2021\_22

Mega Independent Cinema Experience - MICE GP2

This assignment relates to the MICE Case Study used in GP1. However, there has been an update on the specification. So, first read the case study update in Section 1. The tasks you need to complete are in Section 2 of this document. Some supporting materials are provided in Section 3. Submission arrangements are explained in Section 4. The marking criteria are listed in Section 5. A final checklist to help you work through the tasks is also provided at the end of this document (Section 6).

1. Case Study Update

It has been decided to split the implementation of the MICE system between a Database Team and your CS/ITDE System Development team. The Database Team has been given the briefing which you have seen in your Database module. GP2 will focus on activities to do with booking seats for performances, gaining entry to a performance and membership of the MICE club described in the MICE Case Study

The following update has been provided:

* The management of staff is NOT within the scope of GP2. So Employee data is NOT relevant to GP2. However, job roles (such as: manager, booking office clerk) may be relevant.
* Section 2 of the MICE case study describes the membership system. You should only consider customers making books for performances and the running of the membership scheme. Details of discount schemes, or other activities available to members, are NOT relevant at this stage of design
* Section 3 of the MICE Case Study describes the booking system and the entry system.
* Assume that MICE will have one web-based booking system available to all who need to use it. Members/cinema goers will be able to make bookings either directly by personally accessing the bookings web page, or by phoning a booking office of an individual cinema, or by booking through Central Advanced Ticket Sales (CATS). All users will use the same web-based booking system, which will be hosted on servers in CATS.

* Currently, ushers check booking details against the performance details before allowing entry to a performance. Eventually, they will be replaced by automated entry checkers, but the technology for this is not yet in place. However, the system should be able to accept a booking id and check whether it has the same the performance id to which the user wants to gain entrance and then, either allow or reject entry. Ushers may need to check bookings made for a performance.
* Note: A screen will only have one performance a day, all seats at a particular screen are the same price and seats are not numbered, so a booking is for a number of seats not for specific seats. However, the system should check that there are seats available, before making bookings.
* The DB team (your DB assignment) specifies, in some detail, a range of database queries. In GP2, you should NOT duplicate individual queries. However, you may consider broad categories of queries e.g. "management reports" or "performance enquiries"

2. Tasks and Outcomes

The tasks you need to complete for this assessment**:**

* **Part A: Project Management**
* **Part B: Use Case Diagram**
* **Part C: TWO Use Case Descriptions**
* **Part D: Level 2 Data Flow Diagram**
* **Part E: Wireframes**

Part A: Project Management [20 marks]

You will be expected to use project management software to support your teamwork. and should start using this from the start of your work on this assignment. Evidence for this should be available as appropriate screen shots and combined into a single document

* Communication - provides ways for members to communicate with one another. Produce:
  + one combined screen shot showing short message sequences between team members at the start of this assignment, in the middle and at the end of the assignment. (we would expect to see some communication before the end of this term and in January).
* Kanban - provides a way of identifying and tracking the progress of project tasks. Produce:
  + one starting screen shot to show disposition of tasks at the start of this assignment
  + one midterm screen shot showing some completed and some to-be-completed tasks
  + one final screenshot showing completed tasks
* Repository - allows team members to save their work in a central repository, so that they can both see and amend each other's contributions, or return to a previous version when necessary. Produce
  + one screen shot from the middle of assignment showing contributions from team members to a central repository

You may us any appropriate software. For revision please see Unit 3 : L07 & L08

Note: You are only required to submit some evidence of these tools. However, in cases of disputes about relative contributions of team members, staff my request further evidence in support of your claims.

