



MONASH University

Information Technology

FIT2094 Databases

2021 Semester Summer B

Assignment 1A - Conceptual Model

Monash Dental (MD)

Learning Outcomes: 2, 3 (see Unit Preview)

Assignment weighting 5%

Assignment marked out of 100 and released as a grade out of 5

Monash Dental (MD) provides dental services such as fillings, scalings, extractions etc to its patients. For each service, MD records a service code, service description and the MD standard fee for this service. The actual fee charged to a patient for a particular service may be varied from this standard fee. These services are provided by a range of professionals (providers) that MD employ. Each provider is assigned a provider code. MD records the provider's name, the type of provider they are (for example general dentist, orthodontist, endodontist etc), and the room number where they normally treat patients. Some services require a particular provider while other services are able to be provided by a number of providers.

MD patients are assigned a patient number. The company records the patient's name, date of birth, the residential address, contact phone number (all patients are required to provide a contact number for the purpose of confirming appointments) and Medicare number (if applicable). Some patients are covered by a private medical insurer for dental treatment (a patient can only be covered by one insurer at any point in time). MD gives each such insurer an insurer code and records the company's name and contact phone number.

Patients contact Monash Dental and make appointments to see a provider. Each appointment is booked with only a single provider, the provider is assigned when the appointment is first recorded. There is a possibility that a patient needs more than one appointment per day (e.g., having an X-Ray procedure in the morning and coming back in the afternoon for re-evaluation). An appointment will require one or more services depending on the work required. For an appointment, MD records the appointment date and time and the room number in which the consultation (appointment) will take place - in some circumstances this room may not be the provider's normal room, for example, due to the need to use specialist equipment. The reception

staff, based on the patient's requirements, **set an appointment length as either short, standard or long.** The staff who schedule appointments will also ensure that the allocated provider can provide the services which will be required during this appointment, your design is not required to enforce this, although these staff must be able to look up which providers provide which services if required.

Providers require the assistance of one or more dental nurses during an appointment. **Each nurse is assigned a nurse number - MD also records the nurse's name and their contact number.** At least one nurse is assigned to each appointment as the head nurse for that appointment.

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

To view Assignment 1A only posts, select the Assignment 1A forum from the Categories list in the left panel.

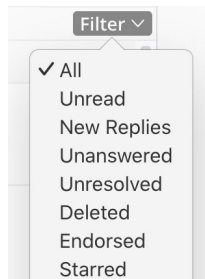
CATEGORIES

- ☐ General
- ☐ Workshops
- ☐ Tutorials
- ☐ Software related help

☒ Assignment 1A



Once selected you can Filter the posts via the Filter option at the top of the list of posts:



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** you include your **name and ID 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 marks 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.

The task to complete:

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

- For this FULL conceptual model (ERD), 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 FIT2094 ERD standards listed in the session 3 tutorial document.

Submission Requirements

Assignment 1A:

Due: Wednesday 20th January 2021 4 PM (AEDT)

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 (ERD). Name the file **md_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 **md_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 of 5 mark deduction per 12 hours or part thereof late. Submissions are not accepted beyond 7 days late.

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.

Submission status

Attempt number	This is attempt 1.
Submission status	Submitted for grading 
Grading status	Not graded

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]	<ul style="list-style-type: none"> All/most entities identified. All/most keys are correctly identified. No "extra" entities included 	<ul style="list-style-type: none"> Majority of entities identified. Majority of keys are correctly identified. 	<ul style="list-style-type: none"> None or few of entities identified. None or few of keys are correctly identified
Identified the correct attributes for each Entity [30 marks]	<ul style="list-style-type: none"> All/most required attributes identified and placed in correct entities. No "extra" attributes included 	<ul style="list-style-type: none"> Majority of required attributes identified and placed in correct entities. 	<ul style="list-style-type: none"> None/few required attributes identified and placed in correct entities.
Identified the required Relationships [10 marks]	<ul style="list-style-type: none"> All/most required relationships identified. No "extra" relationships included 	<ul style="list-style-type: none"> Majority of required relationships identified. 	<ul style="list-style-type: none"> None/few required relationships identified.
Identified correct Connectivity and Cardinality for each relationship [20 marks]	<ul style="list-style-type: none"> All/Most of depicted relationships Connectivity and Cardinality correctly identified. 	<ul style="list-style-type: none"> Majority of depicted relationships Connectivity and Cardinality correctly identified. 	<ul style="list-style-type: none"> 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]	<ul style="list-style-type: none"> All notations in the model are consistent and follow FIT2094 ERD standards. 	<ul style="list-style-type: none"> Most notations in the model are consistent and follow FIT2094 ERD standards. 	<ul style="list-style-type: none"> Few notations in the model are consistent or follow FIT2094 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.