

Institute of Computer Technology
B. Tech Computer Science and Engineering

Sub: Identity and Access Management (2CSE507)

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Semester - 5

Class - A

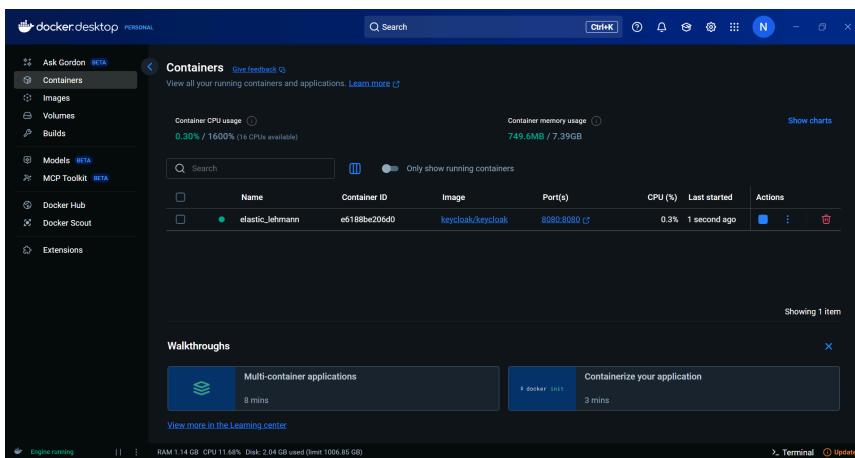
Batch – 52

PRACTICAL NO:- 6

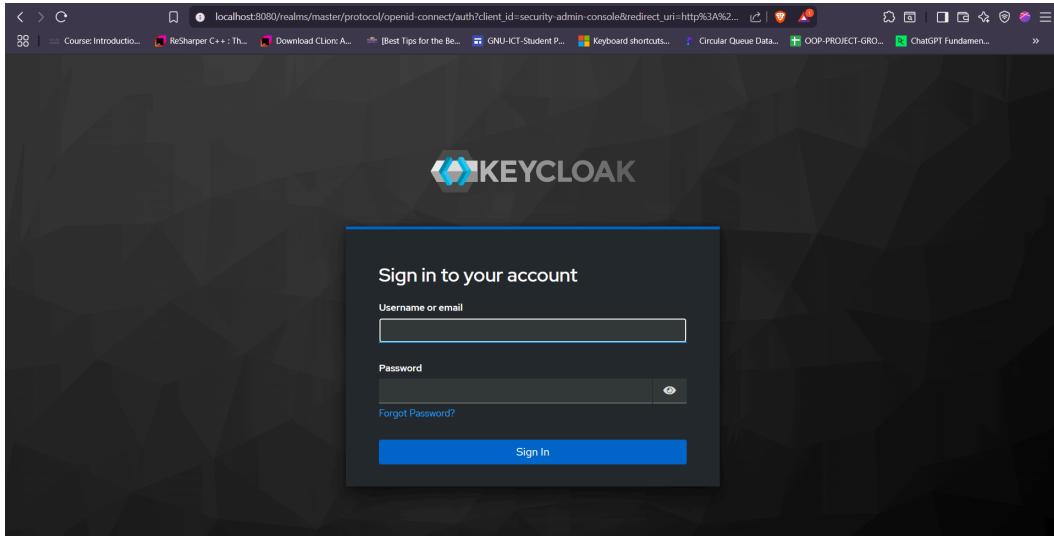
Aim : Creating a Realm and assigning admin role to users

Starting the Container:

- Open your Docker Desktop.
- In the containers tab, click the start button of the container you want to start.

