

# D12 – Hackathon

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This document describes Deliverable “D12 – Hackathon”, whose deadline is June 5, 2015 at 23:59h. Please, recall that you must produce your deliverable and upload it to the USE’s e-learning platform by the deadline; failing to produce your deliverable in time amounts to failing the subject.

We, the lecturers, assume that if you submit this deliverable, then you understand what the consequences are if you lie regarding the following items, where "I", "me", "my", and other first-person pronouns refer to you, the student who is reading this document:

[x] I’m the legitimate author of this deliverable; I’m not cheating.

[x] If I have some partners, then I’ve collaborated with them on producing this deliverable; in other words, neither am I riding their coattails nor gobbling them up.

[x] I’ve learnt from working on this deliverable, so that I can pass my control checks.

[x] I’ve organised the deliverable according to the guidelines that are available in document “On your deliverables.pdf”, which is available at the USE’s e-learning platform.

[x] I’ve made sure that this deliverable fulfils the requirements to get a/an A+ (C, B, A, or A+).

[x] I fully understand that my deliverable will be considered failed if I fail to meet any of its requirements, or if I do not deliver a filled, dated, and signed copy of this document.

[x] I fully understand that failing this deliverable amounts to failing the subject.

*(Please, check the previous items and write the level of your deliverable. It’s compulsory that you fill in this form and that you date and sign it; otherwise, your deliverable won’t be evaluated, which amounts to failing the subject.)*

<https://repositorio.informatica.us.es/svn/yja93qjt63mhv64lm7>

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URL of your deliverable in ProjETSII

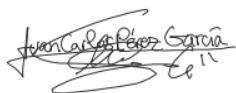
Sevilla, 16/04/2015

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Place, date

Juan Carlos Pérez García



Group number

Julio Carmona Ferri



Partner group (Acceptance testing)

Raúl C. Díaz León



Javier Carmona Ferri



Authors’ names and signatures

## Instructions

The lecturers will evaluate your results as follows:

- Regarding laws:
  - They'll check that your project complies with the minimum requirements that we've presented in the lecture notes about the following laws: LOPD, LSSI, and Transpositions, except for keeping your files and communications secure and confidential.
- Regarding management:
  - They'll check your project in ProjETSII. They'll check that you have a project, and that you've created and reported on the appropriate tasks. Don't forget to report on the time that you spend at your lectures, at co-ordination meetings, or at studying your lessons.
  - They'll pay special attention to checking that the tasks were created at reasonable moments and that the reports happened at reasonable moments. In other words, a project in which every task and report was created on the last day will not be accepted.
- Regarding documentation:
  - They'll check that you've produced a document with an estimate of the total number of hours you've spent in this project and the total cost expected.
  - They'll check that you've produced a good conceptual model.
  - They'll check that you've produced a good UML domain model.
  - They'll check that you've produced comments in your code where appropriate, e.g., to document complex queries.
- Regarding JSP views:
  - They'll check that you're using customs tags to make your views more compact and less error prone.
- Regarding query efficiency:
  - They'll go through your repositories and check that you've defined appropriate indices for your domain entities.
- Regarding hacking:
  - They'll go through your services to check that you check the principal in order to prevent GET hacking.
  - They'll analyse your views and form objects, as well as your controllers and services to check that you're preventing POST hacking.
  - They'll make sure that your forms do not suffer from SQL injection or cross scripting.
- Regarding functional testing:
  - They'll check that you've followed the guidelines that we've provided regarding how to organise test cases, test classes, and test suites.
  - They'll run your test suite and will check that JUnit does not report any exceptions, that is, it must show a green bar.
  - They'll go through your test cases and will check that you have at least a positive and a negative test case per functional requirement or group of related functional requirements. **IT IS MANDATORY THAT YOU DOCUMENT EACH TEST CASE;** Otherwise the lecturers won't be able to find out what they are intended to test. Please, copy the functional requirement(s) that it is intended to test as a comment at the beginning of your test cases; add a short remark regarding what the test case is intended to test.
  - They'll check that you've followed the guidelines that we've provided regarding how to design test cases.

- They'll check that your test cases are completely automatic, that is, that they do not output any information to the console and that every check is performed by means of the appropriate assertion.
- Regarding performance testing:
  - They'll check that you have produced at least a performance test per functional requirement.
  - They'll check that your scripts don't have any spurious entries.
  - They'll check that you've added timers to simulate sensible human delays.
- Regarding acceptance testing:
  - They'll check that your acceptance tests document provides appropriate checks for every functional requirement. Please, note that you're requested to deliver two documents: one that you must produce with the results of conducting acceptance tests on another group's project (your partner group), and the report that that group has produced on your project. Both documents must make sense or, otherwise, both groups will fail this deliverable.
- Regarding the requirements:
  - They'll run your project as indicated in document "On your deliverables.pdf", which is available at the USE's e-learning platform.
  - They'll check that you've implemented every information and functional requirement well.
  - They'll enter as much invalid and malicious data as possible in the edition forms, just to check that you keep them under control.

## Requirements regarding levels C, B, and A

- Item 1. Deliver a statement that describes your project. Please, note that your statement must include a description of your project, your information requirements, your functional requirements, and your non-functional requirements. It is strongly recommended that you organise your statement like the other statements that you've got in this subject.
- Item 2. Deliver a report with the tasks that you've accomplished to produce this deliverable. The report must list the name of every task, the moment when it started, the moment when it finished, and the number of hours spent on it. It must also report on the total time spent in the project, and the total cost.
- Item 3. Deliver a conceptual model and a UML domain model regarding your project.
- Item 4. Deliver an Eclipse/Maven project that implements your requirements, including your functional tests.
- Item 5. Deliver a script to create the corresponding database in the pre-production environment.
- Item 6. Deliver a war artefact that implements your project and can be run on domain "www.acme.com".
- Item 7. Deliver your jMeter performance tests.
- Item 8. Deliver a report in which you make it explicit what the maximum workload that your system can handle is. Please, add screenshots to prove that you've run your test cases and that you've monitored your system while the test cases were running.
- Item 9. Deliver a report on the results of conducting the acceptance tests on your partner group's project. Deliver a report on the results that your partner group has got regarding performing their acceptance tests on your project. Please, use the following names for your reports: Outbound-Report.pdf and Inbound-Report.pdf, respectively. The first sheet of the reports must clearly identify the group that has produced it and list the names of their members.

## Requirements regarding level A+

- Item 10. Produce a statement that describes your A+. As usual, it must explore a new technology, something that has not been studied in our lectures, and it must be a challenge.
- Item 11. Produce a project that includes your A+.
- Item 12. Produce a report that describes how you've implemented your A+.
- Item 13. Write a report to provide feedback about Design & Testing. Please, provide positive feedback (things that you think are positive and must be repeated) and negative feedback (things that you think are not appropriate and should be enhanced or forgotten). Please, recall that if you provide negative feedback, you must also suggest a solution to the problem that you describe. If you are a repeat, please assess the changes the subject's undergone. The report in is not expected to be more than 1 000 words.