

ONCAMPUS Aston IY1 Assignment Brief

Academic Year 2022-23

Please read this document carefully. It includes the learning outcomes, assignment task, information about plagiarism and marking criteria. Please speak to your tutor if you have any questions.

Programme	International Year 1
Module code	CS1IADIYO
Module name	Internet Application and database
Module leader	Dr C Mushi
Assessment type	Portfolio 3: A Database-Driven Website
Assessment title	Movie ticket booking
Deadline date	Sunday, 11:59PM, 30 th July 2023
Weighting	This assessment counts for 20% of your overall grade for this module
Pass mark	40% <i>*please note your University may require a higher grade for progression.</i>
Assignment summary	This portfolio asks you to demonstrate your ability to design and develop a database-driven website. You will be working on three portfolio tasks including databases, HTML, CSS & JS as well as PHP.
Submission of work	Link: The front page of the assignment must include the full name and CEG number of all group members.
Feedback	The results of the portfolio will be released after the official review and confirmation of the assessments.

Important details

Module learning outcomes
on successful completion of this module, learners will be able to: - <ul style="list-style-type: none">• Design and implement well-presented, dynamic, client-side web pages by making use of appropriate languages, frameworks and libraries.• Design and implement web services and applications using server-side scripting languages and associated frameworks and libraries.• Design, implement and administrate a database-driven system based on database principles, entity-relationship modelling and SQL• Integrate database, client- and server-side technologies to create and deploy a secure and performant database-driven web application.

This assignment requires you to demonstrate that you can:

Upon successful completion of this module, students will have demonstrated that they can:

- Design and implement well-presented, dynamic web site that includes client-side and server-side programming.
- Design and create a database required for the web site
- Integrate the database with client- and server-side technologies

Assignment purpose:

This purpose of the assignment is to assess the ability to design and develop a database-driven website.

Assignment instructions:

Each portfolio task should be completed independently and individually

Plagiarism

We expect all submitted work to be your own words (apart from in-text quotations), written in a style that reflects your English language level. If you copy other people's work and present it as your own, this is called plagiarism and is a serious academic offence.

The full details of our policy on academic misconduct can be found at the back of the Programme Handbook.

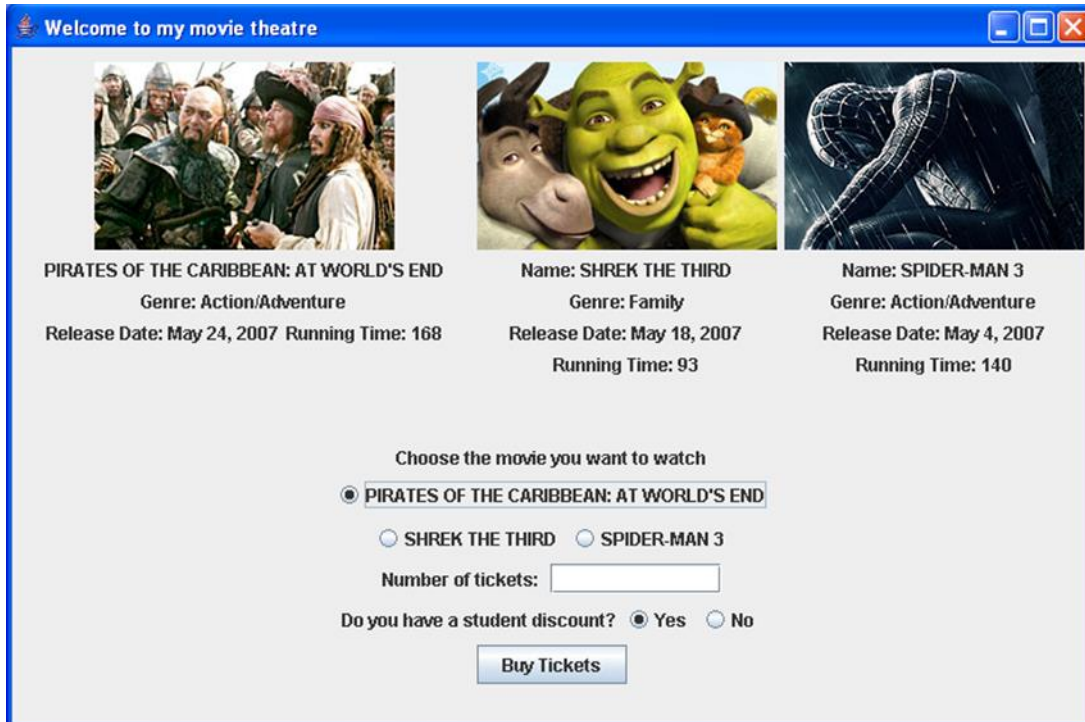
You must complete a portfolio submission sheet and attach this to the front of your assignment. Submissions without this sheet may be rejected and may result in a mark of 0 being awarded for this assignment.