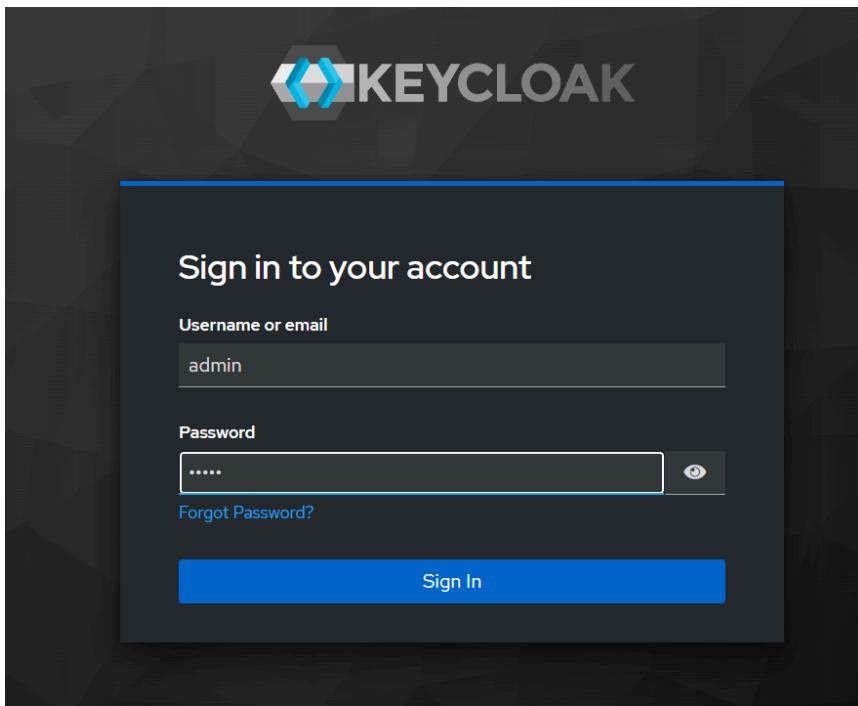


- Now open your browser and go to '<http://localhost:8080/>'.

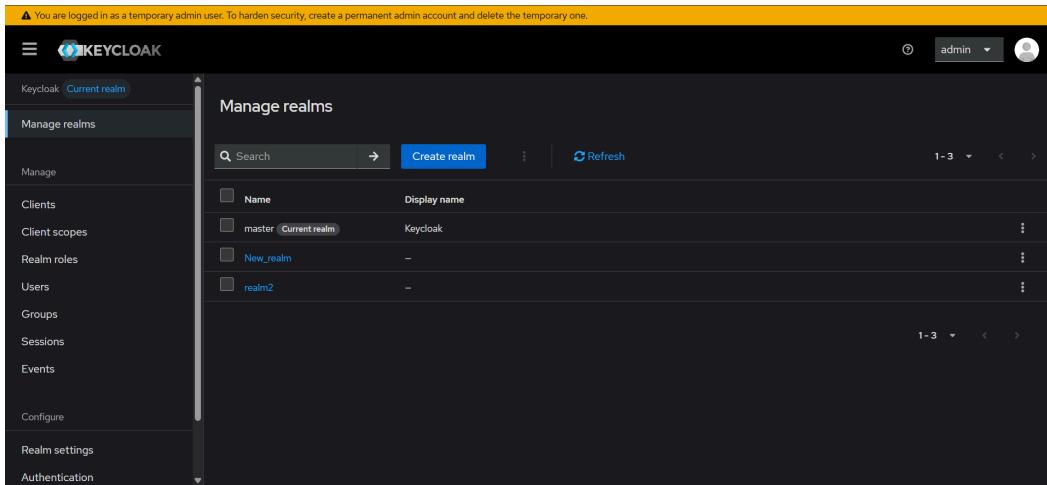


Creating a new Realm:

- Login as admin.

