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| A blue and white sign  Description automatically generated BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY | **Assignments #1** |
| School of Computing and Academic Studies | COMP4976 |
| Programs: CST | Assignment 1 due: Sun Oct 6, 2024, at 11:59 pm |

EXPENSE Classification (ASP.NET MVC)

# Background

You will work on this assignment in pairs.

Last term, you developed a PHP/Laravel solution based on these familiar requirements. This time, you will tackle the same challenges with ASP.NET MVC.

Import ‘2023 02.csv’ into a SQLite database table named transactions. These transactions represent a typical monthly bank statement. Any authenticated user can upload a csv file. Subsequently, whenever a csv file is imported, it gets appended to already existing transactions in the database.

# Buckets

You will create another table named buckets that helps the customer classify expenses. An example of entries in this table are:

|  |  |
| --- | --- |
| Entertainment | ST JAMES RESTAURAT |
| Communication | ROGERS MOBILE |
| Groceries | SAFEWAY |
| Donations | RED CROSS |
| Entertainment | PUR & SIMPLE RESTAUR |
| Groceries | REAL CDN SUPERS |
| Car Insurance | ICBC |
| Gas Heating | FORTISBC |
| . . . . . . | . . . . . . |

# Reports

Your application will generate a report for any given year that shows a breakdown of expenses in the following format:

|  |  |
| --- | --- |
| Entertainment | 560.76 |
| Communication | 32.94 |
| Groceries | 237.94 |
| Donations | 173.98 |
| Car Insurance | 78.96 |
| Gas Heating | 87.02 |
| . . . . . . | . . . . . . |

In addition, you will also display a pie chart visualization of the above table (also for a given year by user).

# Additional Requirements

Your web application will have the following features:

* Allows a user to import any file with the same format. Once a file is uploaded, it is renamed with an extra extension of ‘.imported’. Each user has a separate bucket set and transactions.
* Add, edit, and delete capability of bank transactions.
* Add, edit, and delete of bucket data. Only admins manage buckets.
* A registration page allows users to register with their email and password.
* To login, a registered user must be approved by the administrator. Not anybody who registers can have access to the system. The admin would verify that an individual deserves access.
* Seed the database with:

|  |  |  |
| --- | --- | --- |
| Username/Email | Password | Role |
| aa@aa.aa | P@$$w0rd | admin |
| mm@mm.mm | P@$$w0rd | member |

* Users must be authenticated to access any page. The only exceptions are the register & login pages.
* You will deploy your application to Azure.
* Put the name and team members in the footer on the home page of your application.
* Polish the UI of your application so that it has a unique theme
* Remove any unnecessary content from your web pages

# SUBMISSION:

* Do not include unnecessary files that are not needed in your submission.
* Delete the .obj and bin folders
* Put the following information into the learning-hub (D2L) as you upload your solution:
  + The URL of your app deployed to Azure.
  + your names, BCIT ID numbers and your preferred email addresses. Avoid your my.bcit.ca email account because it has file attachment restrictions. This is necessary in case the assignment marker wishes to urgently contact you.
  + what you have NOT completed
  + any major challenges
  + any special instructions for testing your web app.
* Assignments must be zipped (.zip extension) and uploaded to the drop-box folder for Assignment 1 in D2L (Learning Hub). Do not use any compression utility other than zip.
* Your ZIP file will include all directories and files comprising your entire web app.
* Each team must make only one submission. If you make more than one submission then you should use the same file name and clearly version the file by adding \_v2, \_v3, etc

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| --- | --- | --- |
| Task | Max Mark | Actual Mark |
| Ability to import multiple files | 5 |  |
| Add, edit, and delete bank transactions | 5 |  |
| Add, edit, and delete bucket data | 5 |  |
| Registration and authentication | 2 |  |
| Reports | 4 |  |
| Deployment to Azure | 4 |  |
| Unique theme | 2 |  |
| Other   * student names on the home page * followed instructions. * Unnecessary content * Unnecessary files * Design and coding conventions * Contents & quality of D2L comments * No errors | 3 |  |
| **TOTAL:** | **30** |  |