Individual Assignment

Scenario:

This set of portfolio tasks ask you to demonstrate your ability to design and develop a database-driven website.

You are expected to develop a database-driven website for movie ticket booking.



The screenshot shows a web browser window titled "Welcome to my movie theatre". The interface displays three movie posters in a row: "PIRATES OF THE CARIBBEAN: AT WORLD'S END", "SHREK THE THIRD", and "SPIDER-MAN 3". Below each poster, the movie's name, genre, release date, and running time are listed. Below the posters, there is a section titled "Choose the movie you want to watch" with three radio buttons. The first radio button, labeled "PIRATES OF THE CARIBBEAN: AT WORLD'S END", is selected. Below the radio buttons, there is a text input field labeled "Number of tickets:". Below the input field, there is a question "Do you have a student discount?" with two radio buttons, "Yes" (selected) and "No". At the bottom of the form, there is a "Buy Tickets" button.

Movie Title	Genre	Release Date	Running Time
PIRATES OF THE CARIBBEAN: AT WORLD'S END	Action/Adventure	May 24, 2007	168
SHREK THE THIRD	Family	May 18, 2007	93
SPIDER-MAN 3	Action/Adventure	May 4, 2007	140

Choose the movie you want to watch

☒ PIRATES OF THE CARIBBEAN: AT WORLD'S END

☐ SHREK THE THIRD ☐ SPIDER-MAN 3

Number of tickets:

Do you have a student discount? ☒ Yes ☐ No

The website displays the selection of movies currently playing in the cinema. The user should be able to choose the movie and book the required number of tickets. The customers can be of two types. Guest customers and Member customers. Guest customers will not require a login and will be able to book the tickets without any discounts offered.

The member customers could be regular, senior or children. The member customers will require a login and will be able to book the tickets with discount offered based on the type of the member.

You are expected to create a dummy screen to indicate the processing of payments.

The website primarily involves details of the movies currently played, their show timings, ticket prices as well as customer orders generated and maintained.

The website should be developed for two types of users:

1. Customers – Purchase movie tickets, Bill calculation with/without discounts, browsing the availability etc.

2. Employees – Update the currently played movies, introducing various discount offers, maintain the customer records, review the populate movies etc.

Portfolio Task 1: Database

- You need to design your own database to store the event information with proper relations and constraints, adhering to at least 3rd Normal Form.
- A user should have a name and contact information (e.g. email, phone, etc.) and payment details.
- A movie includes a genre (comedy, action etc.), name, description, duration and other information you think is appropriate.
- Create E/R diagram indicating the relationship between the tables. The cardinality and degree of relationship must be indicated in the diagram.
- You should manually populate the tables with some at least 3 data entries for each table.

Portfolio Task 2: HTML, CSS & JS

- The user interface must be easy and convenient to use. E.g., on each page, it should have links pointing to the main page or related pages; the page should be readable with appropriate text font, size, colour and background colour.
- The web pages should be clean and tidy.
- The names of the links should be descriptive; the output and information should be in adequate descriptive text and neat, clear format.
- The use of images, links to external web sites, style sheets must be evident. It is required to use external style sheets connected to multiple web pages.
- At least one form should be developed as part of one of the web pages.
- Minimum 5 web pages must be developed

Portfolio Task 3: PHP

The necessary PHP scripts should be generated to interact with the database and make changes to the database

The php scripts should be written to

- i. Process the username and password entered by the user and validate the authenticated user
- ii. Maintain the cart where the user has added the chosen movie tickets
- iii. To process the order and save the order in the database
- iv. Allow the employees of cinema to add, delete, modify the movies into the database
- v. Register the new users who want to buy movie tickets
- vi. Make the tickets unavailable when all the tickets are sold for a particular movie.

Submission Observation

This portfolio is the final portfolio examination for Term 3 CS1IAD and should be submitted as a zipped folder via an assignment section in Moodle at the date shown above. It carries 20% of the overall marks for the CS1IAD module. The folder should have the report document as well as the HTML, CSS, JS, PHP, and SQL files.

