Institute for Information Systems Research
University of Koblenz-Landau
Prof. Dr. Patrick Delfmann, Sabine Nagel

Business Process Management
SS 2021
Exercise 8

Formalities for submitting your solution:

- Please submit your solution in OLAT
- The solution is due on **07.07.21 at 23:59 (UTC+2)**
- Please provide one single PDF file per group
- Please include the names of all group members into your solution
- You can reach up to 10 points in this exercise sheet

Task 1 (4 points)

In the lecture, the verification capability framework by Smit et al. (2017) was introduced.

Create one single DMN table that contains one "example" for each of the 8 capabilities. Please also indicate which rules represent which capability (using numbers, color codes etc.).

(The DMN table should make some sense, i.e., the domain of the company should be clear.)

Discuss for each capability, how the underlying problem/inconsistency in your example could be resolved with as little information loss as possible, i.e., explain which rule should be deleted and why, or – if deletion results in information loss – suggest what else could be done to resolve the problem.

Task 2 (6 points)

Consider the following set of DECLARE rules.

ChainResponse(a,b)	*(i)*	*NotResponse(a,c)*	*(vi)*
Response(d,e)	*(ii)*	*Response(e,c)*	*(vii)*
NotPrecedence(b,d)	*(iii)*	*NotResponse(d,e)*	*(viii)*
Response(b,d)	*(iv)*	*Response(d,c)*	*(ix)*
ChainResponse(d,f)	*(v)*		

Define the minimal contradictory subsets. Then, compute the C# culpability value for all constraints as introduced in the lecture.