

dashboard for

Getting Started with Kubernetes

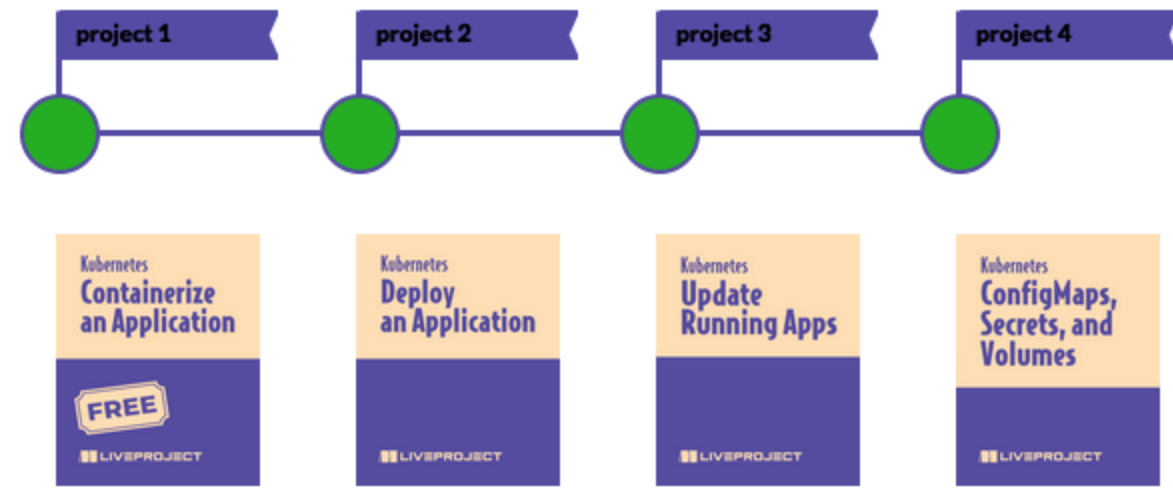
series progress



Getting Started with Kubernetes

Sunil Jacob

Step into the shoes of a DevOps engineer for BuildYourHome, an e-commerce company specializing in home improvement products. In this series of liveProjects, you'll take BuildYourHome's booming online business from monolith to modern by leveraging the power of the cloud. Adopting Kubernetes as a container orchestrator will ensure application uptime, lower operational costs, and help the application scale as needed. You'll containerize the existing e-commerce application with Docker files, deploy the application in Kubernetes, learn strategies for providing rolling updates without...



Congratulations! You have passed your online exam. Contact your mentor to schedule your live assessment.



Containerize an Application

Sunil Jacob

BuildYourHome, an e-commerce company specializing in home improvement products, wants to get its own house in order by modernizing its monolithic architecture. As a DevOps engineer, your task is to containerize its e-commerce application to improve scalability, maintainability, and resource management. You'll define a container image with a Docker file, build the container image, and push it to the registry, making the image available for viewing in Docker Hub. When you're finished, you'll have a containerized... [go to liveProject](#)



amazing! you have finished all milestones!!!



Deploy an Application

Sunil Jacob

The success of BuildYourHome, an e-commerce company, is soaring, but so is the cost of managing its newly containerized system. As a DevOps engineer, you'll solve this problem by setting up Kubernetes, a widely used container orchestration system, to run the e-commerce application's Docker containers. You'll create a pod for deployment, build a deployment manifest file to provide important instructions to Kubernetes, provide customer access to the application, and take steps to manage CPU and memory resource... [go to liveProject](#)



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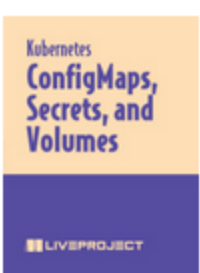
Update Running Apps

Sunil Jacob

E-commerce company BuildYourHome has a modern, scalable, containerized e-commerce application running on Kubernetes. As a DevOps engineer, your task is to ensure that improvements—including new features, functionality, and deployment strategies—can be made without disrupting the user experience. You'll walk through four different update approaches; replacement strategy, ramp up strategy, blue/green strategy, and canary strategy. When finished you'll have a solid grasp on the nuances of all four strategies... [go to liveProject](#)



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Config Maps, Secrets, and Volumes

Sunil Jacob

You're a DevOps engineer for BuildYourHome, an e-commerce company with a newly containerized e-commerce application. As part of an ongoing effort to ensure web page updates are delivered seamlessly, you'll store web page-related configuration information with Kubernetes objects, including ConfigMaps and Secrets, then inject them into your microservice containers. When done, you'll have gained familiarity with maintaining stateful applications with Persistent Volumes and Persistent Volume Claims... [go to liveProject](#)



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mentors



KELUM SENANAYAKE

Kelum has 11 years of industry experience in designing, developing, and deploying enterprise software solutions. Currently, he is working as a Senior Software Developer at Echowork, Toronto. He is proficient with Java, Node.js, React, MongoDB, Spring, Hibernate, Oracle, PostgreSQL, JUnit, and GIT. Finally, he is familiar with Object-Oriented Programming, Micro Service Architecture, Distributed Computing, Design Patterns, RESTful Web Services, and NoSQL concepts.



authors



SUNIL JACOB

Sunil Jacob is a principal architect in the DevOps area at an e-commerce company. He has gained experience with Docker, Kubernetes, and Google Cloud Platform, and implements DevSecOps practices using Policy as Code with Open Policy Agent, giving high importance to security. Well-versed in CI/CD platforms like GitHub Actions and GitLab, Sunil is a certified Professional Cloud Architect and Certified Kubernetes Administrator.