Overview The objective of this assignment is to measure your understanding of the basic concepts in the relational database model and using entity-relationship model for database design. The assessment is in two parts, split into four tasks which cover Basic ER Modelling and Basic Relational Modelling. The tasks are as follows. Part A: Entity-Relationship Modelling (12 Marks) 1. Design and plan for the implementation of a database system, diagramming the design to a high standard using UML notation through the diagramming tool Lucidchart. 2. Model the activities of an organisation and present the model as an Entity-Relationship (ER) diagram. Analyse this ER diagram, and possibly modify it, based on additional client requirements. 3. Map an ER diagram into a relational database schema, showing every step of the mapping. Part B: Relational Database Model (8 Marks) 4. Answer a series of short questions about a Relational Database model. To complete this assessment, you must be familiar with Lucidchart, which is covered during the Week 1- 4 activities. Assessment criteria This assessment will measure your ability to: • Describe various data modelling and database system technologies. • Explain the main concepts for data modelling and characteristics of database systems. Course learning outcomes This assessment is relevant to the following course learning outcomes: CLO1 Describe the underlying theoretical basis of the relational database model and apply the theories into practice. CLO2 Explain the main concepts for data modelling and characteristics of database systems. CLO3 Develop a sound database design using conceptual modelling mechanisms such as entity-relationship diagrams. CLO4 Develop a database based on a sound database design.