Scala Task

This test assignment is aimed at evaluating your dedication, code organization and familiarity with Scala basic syntax. https://www.scala-exercises.org/std_lib could be used to get familiar with scala basic syntax: collections, case classes.

Please note that the task should be executed to the best of your abilities, but we do not recommend spending more than 6-8 hours on it.

Outcome of this task should be a link to your open github repository with application code written in Scala.

The application should be a command line interface: java -jar crime.jar -d <absolute_path_to_the_crimes_folder>

Crimes data could be downloaded from

https://github.com/LvivScalaClub/crimes/blob/master/crimes.zip. The folder contains a list of CSV files. The first line of any file contains the line format (column names).

Application should do the following:

- From CSV files gather the crime records with non-empty crimeID.
- Group resulting list by coordinate pairs.
- Sort coordinate pairs by total number of crimes, most repeated crime locations first.
- Print out top 5 crime locations, each with list of associated theft incidents, for example:

(0.0234567,0.0345678): 246
Thefts:
theft1
theft2
....
theftN

(0.1234567,0.1345678): 210
Thefts:
theft1
theft2
....
theftN

Application source code should include unit tests and scaladoc documentation. Use sbt as a build tool, scalatest as a unit test framework. Follow please https://www.scala-sbt.org/1.x/docs/sbt-by-example.html to setup the project and unit tests.

How to submit tasks for code review

1. Make sure you have a GitHub account. You can create one here https://github.com/join if you do not have an account yet.

- 2. Create a new public GitHub repository: https://help.github.com/articles/creating-anewrepository/
- 3. Create a new git branch from master: https://help.github.com/articles/creating-anddeletingbranches-within-your-repository/
- 4. Complete your task in the branch you create in previous step.
- 5. Push the branch to GitHub and create a Pull Request to the master branch.
- 6. Submit a link to your pull request using the form till 2pm April,1.
- 7. Wait for comments and feedback.