

## Semantic Web

## Exercise sheet 9

# Reasoning on the Web

### Exercise 1 (First order logic and Web reasoning) (5 points)

Explain in your own words what is the problem of applying FOL for reasoning on the Web (min  $\frac{1}{4}$  page, max 0.5 page).

### Exercise 2 (Requirements and limitations) (5 points)

Explain in your own words requirements for Web-scale reasoning and limitations of traditional reasoning approaches in the context of Web-scale reasoning (min 0.5 pages, max  $\frac{3}{4}$  page).

### Exercise 3 (Web-scale reasoning techniques) (5 points)

Explain in your own words main characteristics of the following techniques which can contribute to Web-scale reasoning (min 0.5 page, max 1 page):

- Approximate Entailment
- Bounded Rationality (exemplify an application of Bounded Rationality approach over Stream Reasoning)

### Exercise 4 (LarkC platform) (5 points)

Explain in your own words what is LarkC platform and what are the main characteristics of the approach (min 0.5 page, max 1 page).