# JDBC programming Assignment

100 Points

Given the following database tables:

**Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| StudentId | LastName | FirstName | GPA | PhoneNumber |
| 1 | Smith | John |  | (773) 555-1212 |
| 2 | Doe | Jane |  | (312) 555-1212 |
| 3 | Blake | Joe |  | (778) 555-1212 |

**Courses Taken**

|  |  |  |
| --- | --- | --- |
| StudentId | CourseId | Grade |
| 1 | Math101 | A |
| 1 | Hist100 | B |
| 1 | Lang200 | A |
| 2 | Art201 | B |
| 2 | Music 1.1 | B |
| 3 | CS100 | B |
| 3 | Math100 | C |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Easier | Max Pts | Harder | Max Pts |
| Connect to DB | Hard coded connection string | 10 | Read db-config.properties file or Persistence.xml | 20 |
| Insert records in above table into database | Hard coded within the application | 20 | Read values from file in data subdirectory | 30 |
| Update GPA for each student based on calculation of GPA =4.0 for A, 3.0 for B, and 2.0 for C | Hard code the calculated values | 20 | Dynamically calculating and updated using data values from table | 30 |
| Complete solution | One big main method with one class | 10 | Multiple classes and main leveraging supporting classes | 20 |
| **Max Points** |  | **60** |  | **100** |

Submission instructions: Zip up the source code and the source code and database and upload to COL