

TidBIT

In today's busy world, it is less common than it once was to create a meal from scratch using basic ingredients like flour, eggs, sugar, and so on. Instead, we save time and ensure a known and expected outcome by using prepackaged kits like cake mix in a box. The time savings, cost savings, and reduced effort can be significant using this approach. Similarly, there are many pre-built package libraries containing functionality that can be "dropped in" to your project, which is the basis for Dropwizard.

While you are learning about and getting the benefit of REST-style programming, you are also learning another subtle but equally valuable skill: how to incorporate prebuilt libraries into your project. In fact, this is something you will do on nearly every project you work on in the coming years. Besides learning how to incorporate them, in the case of open source projects, you also have the ability to examine the source code used to build that library. This journey of locating, discovering, examining, and incorporating packages means you will always have new learning adventures to look forward to.



Required Resources

Reading: Hands-On Design Patterns with Java, Chapters 6 and 7

Architectural patterns are important to system designers, as a system's architecture is one of the building blocks for creating a system. These patterns involve considerations for software design and, in some cases, hardware connectivity. Specifically, in this

chapter, you will be introduced to the architectural pattern category, and examine the patterns along with pattern diagrams and use cases to demonstrate applicability and implementation.

Reading: Computer Programming Languages &

(https://www.computerscience.org/resources/computer-programming-languages/)
Review this resource to learn about the various programming languages, who uses each, and how they are generally used for software development in various industries.

Reading: Polyglot Programming &

(https://searchsoftwarequality.techtarget.com/definition/polyglot-programming)
One tool and language does not solve all problems or work for all scenarios. This reality has an industry term - polyglot programming. Polyglot programming is the practice of writing code in multiple languages to capture additional functionality and efficiency not available in a single language. Read this article to learn about the importance and utility of being able to code in multiple languages.

Webpage: What Is REST **௴** (https://restfulapi.net/)

This source provides an overview of REpresentational State Transfer (REST), an architectural style for distributed hypermedia systems.

Reading: A RESTful API PDF

(Course%20Documents/CS%20230%20A%20RESTful%20API.pdf?ou=1798772) In today's technology environment, you will usually encounter the term REST in the context of building a "RESTful API." REST is an acronym for REpresentational State Transfer. In this reading, you will learn about REST, which is a term that describes a software architectural style for building distributed hypermedia systems.

Webpage: <u>Dropwizard Getting Started Guide</u>

(https://www.dropwizard.io/en/stable/getting-started.html)

A distributed application provides functionality across many different platforms and is used for distribution of resources and scaling. Dropwizard is a framework for implementing a distributed application using RESTful web services with Java. The

libraries used with Dropwizard are packaged to provide the common functionality for a production-ready distributed application including operational tools, logging, and application metrics.