Week 6 Seminar & Pre-class activities

Q1. Classes and Associations

System description

Each Uber Delivery Driver gets a report each night tallying all their deliveries for the previous 24 hours. They also get a summary of their Driver reviews e.g. 5 star - 3 reviews, 1 star - 4 reviews, etc.

Question A *Submitted Apr 10th 2022 at 1:16:00 pm*

Using the Uber Eats system description:

A. Identify the things (classes) and the class category of each thing (class) you have identified.

Class example from Allocate+ system: Student - Role

B. Describe the associations between the things (classes)

Association examples from Allocate+ system - Reminder: Associations occur in 2 directions:

- *A Student is enrolled in a Course*
- *A Course may be enrolled in by many Students*

Value: 30%

> A. driver - role ; report - Transactions; driver reviews - events
>
> B. A Uber Delivery Driver get a report every night.
>
> A Uber Dlivery Driver get a summary of their Driver reviews.
>
> The Driver reviews are shown in the report.

Q2. Multiplicity, Association Classes, Attributes

The following depicts a partial domain model class diagram of the 'Review restaurant' functionality. Using the diagram below answer the questions.

Question A *Submitted Apr 10th 2022 at 1:44:23 pm*

Describe the multiplicity of each of the associations in the above diagram

Value: 20%

Customers may not have written any restaurant reviews, or they may have written many restaurant reviews.

A restaurant may not have been reviewed by customers, or it may have been reviewed by many customers.

A restaurant menu has at least one menu item and may have many menu items.

A menu item has one and only one restaurant to use.

Question B *Submitted Apr 10th 2022 at 1:52:12 pm*

List what you think may be the attributes for the 'Restaurant Review' class.

Value: 10%

Customer ID

Restaurant Name

Environment of a restaurant

Food tastes

Question C *Submitted Apr 10th 2022 at 2:09:22 pm*

Describe the association class in the diagram.

Value 10%

Association class is 'Restaurant Review' class, it is based on the association between the customer and the restaurant.

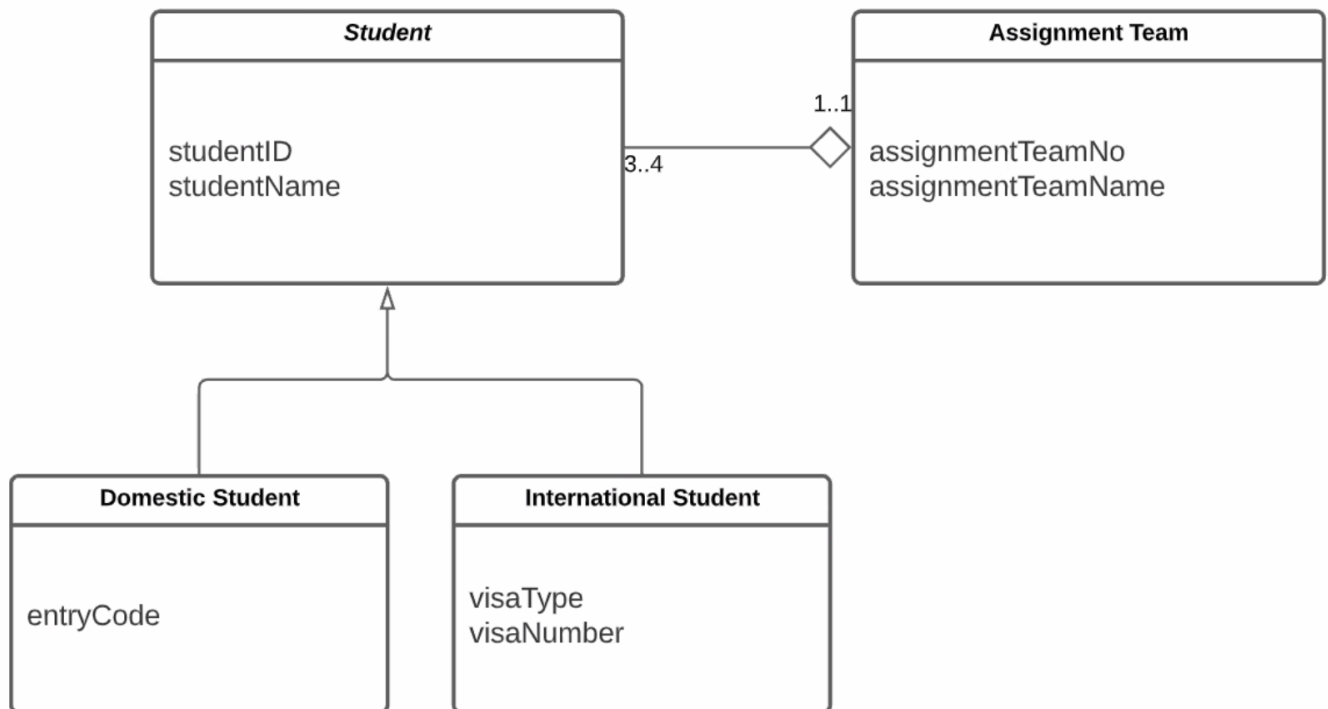Customers comment on the restaurant after they experience it.

Q3. Complex relationships

Please note the following issue in the video:

- Slide 33 - Abstract class names should be shown in italics

The following depicts a partial domain model class diagram.

Using the diagram below, answer each of the following questions:

Question A *Submitted Apr 10th 2022 at 2:24:59 pm*

IMPORTANT NOTE - Please do not attempt this question A as there is an issue with the diagram in relation to this question. There will be no marks allocated to this question.

Describe the 'Student - Assignment Team' association

Value: 10%

issue

Question B *Submitted Apr 10th 2022 at 2:24:03 pm*

List the attributes of the 'International Student' class (from this diagram only). Why did you include these attributes?

Value 20%

> visaType and visaNumber
>
> Because each student has a student ID and name, it is impossible to tell whether the student is a domestic student or an international student, so 'student' is an abstract class. Domestic students and international students are instantiated classes so they are concrete classes. Visas can distinguish between two different categories of students, domestic students do not need a visa, while international students need to determine the visa classification and visa number. So the 'International Student' class include these attributes.