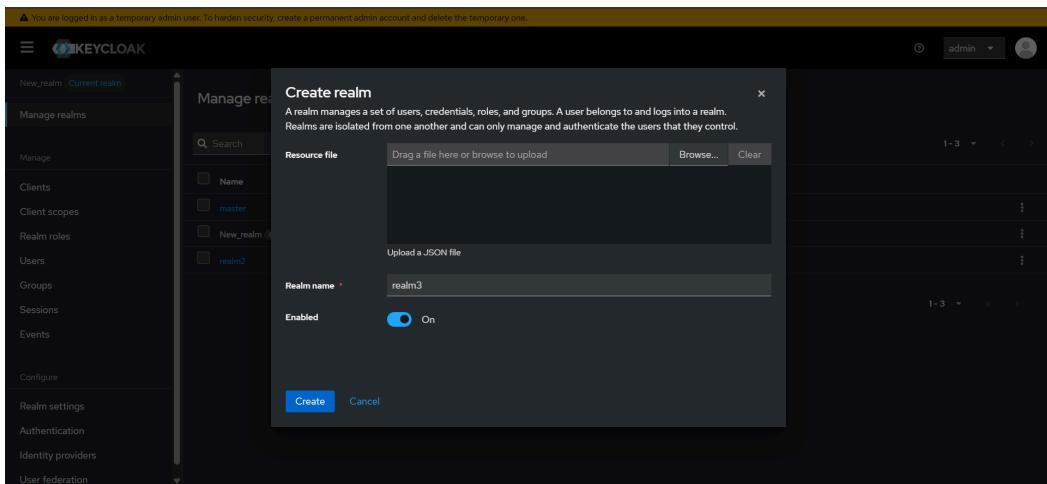


- Go to the ‘Manage Realm’ tab and click on ‘Create realm’.



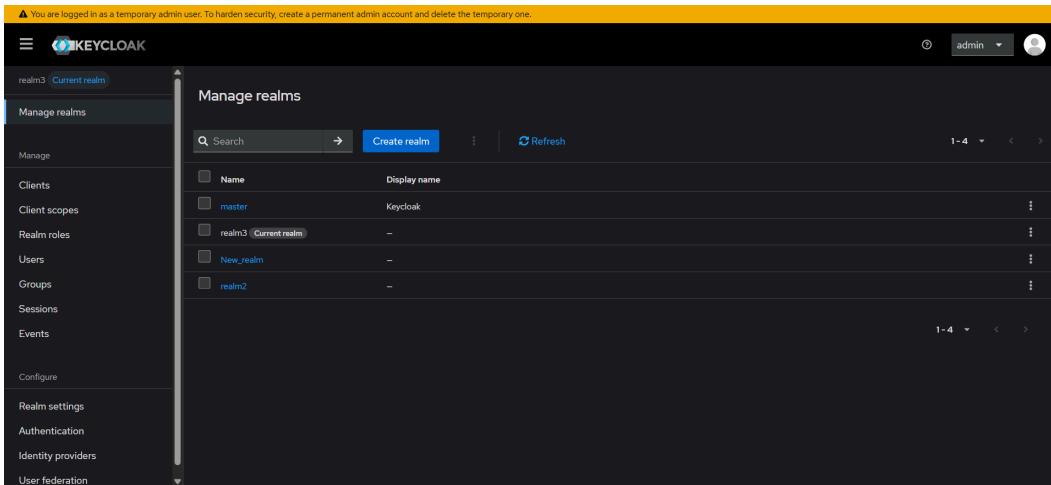
The screenshot shows the Keycloak administration interface. The left sidebar is titled 'Manage realms' and contains links for Clients, Client scopes, Realm roles, Users, Groups, Sessions, Events, Configure, Realm settings, and Authentication. The main area is titled 'Manage realms' and features a search bar, a 'Create realm' button, and a table listing realms. The table has columns for 'Name' and 'Display name'. It lists three realms: 'master' (Current realm), 'New_realm' (displayed as '-'), and 'realm2' (displayed as '-').

- Enter the realm name and create the realm.

