

# Exercise session 1 – The Web: Needles in a Haystack

October 16,2023

The goal of the exercise is to help motivate the course by giving you some challenging tasks/questions to solve on the Web. Along with the solution, for each question you answer, **please also provide a brief summary of how you found the answer** (we will search and discuss that in class); the summary should be enough to repeat what you did, including links to web-pages with the key info, how these web-pages were found, combined, etc). For the purposes of this exercise, you can trust the information you find on arbitrary webpages (that were not published by you or someone you know ☺).

1. I will be at the International Semantic Web Conference (ISWC, <https://iswc2023.semanticweb.org/>). After the finishing time of the conference, I need to go back to Germany for our exercise class at the 11th of November. Find me the cheapest way you can to get me there on time. It can be a one-way journey and can take as long as needs be; I just need to be on time for our session. You can assume that:
  - You can assume that the conference ends at 18:00 on the last day.
  - I can walk at most 5 km/h. I can swim at most 1 km/h.
  - I can book online, pay cash or card, have a smart phone, etc.
  - The trip must rely on legal, publicly-available transport: not on the kindness of family, friends or strangers; not on me getting on a train without a ticket or hiding in a wooden crate (even if it has air holes); etc.
  - Don't worry about food, tiredness or luggage.
  - In Athens, I need to pay for a hotel/hostel, In Dresden I can sleep in my office.
  - It is widely considered important for the success of the exercise session that I arrive alive and in one piece.
2. Answer (at least) three of the following
  - (a) Find at least one professor at ICCL who publishes at the journal *Fundamenta Informaticae*.
  - (b) Find a Turing Award winner who has coauthored at least one publication with a professor from TU Dresden.
  - (c) Find two siblings who were both awarded or nominated for an academy award for acting, but never acted in a movie together.
  - (d) Find three countries with a population of at least one million people whose tallest building is taller than its highest natural elevation (i.e., its tallest mountain or hill measured from sea level). The building is measured from the ground up (i.e., a 3 metre building on a 1000 metre mountain counts as 3 metres).
  - (e) Find a German men's footballer from the current team who was born in the time of a FIFA world cup.
  - (f) Find a cinema in Dresden showing a movie on Wednesday, October 18<sup>th</sup> that won the Cannes Jury Prize.

These queries are certainly easier with the Web than without it. But even on the Web some of these tasks/-queries seem unnecessarily difficult to solve. (Maybe there's a better way to structure the content of the Web so that these sorts of tasks/queries can be done in a more automated way ...)