**Performance optimization task**

The goal of the test task is to optimize java web application and make it fast. During optimization process, you should learn performance bottlenecks analysis, performance tuning techniques, memory usage investigation and database queries improvement.

Particularly the following goals must be achieved

1. Upload **5 files** (from stack-overflow-developer-survey-2017.zip) with StackOverflow survey results for 2017 year should not take more than **2 minutes**.
2. Display results by clicking on “**Refresh**” link shout be within **2 seconds.**

**Task results**

Task results should include:

1. Optimized application sources. You can provide zip-archive with sources, but it is more preffered to use our gitlab
2. Performance optimization report with description of used tools and approaches, and results achieved on every iteration. Please find the template below.

**Performance optimization report**

1. Link to VCS with optimized application sources (if applicable)
2. Iteration descriptions in next form

Iteration №

**Tools**: which tools were used for bottlenecks identification

**Discovered issues/problems**: performance problems which were discovered during iteration

**Solution**: optimization solution applied on this iteration

Screenshots with demonstration of used tools

1. Filled resulting table with performance **optimization process** results

|  |  |  |
| --- | --- | --- |
| Iteration # | Upload (seconds) | Refresh (seconds) |
| 1 |  |  |
| …. |  |  |
| N |  |  |

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**How to launch the test application**

1. Create a new **Branch (**your **name-surname)** in the repository https://gitlab/roman.krutyakov/performance-optimization and clone it.
2. Add to MySQL user **perf** with password **qwerty** and create schema perftest for this user. (You can specify your own user and schema and provide your settings in **persistence-mysql.properties** file in **dao** submodule project sources)
3. Build root project with maven.
4. Deploy application target/perf.war on tomcat.
5. Work with this **Web Site** during performance optimization.