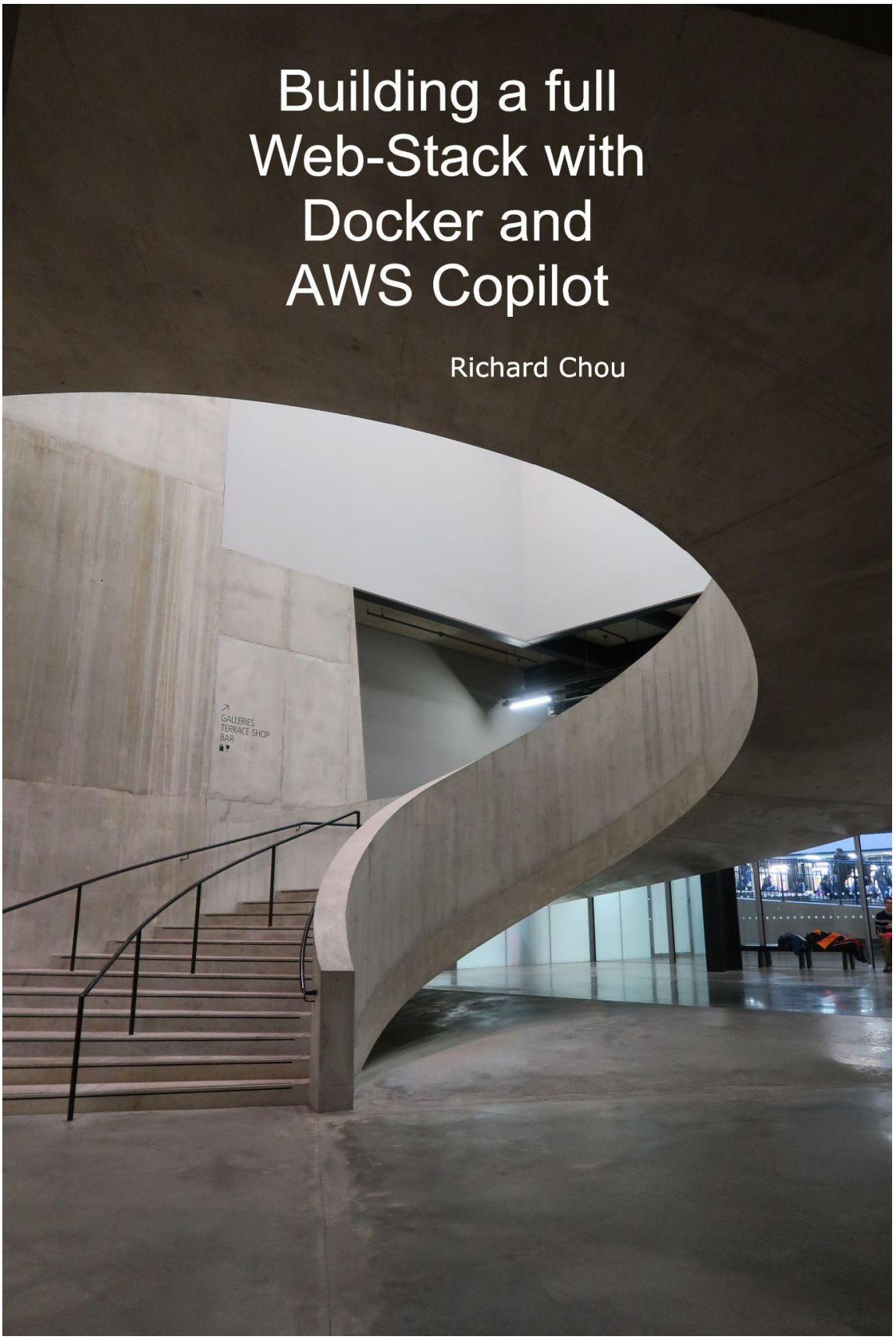

Photo by Emma Raphael on Unsplash

1. Introduction

I have been working as a Software Developer for several years. I'm sure every developer has had this thought, at least once; to utilise his skill to start a business. We are familiar with all software and practices, from frontend, to backend, to DevOps. However, not many of us have the opportunity to build a technology-stack from scratch. Most of us create things on top of what has already existed. To build a technology stack, you must develop locally, commit your code to a repository, and connect the repository to a CI/CD pipeline. The pipeline needs to be able to deploy to staging and production environments. This process takes effort and time. By the time you finish building a stack, weeks have passed.

AWS Copilot is a command-line tool that helps you push containerised apps to the cloud. It provides commands to create multiple environments in separate AWS accounts and regions, and to create CI/CD pipelines to build your container images, deploy your services, and run automated tests.

In this book, we will build a web-stack locally first (NextJS, Express, DynamoDB and worker) and then deploy it to production with AWS Copilot. The stack will be hosted in a Fargate cluster on AWS. We will also create a CodePipeline. We need to commit our code to our repository in the future, and CodePipline will push it to production. There are many other combinations for a technology stack. If you can containerise your app, AWS Copilot can help you deploy it. Hopefully, after reading this book, you will be able to build your own stack more quickly.

The source code for each chapter can be found here.