

**Databases and the Web**  
**55-407818**  
**Coursework**

**Instructions**

1. **The project** assignment for the module consists of one question which contributes **70%** to your final marks covering both elements of the web and databases.
2. The project assignment should be done **individually**.
3. The project assignment task is to develop **web application pages** that connect to a database for the business processes defined in the question. The web application should be developed using **PHP which should be connected to SQLite**.
4. The deliverable submission should use the following naming convention:  
  
DBWCoursework\_StudentID.zip  
  
example: DBWCoursework\_232208.zip
5. The submission point is via Turnitin Blackboard and Github (if applicable).
6. Please read the question and requirements carefully.

**Key Dates**

Hand-out: 1 Nov 2021, Monday, 3pm.

Hand-in: 16 Dec 2021, Thursday, 3pm.

**In-Module Retrieval**

See Appendix B

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**Question**

Bank ABC is organising a campaign for their customers. The campaign is only open to new customers to the bank. The bank would like customers to access a web page to register their interest in account opening during the campaign period (2 Jan 2022 – 30 Jan 2022) and the customers will enjoy the following benefits:

Account name: Time Deposit Account-Jan2022

Free £15 voucher – upon successful placement

Interest rate 2.88% AER p.a.

On top of these benefits, the customers stand a chance of winning £10,000 (for 10 customers),

Placement Amount	Minimum Tenure (Month)	Lucky Draw Entry
£100	6	10
£300	5	15
£500	3	25
£800	3	35
£1000	3	45
£5000	3	55
£10,000	5	60
£15,000	5	65

*(Entries are automatic upon successful deposit placement)*

Develop web application pages for the following business processes:

**Customer Page**

There are **TWO** (2) pages that need to be developed for customers' access.

1. Register for interest page

The page where customers can access and register interest to open a Time Deposit Account-Jan2022 during the campaign period. The following fields are to be captured upon submission,

- First Name
- Last Name
- Date of birth
- Month of birth

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- Postcode
- Contact number
- Product

Placement amounts and their tenures should be presented in the **dropdown** button as per the table above.

On top of the fields above, there should be additional fields that are needed for internal use (staff of the bank) such as **application status**, **application date**, **application ID**, and **lucky draw entries**. New submissions from customers should be captured as a “**new**” status.

Upon submission (register for interest), the customer will be provided with the following message,

***“Thank you for your interest to open a Time Deposit Account with us under this campaign. Your application ID is WWXXYYZZZZZZZ. Only one application is allowed per customer.*”**

***You will have xx entries for the lucky draw (stand a chance to win £10,000) upon successful deposit placement until the end of account tenure.***

***Your record has been successfully submitted. You may update your record as long as your application status is “new” by providing the application ID from this link”***

The application ID should have the following format:

WW – the first 2 letters from the last name  
XX – the first 2 letters from the first name  
YY – the last 2 letters from the postcode  
**ZZZZZZZZ** – **date****RandomNumber**

*Example:*

First Name: Zairul  
Last Name: Jilani  
Postcode: S11WB  
Date of application: 28 March 2021

The application ID will be: **jizawb2800001**

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2. Update record page

Write a page where the customer can access and input their **application ID**, **postcode**, and their **last name**. The customer would be able to update the following records:

- Product
- Withdraw my application (should be “Yes” or “No” radio button)

If the customer wishes to withdraw the application, the status of the field in the database should be updated as “**withdrawn**”. Upon completion of this process, appropriate message should be prompted to the customer.

**Admin Page**

Admin is the staff of the bank. The staff would be able to login to the page and see a **list of customers** who have registered interest in the campaign. The staff is able to **edit** the customers’ details and update status from “**new**” to “**in the process**”. The staff is also able to update the application status as follows

New, In-process, Complete, On-hold, Withdrawn

**Note:** **Application ID** is **NOT** editable even though the customer has changed their first name, last name and postcode.

Also, take note that lucky draw entries should be updated accordingly every time the product record is updated (from the admin or customers).

**IMPORTANT NOTES:**

Following requirements contribute excellent marks to your work,

- User login and authentication
- Sessions
- Audit trail for customer updates<sup>Note A</sup>
- Filter customers by status to view
- Delete customers with **withdrawn status only**
- PDF report

Note A: Since customer is allowed to update their record, the staff should be able to see who and what have been updated.

