

## 6COSC022C Coursework 2 (2022/23)

Module leader	Sriyan Fernando
Unit	Coursework 2
Weighting:	60%
Qualifying mark	30%
Description	Develop a web application
Learning Outcomes Covered in this Assignment:	L02, LO3, LO4
Handed Out:	03/11/2022 1pm
Due Date	<b>1pm Thursday 19<sup>th</sup> January 2023</b>
Expected deliverables	Electronic document and web application deployed on university servers
Method of Submission:	online via Blackboard
Type of Feedback and Due Date:	Feedback will be given during viva in tutorials following deadline submission and via Blackboard rubric.  <b>All marks will remain provisional until formally agreed by an Assessment Board.</b>

### Assessment regulations

Refer to section 4 of the “How you study” guide for undergraduate students for a clarification of how you are assessed, penalties and late submissions, what constitutes plagiarism etc.

### Penalty for Late Submission

If you submit your coursework late but within 24 hours or one working day of the specified deadline, 10 marks will be deducted from the final mark, as a penalty for late submission, except for work which obtains a mark in the range 40 – 49%, in which case the mark will be capped at the pass mark (40%). If you submit your coursework more than 24 hours or more than one working day after the specified deadline you will be given a mark of zero for the work in question unless a claim of Mitigating Circumstances has been submitted and accepted as valid.

It is recognised that on occasion, illness or a personal crisis can mean that you fail to submit a piece of work on time. In such cases you must inform the Campus Office in writing on a mitigating circumstances form, giving the reason for your late or non-submission. You must provide relevant documentary evidence with the form. This information will be reported to the relevant Assessment Board that will decide whether the mark of zero shall stand. For more detailed information regarding University Assessment Regulations, please refer to the following website: <http://www.westminster.ac.uk/study/current-students/resources/academic-regulations>

## Coursework Description

### Introduction

In this coursework, you will describe the implementation of the application you designed in the first Coursework.

### 1. Implementation

Your chosen application should be implemented using PHP and CodeIgniter for the server-side component. The server-side component must also feature a REST API and the use of JSON for data exchange with the client. On the client-side, you must feature the use of a Javascript framework, such as (but not limited to) Backbone in at least one view/page.

Your application **MUST** be deployed on the university web server and use the university student MySQL database. **DO NOT LEAVE IT TO THE LAST MINUTE TO DO THIS!** I will be unable to offer technical assistance at the last minute if your application or your links don't work.

For this section of the report, you should include **two things**:

1. The URL of your application on the university web server
2. Your code listings. Include them as text and not screenshots. Please head each file of code listed in the report with the file name (in **bold**). For example,

#### **Birthdays.php**

```
<?php
defined('BASEPATH') OR exit('No direct script access allowed');
class Birthdays extends CI_Model {
    function getAge($day,$month,$year)
    {
        $dob = $day . "-" . $month . "-" . $year;
        $today = date("Y-m-d");

        $diff = date_diff(date_create($dob), date_create($today));

        return $diff->format('%y');
    }
}
```

### 2. Evaluation of Design from CW1

For this section of the report, I want you to describe what changes you needed to make to your design in order to complete your application and get it working. For example, did you need to change a class by adding extra methods? Or another controller? Did you need extra tables, or extra columns in a table, or fewer?

Give a bullet-point list of the changes you needed to make, with a brief explanation of why each change was necessary.

Finish with a brief paragraph giving your view of how useful your design was to completing the application, given the changes you needed to make. What would you have done differently had you started it again?

### 3. Discussion

Once you have complete your application, read this article

<https://dev.to/gypsydave5/why-you-shouldnt-use-a-web-framework-3g24>

This a blog post whose author argues against the use of web frameworks. When you have read and understood the article, answer the following questions:

Q1: In your own words, give three reasons the author gives for not using frameworks. What are the arguments he gives to support these reasons? (max 500 words)

Q2: In your view, what do you think is the most important reason the author gives against using frameworks? Do you agree or disagree with the argument the author gives in support of this reason? (max 500 words)

### To be submitted

A single document in Word or PDF containing:

1. The URL of your application, clearly highlighted at the top of the report
2. Your code listings, as text, clearly indicating file names. SQL code should also be included.
3. Evaluation of design
4. Discussion

### Indicative Mark Scheme

Marks out of 100 will be allocated between the different components as follows:

- |                                      |       |
|--------------------------------------|-------|
| 1. Implementation of web application | -60%  |
| 2. Design evaluation                 | - 15% |
| 3.Q1                                 | - 15% |
| 4.Q2                                 | - 10% |

**An excellent submission** (between 70-100%): your implementation will feature a well-written application, that fully meets essential requirements, most of the desirable requirements and some luxury requirements. There may be one or two issues, but these will be minor or related to requirements identified as luxury in CW1. MVC guidelines will be fully respected. The implementation will feature good use of REST and JSON, and there will be good broad use of a JS framework throughout the client. Code will be clean, well-organized, with useful clarifying comments. Evaluation of design will make clear what changes needed to be made during the course of implementation, and the reasons for these changes.

Answers to the two questions will feature clear and well-structured explanations in the students' own words (not paraphrased or generic), showing good understanding of the question and the relevant issues raised by the author. Spelling and grammar will be good.

**A good submission** (60-69%): all essential and most desirable requirements will have been met. There may be some bugs, but these should be relatively minor. REST API may not feature good use of URL naming conventions or request methods may not be used wholly according to REST conventions. MVC guidelines will be fully respected. Good use of JS framework on at least one view/page. Code will be clean and well-organized, although commenting may be redundant or lacking.

Evaluation of design will describe what changes needed to be made during the course of implementation, and the reasons for these changes. However, descriptions may be brief or lacking in necessary detail and language may be generic.

Answers to the two questions will feature clear explanations mostly in the students' own words, but may feature some limited paraphrasing or generic language. Answers may not be well-structured. Spelling and grammar will be good.

**A fair submission** (40-59%) : most essential requirements will be met. There may be some bugs or problems, only one or two of which are serious. REST may have been attempted, but lack proper conformance with, for example, naming conventions or use of request methods. MVC guidelines

respected. JS framework may not have been used. Code well-organized, for the most part. Commenting may not be present or may be generic.

Evaluation of design will describe some of the changes needed to be made during the course of implementation, but may not make clear the reasons for these changes. Descriptions may be brief or lacking in necessary detail and language may be generic.

Answers to the two questions will attempt explanations, but may feature paraphrasing or generic language. Answers will not be well-structured. There may be issues with spelling and grammar.

**A failed submission** (less than 40%) will not address all components of this specification. Implementation will demonstrate serious issues with missing essential features and/or serious errors, such as (but not limited to) no REST API and/or breach of MVC guidelines and/or use of technologies outside the scope of this coursework (such as no framework or a different server-side framework). A different application to the one designed in CW1 may also have been attempted.

The evaluation of design and answers to the questions will be generic, lack coherence and feature discussion that is unrelated. Overall, grammar, structure and organization will be poor.

## **Finally**

All work must be done on an individual basis - group work is NOT sanctioned.

If you need any clarification about any of these issues, please contact me by email (at [sriyan.f@iit.ac.lk](mailto:sriyan.f@iit.ac.lk)) or in the tutorials or make an appointment to see me in my office.

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