

## Task 1

**Objective:** To practice claim and policy based authorization

**Learning Resource:** [link](#)

Suppose you are developing a basic website for PUCIT. This website has only four pages.

1. Main page
  - Contains some dummy information about the university and one image
2. Page for SE department
  - Contains some dummy information about the SE department and one image
3. Page for CS department
  - Contains some dummy information about the CS department and one image
4. Page for IT department
  - Contains some dummy information about the IT department and one image

Each of the four pages should have references to move to the other pages.

This site also contains two forms.

1. Register form
2. Login form

Both forms have the same fields which are email, password and select list. Select list contains three options i.e. SE, CS, IT.

When a user goes for login, he will enter email, password and select department. After successful login, user is moved to the main page. Main page will show references to move to SE, IT or CS pages. User can visit only one page. If user belongs to SE department, he can only visit SE department page. If user belongs to CS department, he can only visit CS department page. If user belongs to IT department, he can only visit IT department page. If user clicks to see the other department page, a meaningful error is shown to user i.e. OOPs!! You don't have access to visit this page.

## Task 2

**Objective:** To practice generic repository

**Learning Resource:** [link](#)

You are hunting a software developer job. A company called you for an interview. In the interview, you are assigned a job of saving Customer and Product data. You are asked to design forms to get input for Customer and Product data.

Customer entity has these fields: id, first name, last name, phone number, email

Product entity has these fields: id, name, description, quantity, price

You are asked to perform three operations on each entity.

1. Adding customer/product
2. Deleting customer/product by id
3. Finding a specific customer/product by id

One important instruction is to follow the principle “**DRY (Don’t Repeat Yourself)**”

Based on the above mentioned description, you have to show your talent to the interviewer by solving this problem.

**Note:** Main focus of interviewer is to follow the principle DRY

```
while (not succeed):  
    try( )
```