MONASH University
Information Technology

FIT9132 Introduction to Databases

2020 Semester 1

Assignment 1A - Conceptual Model - Monash Art Union (MAU)

Assignment weighting 5% - Lecturer in Charge: Lindsay Smith

Monash Art Union (MAU) is a company which accepts artworks from artists and offers these artworks to galleries around the country for display and potential sale. The galleries display the artworks supplied by MAU as part of their exhibitions. A registered MAU customer may, while the artwork is being displayed, decide to purchase the item. MAU charge a standard percentage of the price at which the artwork is sold as their commission (note this does not need to be recorded as part of the model). The gallery is paid a standard percentage of the sale price as its commission, this percentage is negotiated per gallery and so may vary from gallery to gallery (this gallery percentage must be recorded as part of the model). The remainder of the sale price goes to the artist.

MAU assign an artist code to each artist which the company represents. MAU record the artist's name, their contact address and telephone number (not all artists supply a telephone number). When an artist has completed an artwork which they wish to sell through MAU, they contact the company and offer the work to be sold by MAU. MAU maintain for each artist the number of works which MAU currently hold in stock for that artist.

All artworks accepted by MAU are assigned an artwork number specific to a particular artist. For example artist 1234 will have artworks 1, 2, 3 etc and artist 4567 will also have artworks 1, 2, 3 etc. The title of the artwork, the date the work was accepted into the MAU system and the minimum price at which the artist is prepared to sell their work are recorded. The work may be sold for any price above this such that the artist receives at least this minimum amount and the gallery and MAU commission requirements are satisfied.

All artworks are assigned a style which represents the style of the work. The artwork styles used by MAU are listed here: https://www.wikiart.org/en/paintings-by-style. A particular item may be classified as a parent style such as "Chinese Art" or one of the child styles of Chinese Art such as "Ink and Wash Painting" (only one such style is attached to each artwork). MAU wish to be able to determine the parent style for any child style MAU have in their system.

Each artwork is also assigned a media description as listed here: https://www.wikiart.org/en/paintings-by-media (only one media description is applied to each artwork).

A gallery is identified by a gallery id. MAU record the name of the gallery, the gallery manager's name, the address of the gallery and the contact phone number for the gallery (all galleries are required to provide a contact number).

Art collectors who are interested in purchasing an artwork must register with MAU as a customer before they are able to make any purchase. Each customer is identified by their customer id. The customer's name, address and contact phone number are recorded. If the customer is a business customer their business name is also recorded.

A gallery considers the artworks which MAU has on offer and then requests and exhibits (displays) the artwork in its gallery with the intention of generating a sale. The date at which the exhibit starts is recorded. If the item generates little interest then the gallery will return the artwork to MAU. At a later date, after it is back at MAU, the gallery might request and display the same artwork again.

When an artwork from MAU stock is sold, the sale is assigned a unique sale id. The artwork, date of the sale, sale price and customer who purchased the item is recorded. MAU is interested in identifying which exhibit generates a particular sale.

REMEMBER you must keep up to date with the Moodle assignment 1A forum where further clarifications may be posted (this forum is to be treated as your client).

Please be careful to ensure you do not post anything which includes your reasoning, logic or any part of your work to this forum, *doing so violates Monash plagiarism/collusion rules* and has significant academic penalties.

You are free to make assumptions if needed however they must align with the details here and in the assignment forums and must be clearly documented (see the required submission files).

TASKS

Please **ENSURE** your **name and ID are shown on every page of any document you submit**. If a document is a multipage document, please also make sure you include page numbers on every page.

GIT STORAGE

All working files, as you work on this assignment task, ***must be stored in GIT and must show a clear history of development***. Your work for this task **MUST** be saved in your working directory in your Assignment 1A folder and ***regularly pushed to the FIT GitLab server*** to build this history of development. Any submission with less than two pushes to the FITGitLab server will incur a grade penalty of 10 marks (a 10 mark deduction).

Students must regularly check that their pushes have been successful by logging in to the web interface of the FIT GitLab server, you must not simply *assume* they are working. Before submission, via Moodle, you **must** log in to the web interface of the GitLab server and ensure your submission files are present on the GitLab server.

Task to complete:

Using LucidChart, prepare a **FULL conceptual model** (Entity Relationship Diagram) using crow's foot notation for the Monash Art Union (MAU) described above.

