COSC344 Assignment 1 Database Design

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Documentation of attribute domains:

Attribute domains for entity “Patient”

* patient\_id is a varchar type instead of an integer as it is alphanumeric, additionally this is a unique identifier for “Patient” (primary key).
* first\_name and surname are both varchar types as it stores Strings with a maximum character length of 50 as which is the most sensible length for names.
* address is a varchar with a maximum character length of 200 as it will need to store characters and numbers in the attribute.
* Email is of type varchar with the length set to 320, as 320 is the maximum theoretical length of the email address which includes the local and domain parts of an email.
* Phone\_num is a varchar with a max length 25, to ensure landlines, mobile phone numbers can all be stored.
* Gender is a varchar with max length of 50 to allow all users to specify their gender.
* DOB is a datetime type
* Age<18 would be a Boolean type as it just needs to state whether the patient qualifies for under 18’s, government subsidizing fee.
* Health\_cond would be a varchar with max length 100
* Allergies would be a varchar with max length 100

A single “Patient” will have 1 or many bookings.

A single “Patient” will have 1 or many payments to pay. (Unless patient qualifies for government subsidy <18 then it will process as a 0$ payment)

Attribute domains for “Staff”

* Staff\_id is varchar type instead of an integer as it will be alphanumeric, also this is the unique identifier for “Staff” (primary key).

Documentation and justification of any assumptions or non-obvious design decisions:

We are assuming the following when creating the ERD and documentation report.

* “Patient” must have at least 1 booking to qualify as a patient.
* If a “Patient” is under the age of 18, they qualifies for government subsidy then their payments will process as a 0$ payment.

Documentation for contribution to the project

Both members (Yuki Yoshiyasu & Leon Chen) worked evenly on the development of the conceptual level ERD.

Documentation of attribute domains:

Documenting “Patient” entity - Yuki