Group Assignment - Database Prototyping
Games Rental System

This is a **group assignment** with groups normally consisting of 4-5 students. You should notify the Module Leader Ismini Vasileiou ismini.vasileiou@plymouth.ac.uk by email of the membership of your group by Friday 27th November 2015 10am. If you do not do this, you will be assigned to a group. A list of groups will be posted on the DLE in the Assignments section and you should check this to ensure you are in the correct group. You may not change your group without the agreement of the Module Leader.

The objective of the assignment is to use evolutionary prototyping to develop a database application for a Games Rental Shop. You are required to submit a **Group Report** together with a zipped MS Access file containing your *relational* database application and to give a **demonstration** of this product.

Submission of the Group Report

You should submit the Group Report which should be 2000 words, and the MS Access file by Monday 11th January 2016 at 12 o'clock on the DLE site. The names of the group must be written on front page of the report. You are also required to give a 15 minute demonstration of your MS Access product during the week beginning 11th January 2016 in Portland Square B328. You will have to provide your own laptop - in the case you cannot provide one let Ismini know well in advance. Please ensure that you have an additional copy of your MS Access product to use for the demonstration.

You must submit all the elements of the coursework online on the DLE.

Please note that the University enforces a penalty of zero percent for work submitted after the published deadline without valid extenuating circumstances.

Demonstration date and time

Demonstration times will be posted on the DLE in the Assignments folder by Friday 18th December 2016 and will take place during the week beginning Monday 11/01/2016.

Deliverables

An outline of the required system was provided as part of the formative assessment and you should refer to this. It is likely that you will want to modify your models as you clarify the requirements. The models should be kept up to date as you develop the prototype database towards your final product so that the versions included in your report reflect the system as submitted.

Group Report

A suitable outline structure for the report is given for guidance and is not exhaustive. Any appendices do not contribute to the word count (max. 2000 words [+/- 10%]).

Introduction
  Objectives
  Background information
  Method of Approach
  Project plan

Analysis & Design
  Data Modelling – Logical Data Model and supporting table definitions
  Definition of key requirements (should refer toFunctional requirements)
  Needs of different users (Manager, Shop Assistant, Member)

Development
  Features of Access used including outline details of Forms, queries, etc.
  Problems encountered and any deviations from the design with reasons
  Management of the development process *(keep a diary as you do this)*

Testing
  Outline of methods and results

Evaluation / Critical Review
  Suitability and completeness of the solution
  Further requirements (what else you would like to do & what you would do
    differently)
  Group involvement and evaluation of the Project Management

Database Product

Your application must provide facilities to add, delete and edit records, and include the necessary queries to run the system. Different users (shop counter staff, management and members) will require different functions. Your group will need to establish the data requirements and associated rules. Marks will be gained for intelligent choice of data types, validation rules and data formatting.

Suitable sample data will be required to test and demonstrate the application. A small amount of example data, from tables in the existing system, was provided for the normalisation tasks. However, this may not be logically structured and will certainly not include suitable data for all the tables required for your replacement system.

Do not disable any of the standard MS Access windows as these must be available to the marker. The underlying structure of your application will be examined. You are advised to ensure you backup your work regularly and check for viruses.

> **Criteria for assessment of database product**
> 1. Structure and functionality of application
> 2. Conformance to requirements of the different users
> 3. User interface (the system should be simple and logical to use)
> 4. Screen design (uncluttered forms, use of colour)
> 5. Queries and reports (including suitable management reporting)
> 6. Validation of data entry
> 7. Use of more advanced features such as subforms, user parameters, macros, etc.

Demonstration

The 15 minute demonstration should involve all group members. It will be informal (with no role playing) and viewed only by staff involved in the assessment. Any member of the group may be questioned regarding the analysis, design and development of the MS Access application. You should plan your demonstration to show the best features of your product taking account of the criteria listed above. This is your chance to show off and "sell" your application.

Client Participation

The shop manager (role played by Ismini Vasileiou) will be available during normal practical sessions to answer your questions about the requirements and to comment on your prototype as it develops. You will be given time during these practicals to check your design, to clarify and prioritise the requirements with the shop manager and to get feedback on your prototypes. You are required to use these opportunities for client participation and details of the feedback must be included in the report appendices. **It is essential that you start work on the first prototype as early as possible.**

You may decide to limit some of the complexity or features of your prototype but the more you attempt to include the greater the scope for gaining marks. You must ensure that you include all essential features required to provide a useable system. The shop manager can help clarify what is essential.

Assessment and Feedback

Report

(mark out of 40)

	Excellent	Good	Fair	Satisfactory	Poor
Quality of Report Writing					
Introduction					
Analysis & Design					
Development					
Testing					
Project Management					
Evaluation / Critical Review					

Product

(mark out of 60)

	Excellent	Good	Fair	Satisfactory	Poor
Structure & Logic					
Functionality					
Basic requirements					
User requirements					
User interface					
Screen design					
Queries and reports					
Level of Sophistication					

Group Members:		Total:	/100

Report

(mark out of 40)	Excellent	Good	Satisfactory	Fair	Poor
Introduction (5)					
Analysis & Design (5)					
Development (10)					
Testing (10)					
Evaluation/Critical Review and Project Management (5)					
Quality of Report Writing (5)					

Additional Comments

Product

(mark out of 60)	Excellent	Good	Satisfactory	Fair	Poor
Structure and functionality of the application (15)					
Conformance to needs of different users (5)					
Appropriate validation of data entry (10)					
Logical User Interface and screen design (5)					
Use of features such as queries etc (20)					
Provision of suitable management reports (5)					

Additional Comments

Functional Requirements	easy to use	fully functional	partially functional	little or no function	not provided
Add/Amend a Member					
Add/Amend a Game					
Add/Amend Game Copy					
Issue a Game Copy rental					
Renew a Game Copy rental					
Return a Game Copy rental					
Manage an overdue Game Copy rental					
Reserve a Game Copy					
Cancel/delete a Reservation					
Create a Rental History record					
Add/amend Catalogue information (such a Review or Screenshot)					
Add/Amend a Rental Rate					
Add/Amend a Distribution Company					
Add/Amend a Supplier					
Search Catalogue on criteria such as Game, Genre and Age Rating					

View Game(s) and/or Game Copy(ies)					
View/Report Rental(s)					
View/Report Rental History					
View/Report Member(s)					
View/Report Reservations					
View/Report overdue Rental(s)					
View/Report Members overdue					
Report popular Games					

(some spaces to add your own)