**UTCN**

**Computer Science Department**

**Software Design 2015/2016**

**ASSIGNMENT A2**

**====================================================================**

1. **Objective**

Enhance the internet banking application started in Assignment 1.

1. **Application Description**

Make sure you completed the tasks included in Assignment 1 (this includes money transfers and reports).

Additional operations to be supported:

* Bank operators should be able to generate the reports in JSON and XML formats (see Appendix). The reports need to be exported to a file (.json or .xml). When generating a report a bank operator needs to specify the period and a client (or more/all).
* Clients should be able to able to export the same type of reports (JSON and XML), but should only be allowed to choose the period

1. **Application Constraints**

Continue the application started for Assignment 1.

Use Factory Method for generating/exporting the reports.

1. **Requirements**

* Create the analysis and design document (see the template).
* Implement and test the application.
* Bonus points for unit testing (relevant pieces of the application)

1. **Deliverables**

* Analysis and design document.
* Implementation source files.

Appendix

JSON format sample:

{"transaction":{

"date":"2016-02-19",

"fromAccount":"RO123BTRL342432432XX",

"fromName":"John Doe",

"toAccount":"RO567BTRL334529672XX",

"otName":"Jane Doe",

"amount":322.20,

"description":"Some payment info"

}

}

XML format sample:

<transaction>

<date>2016-02-19</date>

<fromAccount>RO123BTRL342432432XX</fromAccount>

<fromName>John Doe</fromName>

<toAccount>RO567BTRL334529672XX</toAccount>

<toName>Jane Doe</otName>

<amount>322.2</amount>

<description>Some payment info</description>

</transaction>