

## 1. Project: Online TODO List

You are required to build a simple online TODO list either supporting back-end or web interface that can be used in all popular web browsers. The application must store necessary data in an in-memory database or in web store. Must be built with java 8+ or an open-source framework e.g. Spring. For the front end, the guidance here would be for you to use a modern JavaScript framework (e.g. Angular 2+, React) supported by the Java REST layer.

Depending on your solution the functionality below should be demonstrable through API testing (Swagger UI, postman) or by website user interface

## 2. Minimal functionality

- When user can view her/his task list
- User can add/remove task
- All changes be persisted within an application run
- Each task should display the date of last updates and description
- All changes can be persistent to allow view them with page refresh
- Tests (e.g. unit, component tests)

## Bonus functionality

- Both applications working and communicating
- Code structure
- Build tools (Maven, Gradle)

## 3. You Outputs

Please provide a source code repository link (e.g. GitHub) including instructions to build, deploy and run the applications.

The application should run with your instructions with build tools or as a final WAR file. You can use any open-source library/framework. Please use an open sourced in-memory database if needed (e.g. HSQL).

Please also supply a short (1 pages) write up that explains you design choices:

- Why certain approaches were used
- Any design patterns used
- Anything extra you would have done give more time
- Anything else that you feel is relevant