IBM SkillsBuild Physical Build-a-thon

Cloud App Development

Create IBM SkillsBuild Account & Cloud account

Please follow the video to create IBM Skills Build Account & IBM Cloud Account.
Go to https://bit.ly/Faculty_Buildathon2023_SkillsBuild

And follow the video: https://youtu.be/7xOyKl80iUk

Note: Make sure that all the faculty create IBM SkillsBuild and Cloud account using feature code. Our target is on feature code here.

Complete the Courses

1. **Journey to Cloud: Envisioning Your Solution Course**

   To enrol for the course please follow the given steps

   Step1: Go to IBM SkillsBuild Platform

   Step2: Go to Topics in main menu -> select IBM Cloud from the dropdown

   Step3: Scroll down to Courseware and start with Journey to Cloud: Envisioning Your Solution Course

2. **Getting Started with Enterprise Data Science Course**

   To enrol for the course please follow the given steps

   Step1: Go to IBM SkillsBuild Platform

   Step2: Go to Topics in main menu -> select Data Science from the dropdown

   step3: Scroll down to Courseware and start with Getting Started with Enterprise Data Science Course

Curriculum

IBM SkillsBuild FDP Daywise Schedule Cloud App Development - Redhat & Openshift			
S.No	Day	Content	Self Learning Content
1	Day-1	**Introduction to Modern App Development** Importance of App Modernization Platforms Used for Development Essentials for App Modernization	To enroll for the course please follow the given steps Step1: Go to IBM SkillsBuild Platform

		Important Modernization Technologies Introduction Red Hat Products of Red Hat and Architecture Red Hat's approach to application modernization? **Developer Sandbox for Red Hat OpenShift** What is the Sandbox? Get started in the Sandbox Introduction to OpenShift Dedicated Architecture concepts Working with features of RedHat Dedicated Underding the features like observe,ConfigMaps,Secrets and search **Red Hat CodeReady Workspaces** Learn launching the workspaces. Working on In-browser IDE and create the projects Edit & test the app code in workspace	Step2: Go to Topics in main menu -> select IBM Cloud from the dropdown step3: Scroll down to Courseware and start with Journey to Cloud: Envisioning Your Solution Course
2	Day-2	**Hands-on with Web-app Development** HTML Basics HTML with CSS JavaScript **Introduction to Flask** Python and Flask Environment Setup What is web framework Flask Basics and Routes, Dynamic Routing, Forms HTTP Methods Templates and Static Files, Redirect and Errors Cookies and Session	To enroll for the course please follow the given steps Step1: Go to IBM SkillsBuild Platform Step2: Go to Topics in main menu -> select Data Science from the dropdown step3: Scroll down to Courseware and start with Getting Started with Enterprise Data Science Course
3	Day-3	**IBM Object Storage** Introduction to IBM Object Storage Introducing python SDK for IBM Object Storage Creating a new bucket Uploading files to the bucket Update and delete the files in bucket Connecting Flask application with Cloud Object Storage **IBM Watson Assistant** Getting Started with Watson Assistant An Introduction to Watson Assistant Learning about Intents, Entities, Dialog Building a use case with IBM Watson Assistant Learn integrating Bot with Flask App	
4	Day-4	**IBM DB2** Introduction to IBM DB2 Database Introducing python SDK for IBM DB2 Database	

		Connecting Flask app to DB2 Database Working on Insert, Update, Delete, Retrieve. Learn creating micro-services with CRUD operations **Containerize your application** Intro and Basics of Containerization What is a Container? Containerization vs. Virtual Machine Docker Installation Main Docker Commands Building your own Containerized Image for Flask Application	
5	**Day-5**	**Kubernetes** Introduction to Kubernetes Understand the main Kubernetes Components Kubernetes Architecture Learn Kubernetes YAML Configuration File Learn to deploy with application with configuration file **Deploy the application** Deploy the application using 3 different techniques in OpenShift - Using a container image - Using a Git repo - Import from local YAML file	

Note: Make sure all the content is covered in 5 Days.

Project Use-Case

Mentorship Program - Smart Assignment Engine

Smart Assignment is a web-based application designed to streamline the process of assignment management and enhance collaboration among students, teachers, and administrators. This project aims to leverage web development technologies to create an intelligent platform that automates assignment creation, submission, grading, and feedback, thereby improving the efficiency and effectiveness of the assignment process. Students can access the platform to view and submit assignments. The application allows for secure file uploads, ensuring the integrity and confidentiality of submitted work. The system provides notifications and reminders to students about upcoming assignment due dates and any updates or clarifications from teachers.

Smart Assignment aims to enhance the assignment management process, promote collaboration, and improve educational outcomes. By leveraging intelligent technologies and providing a user-friendly interface, the application streamlines administrative tasks, enhances student-teacher communication, and facilitates a more efficient and engaging learning experience.

Note: Make sure all faculties should complete the project till Day-5 as certificate distribution will be there on last day