### **Assignment Deliverables**

There are three (3) **MANDATORY** deliverables for the work,

1. A video (**NOT** more than **10 minutes**) showcasing the web pages and their source codes. You will loss 15% if you do not submit this deliverable.
2. The web application source-code. Can be **EITHER** Github **OR** upload the source-code to blackboard. If the source-code is submitted via Github, make sure the project is **public** and **share the Github link the word document** in the deliverable (3) below.
3. A word document outlining the tables and their SQL statements used in the program.

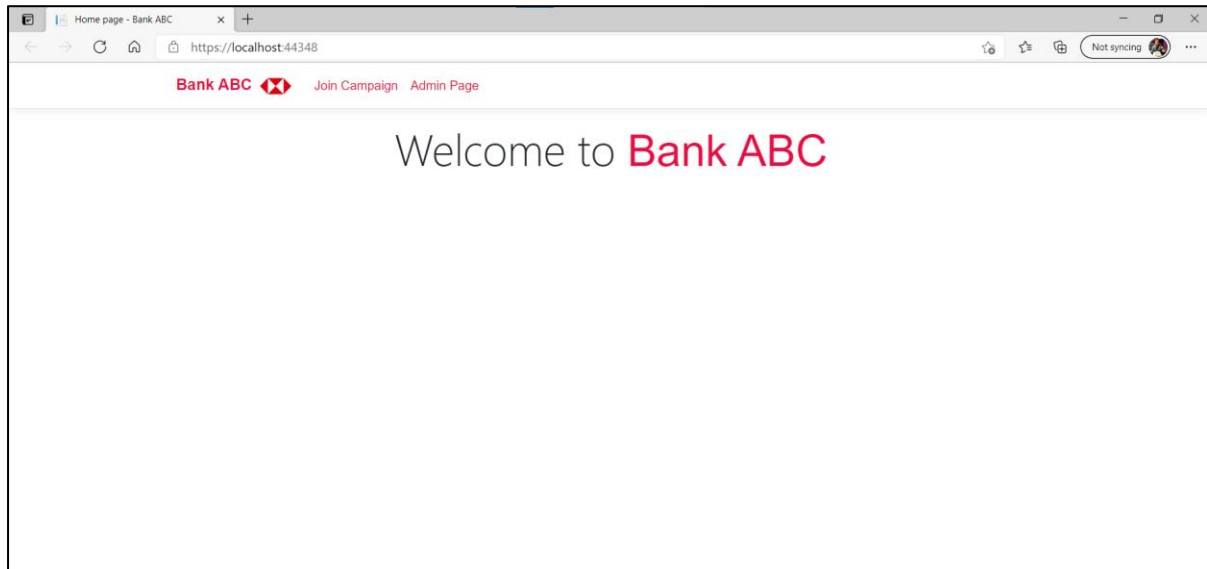
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## Appendix A

