Assignment – Java Developer, Lendico

You are expected to complete the task mentioned below within 72 hours of receiving the assignment.

The business processes of our company involve the International Bank Account Number (IBAN) for processing. For example, DE89370400440532013000 is a valid IBAN for Germany. In order to test such a functionality we would like to implement a utility for generating test IBAN's. The Product Owners provided following details regarding IBAN's https://en.wikipedia.org/wiki/International_Bank_Account_Number

The utility should provide functionality to generate valid IBAN's for different countries. Valid in this context means syntactically valid according to the ISO standard, but not necessarily existing bank accounts. At the beginning, we would like to support Germany, Austria and the Netherlands, but in the future we will extend this list.

The IBAN generator tool must guarantee uniqueness of the generated IBAN's within a specific instance of the tool - i.e. in-memory storage is sufficient.

We expect this tool to be used as a library (simple jar) by our multiple services. Moreover, automated tests that run in parallel will concurrently use this library for generating test data. Therefore, this tool should be thread safe. Implementation should be covered with unit tests to the level where you consider it to be enough to guarantee the quality of the tool.

Please design and implement the IBAN generator written in Java 8 as a Maven project. Usage of any third-party libraries for generating IBAN is not allowed - we do not want to introduce additional transitive dependencies. Together with the implementation please provide a short description for other developers how to integrate and use this tool. Please, upload your project to https://github.com/ and provide us with the link to the repository.