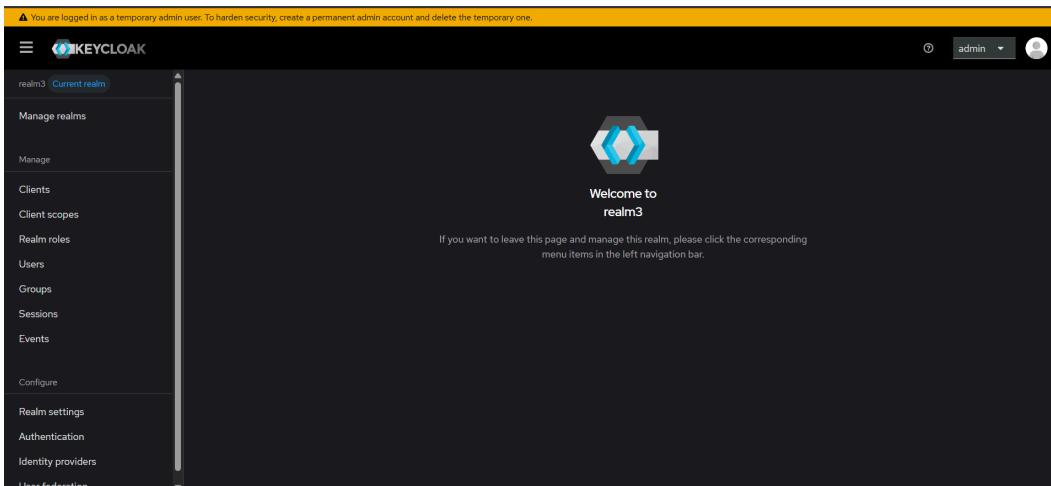


The screenshot shows the 'Create realm' dialog box. It includes a description of what a realm is, a 'Resource file' section with a file upload area, and input fields for 'Realm name' and 'Enabled'. The 'Realm name' field is filled with 'realm3'. The 'Enabled' toggle switch is turned 'On'. At the bottom are 'Create' and 'Cancel' buttons.

- To change between realms, in ‘Manage Realm’ tab, click on the realm name.



The screenshot shows the 'Manage realms' section of the Keycloak administration interface. On the left, a sidebar lists various management options: Manage, Clients, Client scopes, Realm roles, Users, Groups, Sessions, Events, Configure, Realm settings, Authentication, Identity providers, and User federation. The 'realm3 Current realm' option is selected. The main area displays a table titled 'Manage realms' with columns for 'Name' and 'Display name'. The table contains four rows: 'master' (Display name: Keycloak), 'realm3 Current realm' (Display name: -), 'New_realm' (Display name: -), and 'realm2' (Display name: -). A 'Create realm' button is located at the top right of the table. Navigation controls for pages 1-4 are at the bottom right.



The screenshot shows the 'Welcome to realm3' page. The left sidebar is identical to the previous screenshot. The main content features the Keycloak logo and the text 'Welcome to realm3'. Below this, a message reads: 'If you want to leave this page and manage this realm, please click the corresponding menu items in the left navigation bar.' Navigation controls for pages 1-4 are at the bottom right.

