


## Training Content

Day	Module	Topics	Use Case	Course/Badges
Day-1	<b>Introduction to Modern App Development</b>	<ul style="list-style-type: none"> <li>• Importance of App Modernization</li> <li>• Platforms Used for Development</li> <li>• Essentials for App Modernization</li> <li>• Important Modernization Technologies</li> <li>• Introduction Red Hat</li> <li>• Products of Red Hat and Architecture</li> <li>• Red Hat's approach to application modernization?</li> </ul>		<b>App Modernization Basics:-</b> <a href="https://cognitiveclass.ai/badges/app-modernization-basics">https://cognitiveclass.ai/badges/app-modernization-basics</a> 
Day-1	<b>Developer Sandbox for Red Hat OpenShift</b>	<ul style="list-style-type: none"> <li>• What is the Sandbox?</li> <li>• Get started in the Sandbox</li> <li>• Introduction to OpenShift Dedicated</li> <li>• Architecture concepts</li> <li>• Working with features of RedHat Dedicated</li> <li>• Understanding the features like observe, ConfigMaps, Secrets and search</li> </ul>		<b>Getting Started with OpenShift:-</b> <a href="https://cognitiveclass.ai/courses/course-v1:IBM+GPXX0SM9EN+v1">https://cognitiveclass.ai/courses/course-v1:IBM+GPXX0SM9EN+v1</a>
Day-1	<b>Red Hat CodeReady Workspaces</b>	<ul style="list-style-type: none"> <li>• Learn launching the workspaces.</li> <li>• Working on In-browser IDE and create the projects</li> <li>• Edit &amp; test the app code in workspace</li> </ul>		
Day-2 & 3	<b>Flask</b>	<ul style="list-style-type: none"> <li>• Introduction to Flask</li> <li>• Python and Flask Environment Setup</li> <li>• What is web framework</li> <li>• Flask Basics and Routes, Dynamic Routing, Forms</li> <li>• HTTP Methods</li> <li>• Templates and Static Files, Redirect and Errors</li> <li>• Cookies and Session</li> </ul>	<b>Case Study:-</b> Job Portal	
Day-4	<b>IBM DB2</b>	<ul style="list-style-type: none"> <li>• Introducing python SDK for IBM DB2 Database</li> <li>• Connecting Flask app to DB2 Database</li> <li>• Working on Insert, Update, Delete, Retrieve.</li> </ul>	<b>Case Study:-</b> Job Portal	

		<ul style="list-style-type: none"> <li>Learn creating micro-services with CRUD operations</li> </ul>		
Day-5	<b>Containerize your application</b>	<ul style="list-style-type: none"> <li>What is a Container?</li> <li>Containerization vs. Virtual Machine</li> <li>Docker Installation</li> <li>Main Docker Commands</li> <li>Building your own Containerized Image for Flask Application</li> </ul>	<b>Case Study:-</b> Job Portal	<b>Introduction to Containers, Kubernetes, and OpenShift V2:-</b> <a href="https://cognitiveclass.ai/courses/kubernetes-course">https://cognitiveclass.ai/courses/kubernetes-course</a>
Day-6	<b>Kubernetes</b>	<ul style="list-style-type: none"> <li>Understand the main Kubernetes Components</li> <li>Kubernetes Architecture</li> <li>Learn Kubernetes YAML Configuration File</li> <li>Learn to deploy with application with configuration file</li> </ul>	<b>Case Study:-</b> Job Portal	<b>Introduction to Containers, Kubernetes, and OpenShift V2:-</b> <a href="https://cognitiveclass.ai/courses/kubernetes-course">https://cognitiveclass.ai/courses/kubernetes-course</a>
Day-6	<b>Deploy the application</b>	<ul style="list-style-type: none"> <li>Deploy the application using 3 different techniques in OpenShift <ul style="list-style-type: none"> <li>- Using a container image</li> <li>- Using a Git repo</li> <li>- Import from local YAML file</li> </ul> </li> </ul>	<b>Case Study:-</b> Job Portal	<b>Deploying Microservices with OpenShift:-</b> <a href="https://cognitiveclass.ai/courses/course-v1:IBM+GPXX0QHN+EN+v1">https://cognitiveclass.ai/courses/course-v1:IBM+GPXX0QHN+EN+v1</a>