### Examples of pages (Minimal Requirements)



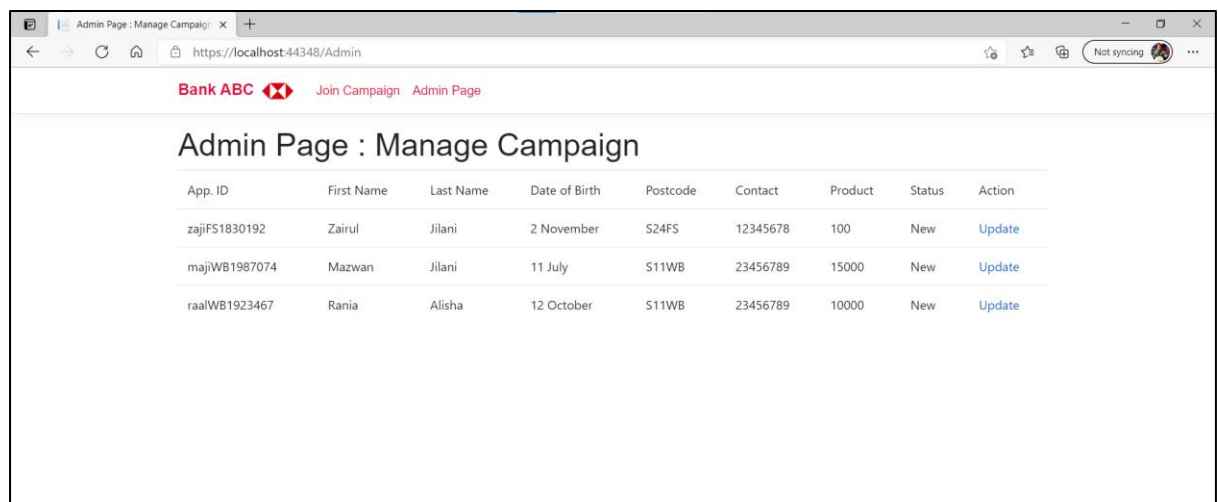
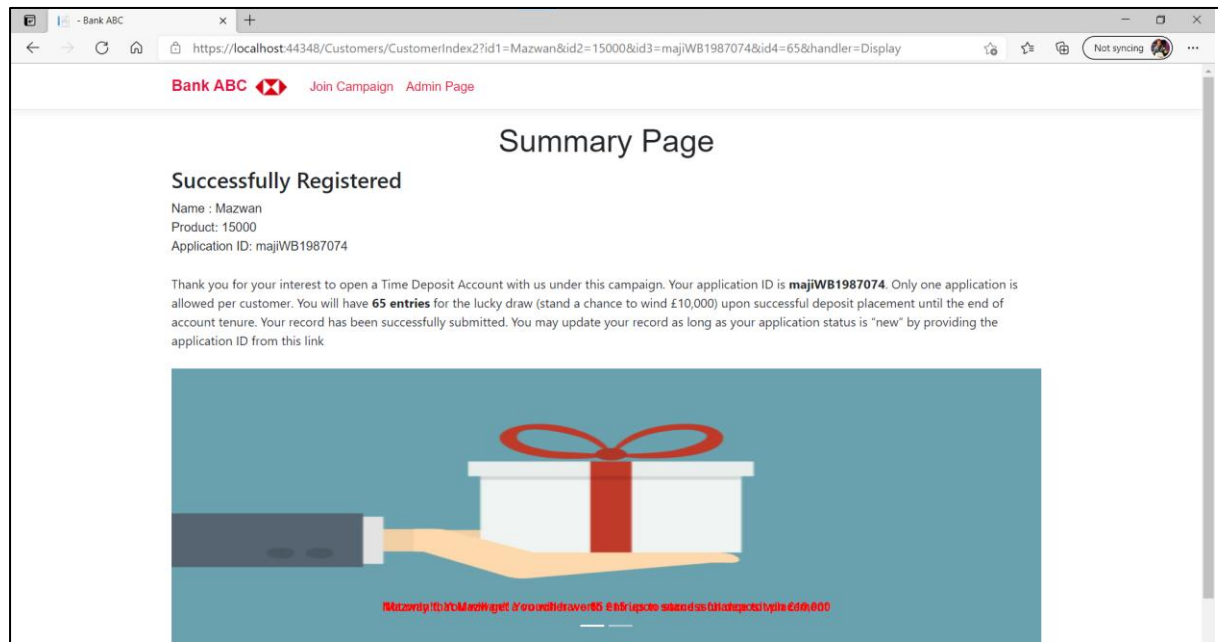
A screenshot of a web browser displaying the 'Register for Product Interest' form on the Bank ABC website. The browser's address bar shows the URL `https://localhost:44348/Customers/CustomerIndex`. The page features a header with the Bank ABC logo, a red 'X' icon, and links for 'Join Campaign' and 'Admin Page'. The main content area displays the title 'Register for Product Interest' in a large, black, sans-serif font. Below the title, there is a form with the following fields:

- First Name**: A text input field.
- Last Name**: A text input field.
- Date of Birth**: A date picker with a 'Select Date' button and a dropdown arrow.
- Month of Birth**: A date picker with a 'Select Date' button and a dropdown arrow.
- Postcode**: A text input field.
- Contact Number**: A text input field.
- Products**: A dropdown menu with the selected option '£100 6 months'.

