

# Introduction to Cloud Computing

## LAB 09c

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### Task 1: Create and configure an Azure Container App and environment

- Search for and select **Container Apps**. Select **Create**, from drop-down menu, **Container App**.

The screenshot shows the 'Create Container app' page in the Microsoft Azure portal. The page has a blue header with the Microsoft Azure logo, a search bar, and a Copilot button. The breadcrumb trail is 'Home > Container Apps >'. The page title is 'Create Container app'. Below the title, there are tabs for 'Basics', 'Container', 'Ingress', 'Tags', and 'Review + create'. The 'Basics' tab is selected. The page content includes a 'Project details' section with the following fields: 'Subscription' (set to 'Azure for Students'), 'Resource group' (set to '(new) az104-rg9' with a link to 'Create new resource group'), 'Container app name' (set to 'my-app'), 'Optimize for Azure Functions' (unchecked), and 'Deployment source' (set to 'Container image' with a description 'Bring your own container registry or build a container from a Dockerfile.'). At the bottom, there are three buttons: 'Review + create', '< Previous', and 'Next : Container >'. On the right side, there is a user profile card for 'bsse2280155@szabist.pk' with a 'Sign out' button and a 'Sign in with a different account' button.

The screenshot shows the 'Create Container Apps environment' page in the Microsoft Azure portal. The page has a blue header with the Microsoft Azure logo, a search bar, and a Copilot button. The breadcrumb trail is 'Home > Container Apps > Create Container app >'. The page title is 'Create Container Apps environment'. Below the title, there are tabs for 'Basics', 'Workload profiles', 'Monitoring', and 'Networking'. The 'Basics' tab is selected. The page content includes a 'Environment details' section with the following fields: 'Environment name' (set to 'my-environment' with a green checkmark). Below this, there is a 'Zone redundancy' section with two radio buttons: 'Disabled' (selected) and 'Enabled'. At the bottom, there are two buttons: 'Create' and 'Cancel'.

- Click **Next: Container** tab and ensure that **Use quickstart image** is checked.

The screenshot shows the 'Create Container app' wizard in the Microsoft Azure portal, specifically the 'Container' tab. The 'Use quickstart image' checkbox is checked. The 'Quickstart image' dropdown is set to 'Simple hello world container'. Under 'Container resource allocation', the 'Workload profile type' is 'Consumption', 'Number of CPU cores' is '0.25', and 'Memory size (Gi)' is '0.5'. Under 'Application ingress settings', 'Ingress' is 'Enabled'. At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next: Tags >'.

- Select the **Review and create** and then **Create**.

The screenshot shows the 'Overview' page for a deployment in the Microsoft Azure portal. The deployment is named 'Microsoft.App-ContainerApp-Portal-37508bb0-81d9'. It shows the subscription as 'Azure for Students' and the resource group as 'az104-rg9'. The deployment is marked as 'complete' with a green checkmark. A 'Deployment succeeded' notification is displayed in the top right corner, stating that the deployment was successful. The page also includes sections for 'Cost management', 'Microsoft Defender for Cloud', 'Free Microsoft tutorials', and 'Work with an expert'.

## Task 2: Test and verify deployment of the Azure Container App

- Select **Go to resource** to view your new container app.

The screenshot shows the Microsoft Azure portal interface. At the top, there's a search bar and a navigation menu. The main content area displays the 'my-app' container app overview. On the left, there's a sidebar with navigation links like 'Overview', 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Resource visualizer', 'Application', 'Settings', 'Networking', 'Security', 'Monitoring', 'Automation', and 'Help'. The 'Overview' tab is selected, showing essential information about the app, including its resource group, status, location, subscription, and tags. Below this, there are three main sections: 'Upload artifact', 'Manage your app with revisions', and 'Set up continuous deployment'. Each section provides a brief description and a 'Learn more' link.

- Select the link next to **Application URL** to view your application.

The screenshot shows the Azure Container App application page. The page has a clean, modern design with a white background. At the top, there's a Microsoft Azure logo. Below it, a heading states 'Your container app is running with a Hello World image'. Underneath, a paragraph explains that Azure Container Apps is a serverless container solution for apps and microservices. A bulleted list highlights key features: 'Simplify your container deployments', 'Manage less infrastructure', and 'Scale automatically on demand'. A 'Learn more' link is provided. The 'Next steps' section offers two options: 'Sample apps' and 'Quickstart', each with a corresponding button. On the right side, there's a large, stylized graphic of a container stack with a circular arrow around it, symbolizing the container ecosystem.