Part B: Use Case Diagram [25 marks]

In GP1 you identified and documented a subset of system requirements by using User Stories and Volere shells. At the client’s request, a more complete set of the system’s functional requirements is needed. Before you draw this diagram you should (Just as in Tutorial T07):

* identify human actors who will be using the MICE system
* list tasks they may wish to perform
* identify further non-human actors/other systems that may be involved

Draw a UML Use Case Diagram for the system to be implemented for MICE

The diagram should use appropriately labelled UML icons, to show:

* the main actors - those human/external systems who will be using the system
* possible use cases
* at least, ONE use case connected to others by <<include>>
* at least, ONE use case connected to others by <<extend>>

Part C: TWO Use Case Descriptions [15 marks]

Using the Use Case Descriptions Template provided, document

* UCDescription1 - describe the activities of your use case for Cancel a membership
* UCDescription2 - describe the activities your use case for Make a booking

Note: a booking is for one performance and includes a main film goers name and a number of seats. The film goer may/may not be a MICE member entitled to discounts

Part D: ONE Level 2 Data Flow diagram. [ 15 marks]

A level 1 Data Flow Diagram has already identified the following functional areas:

* Manager processes (relating to managing performances)
* Customer processes (relating to bookings & membership)
* Usher processes (relating to entry to performances)

Draw a **Level 2** Data Flow Diagram of processes which are likely to take undertaken by the Customer (ONLY).

These processes should:

* be consistent with Use Cases with the Customer as an actor in your diagram for Part B
* have "CATS" as the location
* show data flows from/to external sources/sinks
* show data flows from/to data stores within the system - these are likely to be Database tables but, at this stage, they do not need to be fully normalised
* Note: processes relating to managing performances belong to "manager processes" and should NOT be considered in this diagram

Part E: Storyboards [25 marks]

Design a potential HCI (Human Computer Interaction) solution to implement interactive processes associated with the system identified in Parts B & D. The Storyboard should model what the user interface would look like to the actors (i.e. main users), and how it should behave, showing inputs/outputs and navigation between screens.

The following screen designs should be created to show the overall style of the interface design:

* **Storyboard 1** - a main pre-login screen
* **Storyboard 2** - the main post-login screen, which should include access to the processes and data consistent with your use cases, but actions not required by the Customer should be “grey’ed out”.
* **Storyboard 3** - the main screen for processes required by the Customer
* **Storyboard 4** – ONE screen showing details required/provided for ONE of the processes which could be selected by the Customer

Your collection of storyboards should show:

* controls to allow users to navigate between, and within, screens as necessary
* data display areas (i.e. outputs) that are relevant to users in deciding and selecting a course of action
* data entry areas (i.e. inputs) that allow users to interact with the system and update its information

The format and structure of storyboards should be consistent with information given in lecture and tutorial and take account of the notes on annotations, diagram standards and resources below.

3. Supporting Materials and References

* Canvas (lecture/seminar notes and discussion) in Units 3 - 7
* The following web sites provide free software tools for drawing diagrams (subject to usual conditions)

<http://Balsamiq.com>

http://dia-installer.de/

https://www.draw.io/

* You may also just use the drawing facilities of MS Office or MS Visio

4. Submission arrangements

**Submit ONE zipped file to Canvas by 26/01/22 by 12.00 containing**:

* **Part A evidence of 5 screenshots combined into a single document**
* **Parts B - E should be submitted as a single report**.
* Diagrams produced by various tools/graphics packages into a .jpeg (or other image format)
* Any hand-drawn documents (if you have any) can be scanned/imaged using an image format
* Completed templates for Part B are already in MSWord

Import and combine all of the above into a single MS Word document.

* Completed **GP2 “Roles & Contributions Form”** & **“Assignment Briefing Sheet”** signed by members of the group – as for GP1, these should be a scanned document or an image of the original

**Only ONE submission per group is required**

5. Marking Criteria

**The assignment must be completed in your assigned teams (of 4– 5) only. Individual submissions or those with incomplete teams will not be accepted without the prior consent of the module leader.**

**5.1 Notes on marking criteria:**

***Lower*** ***marks*** typically indicate that templates and diagram are incomplete contain errors/omissions/poor understanding of the case study, or do not conform to the diagram conventions e.g. the incorrect use of arrows on a use case diagram. ***Higher marks*** will indicate that not only do diagrams use the appropriate icons, but also show an understand of the requirements of the case study and the appropriate use of design tools

