object

- Flask app instance **has to process the received** request
- **For processing, the** app instance needs to have access to **certain information**



The request object

- **Few objects are provided to the view functions, where the processing takes place**



The request object

- **Few objects are provided to the view functions, where the processing takes place**
- **One of these objects is the request object**



The request object

- **Few objects are provided to the view functions, where the processing takes place**
- **One of these objects is the request object**
- **This object encapsulates the contents of the HTTP request sent by the client**



The request object

The incoming request data **can be of several forms**



The request object

The incoming request data can be of several forms

- Query arguments **sent as part of the URL in the browser**



The request object

The incoming request data can be of several forms

- Query arguments **sent as part of the URL in the browser**
- Form data **collected from web forms**



The form attribute

- **The request object has one more important attribute called form**



The form attribute

- **The request object has one more important attribute called form**
- **It can be used to collect data from the user using a web form**



The form attribute

- **The request object has one more important attribute called form**
- **It can be used to collect data from the user using a web form**
- **Then store the data as a dictionary in the form attribute**



The POST request method



The POST request method

- Client **will send data to the server using the form**



The POST request method

- Client **will send data to the server using the form**
- **This is to update the server with some information**



The POST request method

- **When you enter your username and password while logging in to a website**



The POST request method

- **When you enter your username and password while logging in to a website**
- **GET request method is used to get or read some data from the server**



Summary

In this tutorial, we learnt about,

- **The request-response cycle in Flask**
- **Different attributes of the request object**
- **Different types of request data**
- **Several HTTP response codes**



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

Thanks for joining
<http://spoken-tutorial.org>

