Giving Go a Go: Build a REST API with Golang

Description

Get a head start for your hackathon project by building a REST API! REST is a widely used architectural style for creating web applications that can communicate with other services and exchange data. Go has gained significant popularity in recent years due to its simplicity, performance, and built-in support for concurrency. By participating in this workshop, hackers can learn the fundamentals of Go by using it to build a REST API and understand its unique features, enabling them to work with the language effectively in their hackathon projects or other tech endeavors.

Learning Outcomes

After this workshop, you will be able to:
- Build and test a REST API
- Understand the basics of Go

Prerequisite Knowledge

While **not necessary**, these skills are nice to have for this workshop:
- Basic knowledge of Git and Github
- Exposure to any programming language
- Exposure to the command line
- Basic experience with APIs

Pre-Workshop Checklist

Before the workshop, please make sure you complete the following items:

- Download the latest stable version of Go from https://go.dev
- Download the latest stable version of Postman from https://postman.com/downloads
- Clone our starter code from Github

Technical Jargon and Definitions

- **Go/Golang:** A statically typed, compiled high-level programming language that is syntactically similar to C, but also has memory safety, garbage collection, structural typing, and CSP-style concurrency. Designed at Google.
- **CRUD:** An acronym for "create, read, update, destroy," refers to the four necessary functions that a model should have.
- **REST:** REpresentational State Transfer — it is a software architectural style that defines the set of rules to be used for creating web services.
- **API:** Application Programming Interface — a software intermediary that allows two applications to talk to each other.

Timeline (60 minutes)

Time	Module	Description
8 mins	Go: What Gives?	Understand what Go is, how it is used, and why it is a useful language to learn.
15 mins	Rest Assured with REST APIs	Learn about how the API architectural style REST and CRUD functions work together to access and manipulate data within a database.
30 mins	Give Go a Go	Build and test a RESTful API in Go with CRUD methods.
7 mins	Gotta Go!	Wrap up the workshop and discuss resources for continuing your Go journey.

Workshop Lead Contact

Adison Lampert	Angela Chen
adison.lampert@shopify.com LinkedIn	angela.ychen@shopify.com LinkedIn

Additional Resources

Hack the North Resources

Hack the North 2023 Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Workshop-Specific Resources

The Go Programming Language

Get the latest stable version of Go here.

Postman API Platform

Get the latest stable version of Postman here.
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