Homework 1

CS453 Application Lifecycle Management
Spring 2020

Due: **1 March 2020 23:55**

Please read the required material then answer the following questions. Examples, when given, should be your own. Try avoiding directly quoting from the texts. Use your own sentences. Do **not** make a cover page for your submission. Failing to include name,surname or section is likely to be penalised. Your submission can not be longer than **2 pages**. You should use a sensible font&spacing and submit to Moodle in **PDF** form before the deadline.

Materials (in Moodle) :

- Why models are the only way to scale software delivery toolchain integration
- How An Integrated Approach To Software Delivery Enables Traceability Through The Value Stream

Questions (each question is worth 20 points) :

Q1) Explain point to point and model-based integration approaches. Which one is easier to scale and why?

Q2) How does model-based integration reduce the integration overhead? Support your argument with an example.

Q3) Assume that there exists a software project where the developer decided to use a model-based integration approach. Knowing that this solution was not beneficial for them considering the cost of service from a model-based integration tool. What can you assume about this project?

Q4) What does traceability mean in software engineering? What are the limiting factors on traceability for a modern software project?

Q5) What are the components of a software value stream? How does linking these components with automation generate business value in a large scale software project?

For clarifications, you can send an email to your TA with a subject starting with "CS453".