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Actual Mark** | **Max Mark** |
| **Part A: Project Management** |  |  |
| Evidence of communications |  | 4 |
| Evidence of the 3 uses of Kanban |  | 12 |
| Evidence of the use of Repository |  | 4 |
| **Total Part A** |  | **20** |
| **Part B: Use case Diagram** | | |
| Appropriate choice of actors |  | 5 |
| Appropriate choice of use cases |  | 5 |
| ONE use case connected to others by <<include>> |  | 3 |
| ONE use case connected to another by <<extends>>. |  | 3 |
| Completeness of your choice of actors & use cases |  | 6 |
| Correct Use Case Diagram conventions |  | 3 |
| **Total Part B** |  | **25** |
| **Part C: Use Case Descriptions** | | |
| UCD1:"Cancel membership" template |  | 5 |
| UCD2:"Make a booking" template |  | 5 |
| Appropriate use of template conventions |  | 5 |
| **Total Part D** |  | **15** |
| **Part D: Data Flow Diagram** | | |
| Processes consistent with use case Diagram |  | 3 |
| Appropriate data stores |  | 3 |
| Appropriate sources/sinks |  | 3 |
| Appropriate labels for data flows |  | 3 |
| Correct use of diagrams conventions |  | 3 |
| **Total Part C** |  | **15** |
| **Part E: Wireframes** | | |
| correct use of graphical notation |  | 5 |
| appropriateness/completeness of wireframe set |  | 10 |
| quality of design |  | 10 |
| **Total Part E** |  | **25** |
| **FINAL TOTAL** |  | **100** |
| **% CONTRIBUTION TO MODULE GRADE** |  | **12** |

5.2 Marking Scheme – Team Contribution

As a team you should consider and submit the “**GP2 Roles and Contributions Form**” posted with the assignment. This asks you to give a percentage “contribution” that each of you has made to GP2. % contributions should add up to 100%. **For a fuller explanation, please see the GP1 specification**

**UH Grading Criteria:**

Your raw final mark out of 100 will be **scaled to be worth 12%** for the module overall. To obtain a % mark for each section : your mark/section total \* 100.

Example: part A mark of 15/25 \* 100 gives 60 which is considered "very good" - see below

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Generic Grading Criteria | no merit | clear fail | marginal fail | satisfactory | good | very good | excellent | outstanding |
| Marks in % | 0 - 19 | 20 - 29 | 30 - 39 | 40 - 49 | 50 - 59 | 60 - 69 | 70 - 79 | 80 - 100 |

6. Assignment Checklist

*This is a summary of the tasks for you to work through as a checklist. Full details are given elsewhere.*

|  |  |  |
| --- | --- | --- |
| **Task** | Use the **discussion** on Canvas to ask any questions | **Done** |
| 1 | Read (and re-read) the **case study and Section1 Case study update** (above), making annotations and carry out some additional research where required. | o |
| 2 | Set up your team's project and communicate using communication s/ware**.** Use **kanban** facilities to identify tasks & their management. | o |
| 3 | Agree & produce the team's **Use Case Diagram.** | o |
| 4 | Download ‘**GP2 Use Case Descriptions**.docx’ and make sure you have two copies | o |
| 5 | Agree & complete the team's **TWO** **Use Case Descriptions** using the template | o |
| 6 | Agree on your teams **Data Flow Diagram** | o |
| 7 | Agree & complete **Wireframes** for the user interface | o |
| 8 | Collect evidence for your team's use of communications, repository and kanban | o |
| 9 | Complete the **Assignment Briefing Sheet (ABS)** as a team. | o |
| 10 | Complete the **Roles and Contribution Form** as a team. | o |
| 11 | Integrate parts A-E into ONE MSWord document | o |
| 11 | Collect all documents for **parts A - E. report, signed R&C Form, signed ABS into ONE zipped file** | o |
| 12 | **Submit** by the date and time shown on Canvas. | o |