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This project requires me to create database model of the Australian hospital information website for a client. I started producing a UML diagram of the entities and the relationships in regards to the MyHospital website to try to replicate it. I was told to replicate only the two services in the website such as elective surgery and emergency department. This project is only done by me.

I started creating an entity that describes a hospital. I had attributes such the name, an id, location, how many beds they have, whether it’s public or private, and the contact information of the hospital. Since each hospital may have an emergency department or performed elective services, I created an entity for each of them describing their attributes as well. I also did associations between two entities that have unique names along with their multiplicity.

From these entities, statistics entities branched out to cover different categories of statistics from the different services. That way, the primary key attributes from the superclass can be inherited by those subclass statistic entities based on the elective surgery service and emergency department.

These different categories of statistics are waiting time for both elective surgery and emergency department, percentage of service received within the recommended time by patients, the percentage of patients leaving in four hours after they arrived and the length of time that 90% of the emergency department patients depart.

Each hospital would provide 0 to many services so I made an entirely new entity just for hospital services that would list the all the services that a hospital provide. Since I have to have unique primary keys for an entity, I end up making both the hospitalID and service together as a primary key.