Business Scenario

Dance schools across Ireland waste many hours a week on tedious paperwork logging attendance, receipts of payments and incident reports. \*Name of program\* Studio Software allows schools to switch to a modern way of performing such tasks. Where people used to sign-in previously, the current COVID-19 pandemic has caused reason for change both for signing in, accepting payments, and keeping track of student numbers.

Currently, when a student enters the reception of a studio, the parent or guardian is required to complete a paper registration form. This is handed to the receptionist and a paper copy of the timetable is given to the student. The decision is then made as to which classes the student will attend and this is entered manually onto the attendance sheet for those classes. Payment is then made, and the student enters the class. The attendance sheet contains all students expected in that class, along with any medical conditions they may have is passed to the teacher. If there is an incident in class, the teacher must complete an incident report form which must be signed and handed to the receptionist.

To simply the above scenario we have decided to develop a Java application that will modernise the way these tasks are carried out. It will first allow the receptionist to register a student into the system, including any medical conditions and emergency contact details. It will then show appropriate class options for that student depending on their age and ability (Beginner, intermediate and advance). When the student decides on their specific classes the system includes them in the class list, which the teacher will have access to at the time of the class. The teacher will also have access to every student’s medical condition and emergency contact details, if needed.

Once the student has been registered, they can sign up for classes by logging into their account and reserving a place. This ensures that the correct number of students can register for each class. The system will keep account of payments to ensure that they are made in a timely manner and that the correct discounts are applied depending on the number of classes taken. It will allow for students to pay in advance and show the number of classes remaining on their current period. Notifications to each student account will be sent when a payment due.

The system allows the manager to view the summary of transactions monthly and will record outgoing payments also (utilities and teacher wages). Managers can create and manage teacher profiles. The manager accounts can set the number of students that are permitted to attend specific classes.

Teacher accounts can view class information and access their payment histories and see their constantly updating wage. In the case of a class cancellation the system will automatically notify all user accounts related to that specific class. Teachers can create incident reports that notify manger accounts, and they can also cancel a class with a description of why the cancelation is being made.

The java application will be deployed using a RESTful web service. It is a lightweight, maintainable, and scalable service that is built on the REST architecture.