- For this FULL conceptual model, include:
    - identifiers (keys) for each entity
    - all required attributes, and
    - all relationships. Cardinality (min and max) and connectivity for all relationships must be shown on the diagram.
- **Surrogate keys must not be added to this model**.

Your model must conform to the FIT9132 ERD standards listed in tutorial 3.

Submission Requirements

Assignment 1A:

Due: Wednesday 22nd April (Week 5) 5 PM

The following files are to be submitted and **must exist** in your FITGitLab server repo:

- A **single page pdf file** containing your full final conceptual model. Name the file **mau_conceptual.pdf**. This file must be created via File - Export (or Download As) - PDF from LucidChart (**do not use screen capture**) and must be able to be accessed with a development history via GIT. You can create this development history by downloading your PDFs and committing/pushing to GIT as you work on your model.
- A PDF document containing any assumptions you wish to make your marker aware of (create the document in MS Word or Google Docs and save it as PDF). Name the file **mau_assumptions.pdf**. If you have made no assumptions submit the document with a single statement saying "No assumptions made". The source document, as an MS Word document must be available in your GitLab account (for Google Docs simply download as Microsoft Word before adding to your repo).

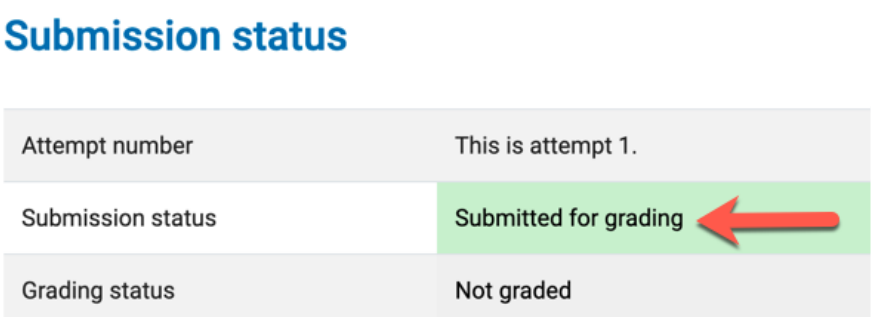
These **two PDF files must be submitted via Moodle before the due date/time** (times are expressed in Aust/Melbourne local time). Do not zip these files into one zip archive, submit two independent PDF files.

Late submission will incur penalties as outlined in the unit guide (5 marks deduction per 12 hours or part thereof).

Please note we **cannot mark any work on the Git Server**, you need to ensure that you submit correctly via Moodle since it is only in this process that you complete the required student declaration without which work **cannot be assessed**.

It is your responsibility to **ENSURE** that the files you submit are the correct files - we strongly recommend after uploading a submission, and prior to actually submitting in Moodle, that you download the submission and double-check its contents.

Your assignment **MUST** show a status of "Submitted for grading" before it will be marked.



If your submission shows a status of "Draft (not submitted)" it will not be assessed and **will incur late penalties after the due date/time**.

Please ***carefully*** read the documentation under "Assignment/Tutorial Task Submission" on the Moodle Assessments page.

Marking Rubric

	Outstanding (HD)	Adequate (Range P - D)	Not Adequate (N)
Identified the required Entities [30 marks]	• All/most entities identified. • All/most keys are correctly identified. • No "extra" entities included	• Majority of entities identified. • Majority of keys are correctly identified.	• None or few of entities identified. • None or few of keys are correctly identified
Identified the correct attributes for each Entity [30 marks]	• All/most required attributes identified and placed in correct entities. • No "extra" attributes included	• Majority of required attributes identified and placed in correct entities.	• None/few required attributes identified and placed in correct entities.
Identified the required Relationships [10 marks]	• All/most required relationships identified. • No "extra" relationships included	• Majority of required relationships identified.	• None/few required relationships identified. .
Identified correct Connectivity and Cardinality for each relationship [20 marks]	• All/Most of depicted relationships Connectivity and Cardinality correctly identified.	• Majority of depicted relationships Connectivity and Cardinality correctly identified.	• None/few of depicted relationships Connectivity and Cardinality correctly identified.
Able to correctly use the required notation convention and be consistent in its usage. [10 marks]	• All notations in the model are consistent and follow FIT9132 ERD standards.	• Most notations in the model are consistent and follow FIT9132 ERD standards.	• Few notations in the model are consistent or follow FIT9132 ERD standards.
Able to correctly push the model to FITGitLab server with a development history of at least two pushes.			If less than two pushes showing a clear development history a ***grade deduction of 10 marks applied***.