**Java 8 Training Assignment**

1. **Present Java8 feature after completed self-research**
   1. Lambda Expression
   2. Stream API
   3. Optional
   4. Default method
2. **Write a program to do the followings:**
   1. Reading staff.CSV file in local environment.
   2. Parsing the CSV file and importing the content into a table called "Staff" in database (Database is your choice. I.e MySQL, Oracle, MSSQL Server...).
   3. Should validate content of each field in CSV file before ingesting staff data into database. A staff is imported to DB if it passed validation process.
   4. Invalid records should be logged.
   5. Add unit tests and ensure coverage >= 70%.
   6. Your program must follow Java/ [KMS coding standard](https://intranet.kms-technology.com/pages/viewpage.action?pageId=6324712) (You can use SonarQube to analyze your program coding compliance) and apply java features(Stream API, Lambda expression, parallel, functional interface…).

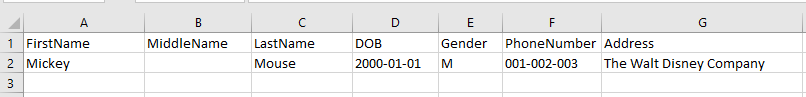
**Technical stack:**

* Java 8
* Gradle 4.9.x or Maven 3.6.x
* Mockito or Junit

**Staff specs:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data type | Length | Required | Note |
| FirstName | Text | 50 | Yes |  |
| MiddleName | Text | 50 | No |  |
| LastName | Text | 50 | Yes |  |
| DOB | Date |  | Yes | Format: YYYY-MM-DD |
| Gender | Text | 1 | Yes | M or F – default ‘M’ |
| Phone | Text | 500 | Yes | Format: XXX-XXX-XXX |
| Address | Text | 500 | Yes |  |

**Example staff.csv file:**

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