

## **FIT2001: Systems Development – Workshop 7**

### **Objectives:**

- Practice requirements gathering and documentation techniques – Domain model class diagrams.
- Work on Assignment 2

### **Activity 1: Review QUIZ (~30 mins)**

- Sign into FLUX (flux.qa).
- Step 1: Join an Audience
  - Hit the "+" button in the top right of the screen.
  - Type the 6 character 'Audience code' provided by your Tutor. Note that this code is case sensitive.
  - Click "Join". You'll now see Presentations pop up when your Instructor begins the Quiz
- Step 2: Join a Presentation
  - Once your instructor starts a Presentation, click the Presentation card to join. From here, you will be greeted by FLUX activities for you to participate in.
- Workshop Topic Review

### **Activity 2: Domain model class diagram – Melbourne Driving School (~40 minutes)**

- Work together with your tutor and fellow students to develop a domain class model diagram for Melbourne Driving School.
- NOTE: For students who attended the Seminar catch-up this version is slightly different. As you have already participated in discussing this case study, it would be great if you could help lead the class discussion.

**Melbourne Driving School (MDS)** offers a range of driving lessons using contract driving instructors.

MDS wants a basic web site that offers information about the driving school and the types of lessons it offers – beginner, refresher, safety. Customers should be able to make a booking for a lesson type (beginner, refresher or safety), and should provide their name, address, mobile phone, email and date of birth, the type of lesson they require and the type of car they want to learn on – automatic or manual. They must also provide additional details depending on the type of lesson they want:

- For a beginner lesson - learner registration no
- For a refresher lesson - length of time not driven, date they first got their licence
- For a safety lesson - how long they have had their licence, reason they want a safety lesson

MDS has a large number of instructors who can provide the types of lessons required. New instructors are added to the list fairly regularly, and the instructor's name, address, mobile number, email, business name and ABN are recorded along with the types of lessons they can deliver, and the type(s) of cars they have. Some instructors have both manual and automatic cars.

When we receive a booking, we want the customer to be given a booking ID and to be informed that they will be contacted by an instructor 24 hours. We want the booking allocated to an available instructor (one who has less than 15 lessons a week) and we want them sent the details of the customer, the lesson type and car type they require. The instructor should then contact the customer to arrange a suitable date/time for their lesson and record it in the system. The system should send the student and instructor an SMS reminder 24 hours before their lesson. The instructor should also record when the lesson is completed, or delete the lesson if it is cancelled. At the end of the month we invoice the instructor – they pay us 10% of all lessons they have completed in the past month. We also need to record the payment when it is made – should be within 2 weeks from the invoice date. They can make partial payments. If they have not paid the full amount within 2 weeks, we want to send them an email reminder every 3 days for 2 weeks. After that, if they have still not paid, we remove them from our system, and no longer give them any work.

### **Activity 3: Domain model class diagrams – Bayside Bikes & Kantini Kegs** **(~50 minutes)**

- Work with your Assignment Team members in a breakout room to create domain model class diagrams (~25 minutes) – we recommend that you use Lucidchart to draw your domain model class diagram.
- Task 3.1: Review Bayside Bicycles detailed project description and documents, and create the Domain model class diagram, showing attributes, associations and multiplicity.
- Task 3.2 (if you complete Task 3.1 early or for additional practice at home): Review Kantini Kegs detailed project description and documents, and create the Domain model class diagram, showing attributes, associations and multiplicity
- Be prepared to discuss your Domain model class diagrams with the class. (~25 minutes)

### **Activity 4: Assignment 2 Discussion (~30 minutes)**

- Assignment 2 - Q & A
- Work on Assignment 2 with your team

**VERY IMPORTANT** – Make sure you have organised regular meetings with your team for Assignment 2