Software Architecture Group Faculty of Informatics University of Vienna http://cs.univie.ac.at/swa



050132 Advanced Software Architecture (UE), Winter Semester 2015/16 Task 5

## Task 5: Dynamic Scripting Languages

Task-ID: SCRIPT

#### **General Remarks**

- The **deadline** for this work is 10.01.2016, which can also be found in Moodle (<a href="https://moodle.univie.ac.at/course/view.php?id=46197">https://moodle.univie.ac.at/course/view.php?id=46197</a>). The deadline is firm! No deadline extensions are given.
- You will have to present your solution during the presentation in class: 19.01.2016 (Group 3), 20.01.2016 (Group 2), 14.01.2016 (Group 4), 15.01.2016 (Group 1), so be prepared and bring with you the requisite materials (laptop, your presentation, running example, ...)
- Your delivered solution will be graded with up to 10 points, which have to be defended during presentation.
- This is an **individual work**. Consequently, group work is **not** allowed in this assignment.
- If you have problems, do not hesitate to query the Moodle forum (<a href="https://moodle.univie.ac.at/mod/forum/view.php?id=1120095">https://moodle.univie.ac.at/mod/forum/view.php?id=1120095</a>), contact the tutors (<a href="ase.tutor@swa.univie.ac.at">ase.tutor@swa.univie.ac.at</a>), or us (<a href="ase@swa.univie.ac.at">ase@swa.univie.ac.at</a>) via e-mail.

#### **Submission Guidelines**

- The guidelines proposed on <a href="https://swa.univie.ac.at/General guidelines">https://swa.univie.ac.at/General guidelines</a> must always be satisfied.
- If guidelines are ignored,
  - o an assessment of the tasks cannot be guaranteed because they are processed electronically.
  - o In case of <u>any</u> unsatisfied guidelines, three (3) points will be deducted from the assessment of the task.
- Artifacts to upload into Moodle are (see guidelines for more information):

One (1) ZIP archive containing:

- o The Task 4 project you worked with
- o The Groovy project containing your code
- o Document about your assumptions (PDF)

### **Task Definition:**

#### Right at the Start

Please, read the guidelines at <a href="https://swa.univie.ac.at/General guidelines">https://swa.univie.ac.at/General guidelines</a>, especially the part about naming conventions for your uploads! If you do not follow these guidelines, we will not be able to grade your work, because we will not be able to find your files any more (yes, it is that simple ...).

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#### **Task 5 Assignment**

In this assignment you will create a hit counter for your "complete" Wikipedia-like application from Task 4 using Groovy [1]. The counter should count the individual views of each of your content pages and present in a table the five most visited pages at any given moment.

The purpose of the assignment is to familiarize yourselves with Groovy and gain some experience with programming in dynamic scripting languages. Create a new Groovy project that references the project from Task 4. The Task 4 project must remain <u>unaltered</u>. Use Groovy to provide the requested functionality by e.g. intercepting method calls from your Task 4 application and counting them. Provide a visualization of the top viewed pages list in whichever way you prefer, e.g. by console output.

#### Checklist

Before uploading your solution, ensure the following checkpoints can be marked positive:

- I followed the guidelines and conventions from <a href="https://swa.univie.ac.at/General guidelines">https://swa.univie.ac.at/General guidelines</a>
- I created a Groovy application that counts the page views
- The Groovy application updates the top 5 viewed pages count at each page hit
- I reference the Task 4 project but did not alter it

## Tips and references

[1] Apache Groovy: <a href="http://www.groovy-lang.org/">http://www.groovy-lang.org/</a>

[2] Groovy with Eclipse Tutorial @ Lars Vogel: http://www.vogella.com/tutorials/Groovy/article.html

Document your thought and solution process. Feel free to make your own assumptions, but mention them in your document. If you use solutions found on the web, please record them as such, with the appropriate link.