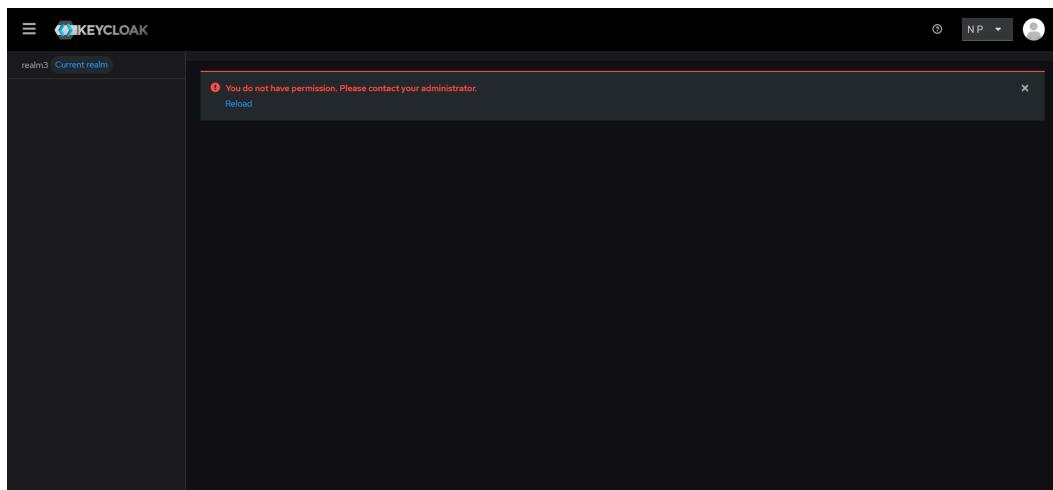
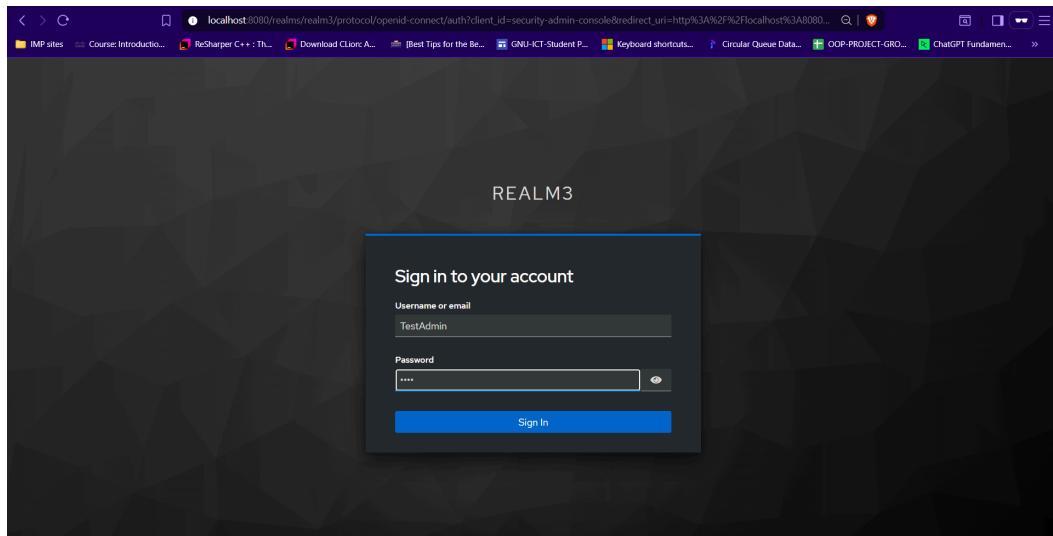
Assigning Admin permissions:

- Create a new user, assign a password to the user and save the changes.

The screenshot shows the 'Create user' dialog in Keycloak. The 'General' tab is selected. The 'Username' field contains 'TestAdmin'. The 'Email verified' toggle switch is set to 'Off'. The 'Groups' section shows a 'Join Groups' button. At the bottom are 'Create' and 'Cancel' buttons.

The screenshot shows the 'User details' dialog for the user 'testadmin'. The 'Details' tab is selected. A modal dialog titled 'Set password for testadmin' is open, prompting for a 'Password' and 'Password confirmation'. Both fields contain masked text. The 'Temporary' toggle switch is set to 'Off'. At the bottom are 'Save' and 'Cancel' buttons. The status bar at the top right indicates the user is 'Enabled'.

- Now, in another browser, open localhost:8080 and change to the realm in which you just created the user and login as the user.



- Now, change back to the browser on which you were logged-in as admin and go to the ‘role mapping’ tab of the user in the ‘users’ tab.

Name	Inherited	Description
default-roles-realm3	False	role_default-roles

- Click on ‘Assign Role’, choose client roles and select ‘realm-admin’ role and click on assign.

Name	Client ID	Description
<input checked="" type="checkbox"/> realm-admin	realm-management	role_realm-admin

- Now, switch back to the browser with the user, that you created above, is logged-in, and reload the page and you will see that the user will have access to all admin abilities like creating users, creating groups, etc. limited to that realm.

