Step to run the application:

1. Download the code from github repository.
2. <https://github.com/sonuahluwalia/learnersacademy.git>
3. In DBDocs folder, learner.sql is the main database script which acts as a backend to the application. Run the script in the oracle database 11g or higher. This will setup all the tables, sequences, procedures and initial data of the application.
4. In src -> com -> learner -> util ->DBConnection.java class, you can change the username, password, dbServiceName or dbDatabaseName for your own jdbc connection.
5. Run the application as a maven project in apache tomcat server. The application has been tested with apache tomcat server 9.
6. Login page would be displayed and the username is admin, password is admin.
7. Home page is displayed with options to choose from master list of subjects, teachers, classes, students.
8. Each master list has options to add, delete and update the respective details.

Existing business rules:

1. A teacher should be assigned to class and a subject
2. Subject should be assigned to a class.
3. Student should be assigned to a class.

I have added some business rules of my own to make it more interesting:

1. A subject cannot be added without a class.
2. A teacher cannot be added without a class and a subject.
3. Class names should be in the pattern of Class 1 to Class 12 as it doesn’t make sense to add haywire names.
4. Same class name could be added as the admin does not keep on hitting the add button the same class name keeps getting added in the class master list.
5. Same subject name and class name cannot be added as the admin does not keep hitting the add button and the same subject name and class name keeps getting added in the subjects master list.
6. Same teacher name, class name and subject name cannot be added as the admin does not keep hitting the add button and the same teacher name and same subject name and class name keeps getting added in the teachers master list.
7. Same student name, class name could not be added as the admin does not keep hitting the add button and the same student name and class name keeps getting added in the students master list.
8. While adding subject, class, teacher or student fresh values are generated from the database as there could be more than one admin using the system.