The deadline should be observed. Ensure you clearly understand the task and get proper clarification where it is not clear to you. You should demonstrate responsibility, and independent thinking in your work, attention to the detail, and the ability to meet the set goals. **Any form of plagiarism would not be tolerated and would disqualify the submission.**

Your weekly follow up progress by the tutor forms part of the formative assessments and should show your understanding of where you are, be able to explicitly explain the respective concepts and to justify the content.

The submission should have the cover page, the template of which you are provided in the assignment section. The structure of your report is outlined below and should be observed. References should be included at the end of your documentation and before the appendices and must follow the style outlined in this link:

[34645-LIS_citing_references.pdf \(aston.ac.uk\)](#)

The submission should observe the following format:

- **Arial**; font size:12; black font colour (except where there are illustrations/diagrams); line space: 14; alignment: justify.
- All pages should be numbered except the first page. There should be an outline of your project (the table of contents) after the cover page
- Properly headed with sub-headings following a consistent format.
- Different points should be put in different paragraphs (no use of bullet points)
- Diagrams and tables should be clear (not blurred), captioned and numbered.
- Check your grammar and spellings before submission.
- Make sure you have gone through the attached checklist before your submission.

Submit your portfolio report on the link directed by the tutor. The file should have the initial of your first and your full last name, the term and module code, e.g. CMushi-Term_3_Portfolio_3_CS1IAD.

Failure to observe the format will lead to the considerable reduction of marks.

Marking criteria

	SOURCE CODE
First ≥70	You have developed <u>competence with complex programming concepts</u> through independent study and rely on professional documentation and tools.
Upper Second 60-69	You are <u>working toward competence with complex programming concepts</u> through independent study, adapting code from examples and tutorials.
Lower Second 50-59	You can <u>create new code</u> to solve problems. Your code is broken into <u>sensible functions</u> which make <u>competent use of variables, loops, and conditionals</u> .
Third 40-49	You can <u>adapt existing code</u> to solve new problems. Your code is broken into functions with <u>basic use of variables, loops, and conditionals</u> .
Fail <40	You can make simple changes to existing code, but this is <u>insufficient to solve new problems</u> . You have not demonstrated programming fundamentals.
Late	0

	PROFESSIONAL PORTFOLIO	
First ≥70	An <u>engaging account</u> of the project, demonstrating <u>excellence with several skills</u> , and identifying useful lessons through <u>reflection and evaluation</u> .	First ≥70
Upper Second 60-69	A <u>readable account</u> of the project, demonstrating <u>competence with several skills</u> , and identifying useful lessons through <u>reflection and evaluation</u> .	Upper Second 60-69
Lower Second 50-59	A <u>readable account</u> of the project, demonstrating <u>competence with several skills</u> . The account is <u>primarily reflective</u> , focusing on what happened.	Lower Second 50-59
Third 40-49	A <u>readable account</u> of the project, demonstrating <u>modest ability with at least one skill</u> . The account is <u>primarily reflective</u> , focusing on what happened.	Third 40-49
Fail <40	A <u>comprehensible account</u> of the project, that <u>fails to demonstrate the basic use of a skill</u> taught this semester.	Fail <40
Late	0	Late

Portfolio Outline & Assessment Criteria

Assessed Criteria	Description	Marks	Assigned Grade
AC01	1. Requirements analysis 1.1. Introduction, purpose, objectives (6) 1.2. Significance of the task (2) 1.3. The activity timeline (2) 1.4. The Gantt chart (2) 1.5. Equipment & budget planning (2)	14	
AC02	2. A clear, structured, and standard report writing following the guideline in the project brief: 2.1. Document outline structure (the table of contents and paging) (4) 2.2. The headings and sub-headings (2) 2.3. Font-family, colour & size (2) 2.4. Line spacing & text-alignment (2) 2.5. Tables & figures (2)	12	
AC03	3. The design specification for the database-driven website: 3.1. The navigation structure (4) 3.2. The CSS Box Model (4) 3.3. Storyboard for webpages (10) 3.4. Database design: 3.4.1. Conceptual design (data descriptions & schema) (6) 3.4.2. Logical design (ERD, normalisations) (10) 3.4.3. Physical design (relational models) (4)	38	
AC04	4. Testing & implementation 4.1. The code analyses with screenshots based on the portfolios (22) 4.2. Strategy to implement the product (4)	26	
AC05	5. Reflection & critical evaluation 5.1. Questionnaire (2) 5.2. Critical feedback review (4)	6	
AC06	Portfolio submission following the guidelines.	4	
Total Marks	Total project assessment	100%	
Grade	Percentage contributed to the overall module assessment	20%	