BSc. (Hons) in Computing

Enterprise Computing

Lecture 2 – database revision

CLASS EXERCISE

The following is a problem description on which previous years CA was based. Please read it, and answer the questions below.

The Problem Description

Your work place is situated in a semi-remote location culinary-wise, except for the restaurant next door, which has excellent food but is a bit expensive to eat lunch at every day. A take-out lunch is delivered to the office each day at noon. Employees take turns to gather the lunch order each day, but as the office is spread out over three floors, it is quite a chore, and no one likes doing it. A web-based ordering system seems the obvious solution.

Typically, people would order a sandwich, a drink, maybe a dessert, or sometimes just fruit and a packet of crisps or chocolate bar. Sometimes the lunch company would ring in the morning with today's special offers, or tell us of a new sandwich they had added to their range.

You have been assigned the task of developing the lunch time ordering system, which allows your colleagues to order lunch, and allows the lunch company to maintain what's available on a given day.

As this is a Java development house, you are required to use JEE compliant technologies in developing your solution. The IDE used by the company is NetBeans. All applications developed by the company must have a JUnit test suit implementing test cases for each

application, and supporting documentation explaining the test cases, and justifying technology choices made.

Note: 3 person groups will need to add additional functionality. For example:

- Allow custom made sandwiches (type of bread; fillings; butter/mayo)
- Cater for dietary requirements (nut allergy, coeliac etc.)

To Do:

Design the database for this application as follows:

1. Model the data requirements using an ERD, ensuring all entities translate to relations in 3rd normal form
2. Write the SQL Create statements for each entity.