Objective

The primary objective of this assessment is:

- To provide students practical experience of developing a demonstration prototype database system and writing SQL query statements.
- To enhance student's group work skill in a collaborative environment.

Project Specification

Amazing Australia Tours (AAT) is one of Australia's leading tour operators that specialises in exceptional touring in regional Australia offering the premium accommodation and unique choices in the key destinations. With the recent growth in the demand for regional tourism, the top management has realised the need for a database application to assist with the administration of the client booking of the tours. The requirements collection and analysis phase of the design process has been completed and provided the following data requirements specification for the database:

- 1. AAT employs a range of staff for its day-to-day operations. Staff details such as name, address, contact phone number, email, hire date, and position are recorded in the system. Each staff member is identified by a unique identification number within AAT.
- 2. The operator keeps a record of all clients who have either taken a tour or booked to take a tour with AAT. Each client is identified by a unique identification number. Client details such as name (including first name and last name), age, gender, mobile number, email address, and emergency contact number are recorded in the system.
- 3. Each client may provide a list of preference for their tours. The system stores client preference details including preferred type of accommodation, star rating for the accommodation, point of interest (e.g. Art galleries, historical landmarks, museum, sightseeing etc). Additionally, a client can leave a comment requesting their special needs.
- 4. AAT assigns unique registration number to each guide who registers with the operator expressing their interest in guiding tours. The registered guides are appointed on an ad hoc

basis. For each guide, the database stores details such as name, registration date, contact phone number, email highest qualification (high school, diploma or certificate), years of experience, hourly rate, and a set of tours that they guide.

- 5. AAT arranges mentoring program for newly registered guides. The operator appoints experienced tour guides with more than 10 years of experience as mentors who take new guides as observers to provide training and coaching. Each tour guide may have at most one mentor within the operator and a mentor can have at most 5 mentees.
- 6. The system also keeps track of all tours, past and future. Each tour has a unique destination, length in days, maximum group size, age range for the participants, cost per person, official language for the tour and a list of guides who can guide the tour.
- 7. A client can book a tour by calling a receptionist over phone or using the website. For each booking, a client chooses a tour, the start date, number of persons, and leaves any general requirements/comment for the tour. Each booking is processed by a staff member generating a unique booking identification number. The system also stores the end date, the status for each booking (e.g. completed, in-progress, in-the-future) and the guide for the tour.
- 8. Each client receives an itinerary for their booking. Each itinerary consists of a list of the dates that the tour covers. For each date, it includes departure point, departure time, short description of activities, and the place of accommodation for the day.
- 9. All over Australia, AAT has a list of accommodations that they housed their tourists in. An accommodation can be a hotel, or a rented room from a rental company, or a rented room from a private person. The system keeps records of these accommodations by storing name, address, postcode, state, star rating, type of accommodation and URL.
- 10. On completing a tour, clients are asked to share their experience of that tour with AAT. The system records each customer review including review date, overall rating, and general comments.