Java Test

Write an application for an overview of calls that need to be handled today.

Conditions for fulfillment

- application meets the assignment requirements
- it can be launched
- it contains a test (tests)
- application is documented
- application has prerequisites that are common for enterprise application development (e.g. the source codes are divided into appropriate layers in the proper manner)

Assignment

The application will be written in Java. The selection of technologies used is up to the applicant. If the applicant is familiar with Spring, then Spring is the preferred technology. The application has no GUI for value entry. All input values are entered either via the preferred Rest or WebService (SOAP) interface or potentially from a standard command-line input. If the input is invalid, the application forwards the problem to output in the appropriate manner.

The application implements one input operation - add call. Call attributes:

first name - max. length 30 characters. Optional. Any character. last name - max. length 30 characters. Mandatory. Any character. time - not specified on input telephone number - mandatory attribute.

The telephone number will be validated for the allowed number characters, -, (,), + and space. The number is comprised of the local compulsory part of 9 numbers and the optional international part of 5 numbers. The saved number will be normalized into the uniform format 00YYY XXX XXX XXX, where the X block is the local part and the Y block is the international part. If no international part is specified on input, it will be automatically saved with the international area code 420. The + character at the beginning is converted to 00. The space, dash and bracket characters can hold any position on input. The + character can only be at the beginning. The number of start and end brackets must be the same. The telephone number can be entered in various formats.

Examples of valid numbers entered on input:

- +(420) 111 222 333
- +(420)-111222333
- +420111222333
- 00420111222333
- (111) 222 (333)
- 123456789

If validations on input pass, the contact is saved to disk. The file name will be capitalized: LASTNAME_FIRSTNAME.txt. The file will contain the number entry time in the HH:mm:ss format as well as the normalized telephone number. This information will each be placed in separate rows. The telephone number will be placed in the first row.

Eclipse, Idea community edition and Netbean are available. The available application servers are Jetty, Tomcat, GlassFish and WildFly. Other tools - SoapUI. Other supporting tools or Java libraries can be used to fulfill the assignment. Internet is allowed but it is prohibited to communicate with any person.