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*(Screenshots are for guidance, your deliverable should be as per the question requirements)*

## **Appendix B**

### **In-module Retrieval**

Following first-sit assessment, In-Module Retrieval (IMR) will be offered to students achieving below 40% for this assessment task.

IMR means that you will have an opportunity to resubmit a reworked version of your original assignment, following feedback, within a short space of time (usually 5-10 working days) in order to achieve a pass grade. The maximum mark available is 40%. You will need to look out for an email from your Module Leader (to your SHU email address) shortly after the marks have been released. This will give you more details and tell you what you need to do next.

If you decide not to participate in the In-Module Retrieval attempt and subsequently do not pass the module, you will be referred which means you will have an opportunity to resubmit an assignment during the reassessment period (usually July for students on standard courses).

The time available to you to submit an IMR attempt will be less for those students who submit after the original submission deadline date (with or without an approved extension).

Further information about IMR is available on Assessment 4 Students on [shuspace](#).



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**Marking Scheme**

Section	Marks
Web application	50
Databases	50
<b>Total marks</b>	<b>100</b>

The Web Requirement (20%)	Fail <40%	Pass 40-49%	2-2 50-59%	2-1 60-69%	First >70%	Weightage
Customer register for interest page	No evidence for the page	Attempt to develop the page is shown, however plenty of errors presence	The page is delivered with minor errors	Good work in delivering the page as per the business requirement	The page is delivered beyond the business requirement and expectation, covering summary page with appropriate messages.	10%
Customer update application page	No evidence for the page	Attempt to develop the page is shown, however plenty of errors presence	The page is delivered with minor errors	Good work in delivering the page as per the business requirement	The page is delivered beyond the business requirement and expectation	10%
Admin login page	No evidence for the page	Attempt to develop the login page for admin, however plenty of errors presence and not working	The page is delivered with minor errors	Good work in delivering the page as per the business requirement	The page is delivered covering exceptional handling and session	10%

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<b>The Web Requirement (20%)</b>	<b>Fail &lt;40%</b>	<b>Pass 40-49%</b>	<b>2-2 50-59%</b>	<b>2-1 60-69%</b>	<b>First &gt;70%</b>	<b>Weightage</b>
Admin pages (view and update)	No evidence for the pages	Attempt to develop the pages is shown, however plenty of errors presence	The page/s are delivered with minor errors	Good work in delivering the pages as per the business requirement	The pages are delivered beyond the business requirement and expectation, covering PDF, filter customers by status to view, and audit trail.	10%
Function/code for getting number of entries and application ID.	No evidence for this function	Attempt to develop this feature in the web pages	These requirements are delivered with errors.	The logic for the requirements presence in the program.	Functions are written in a class and being called appropriately.	5%
Technical and code quality.	Poor development of the web application.	The student has evident the logic of developing a web application.	Good understanding of web application development in the source-code.	Very good development of a web application. Some part of the code can be improved.	Excellent development of a web application presented in the source-code.	5%
Insert record.	This requirement is not included.	Insertion of record is included but some errors exist when inserting records.	Evidence of inserting at least one record successfully.	Evidence of inserting data into more than one table successfully.	Evidence of inserting data into all the required tables successfully.	15%
Update record.	This requirement is not included.	Update of record is included but some errors exist when updating records.	Evidence of updating at least one record successfully.	Evidence of updating more than one record successfully.	Evidence of updating records on all required tables successfully.	10%

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The Web Requirement (20%)	Fail <40%	Pass 40-49%	2-2 50-59%	2-1 60-69%	First >70%	Weightage
Delete customers with withdrawn status only.	This requirement is not included.	Deletion of record is included but some errors exist when deleting records.	Evidence of deleting at least one record successfully.	Evidence of deleting more than one record successfully.	The admin staff is allowed to delete customer records who have <b>withdrawn</b> only. Customer records with other than this status are not allowed to be deleted by the admin staff.	10%
A video recording, source codes	These requirements or some parts of the requirements are not delivered.	Only one of the deliverables is submitted.	A video presentation and source codes are submitted.	Good video presentation with clear explanation on the feature delivered in the work.	Excellent presentation delivered within <b>10 minutes</b> covering the application end to end process and presented their source code.	15%
<b>Total</b>						<b>100%</b>