BCS Level 4 Diploma Digital Modular Programme in Software Development: Synoptic Project Scenarios

Example scenario

Scenario A - An application for job applicants

You can choose to focus your project on addressing the following scenario if you are unable to base your project on a real-world situation.

The problem

You are working as a software developer. You have been tasked to develop an application to be used within a job application website in response to a need to verify the identity of job applicants at an early stage due to a large volume of applications being submitted from individuals who don't meet the required criteria in terms of age and the right to work in the UK.

Requirements

The solution should:

- provide the user with an interface to input their details and attach any required files such as a covering letter and CV, or other media such as an image file.
- require the user to verify their identity by allowing them to upload a form of photo ID, such as an image of their passport or driving license.
- include the required functionality to enable a system administrator to approve an application once submitted, upon which the saved form of photo ID should be automatically deleted in order to comply with GDPR.
- include a search facility to enable an employer to search for potential candidates based on their job application data.

You can choose which programming language you use to develop your solution. You will be required to setup version control for the project. You will need to ensure your code is secure and that it has no known vulnerabilities as per OWASP or other information security standards.

As this is the first task that you have been asked to undertake for the organisation you are keen to use this as an opportunity to evaluate your own skills and identify areas for personal improvement.

Additional suggested scenarios

Scenario B - An application for a sports team

Develop a web application for a local sports team to manage attendance and fees paid by each member. There will be the requirement to upload a copy of insurance documents which should be treated as special category data. The functionality to log training goals should be included. The learner will be required to design and build a suitable solution.

Scenario C – An application for a local restaurant

Develop a web application to enable customers to view a menu, book a table, place takeaway orders. The application should also save an individual's dietary requirements to suggest recommendations for particular meals to provide a more personalised service. The learner will be required to design and build a suitable solution.

Scenario D – An application to promote local artist's work

Develop a web application for user's search for art in their local area, tag their location when visiting a piece of art, and share comments as a review. Artists can view how many visits their work has achieved and all comments shared. The learner will be required to design and build a suitable solution.