Introduction to Web Science

Assignment 12

Prof. Dr. Steffen Staab
staab@uni-koblenz.de

René Pickhardt
rpickhardt@uni-koblenz.de

Korok Sengupta
koroksengupta@uni-koblenz.de

Olga Zagovora
zagovora@uni-koblenz.de

Institute of Web Science and Technologies
Department of Computer Science
University of Koblenz-Landau

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Tutorial on: February 17, 2016, 12:00 p.m.

This assignment is about **Net Neutrality & Copyright**

Copying answers straight way from any source wont be considered for the final score of this assignment. Please cite your sources if any.

Team Name: Golf

Members: Atique Baig, Mtarji Adam, Deepak Garg

1 Copyright & Creative Commons (10 points)

1.1 Differences

On what grounds can you differentiate between Copyright and Creative Commons?
Answer
Creative commons is a license applied to a product under copyrights, it is a mean by which an author can share his work with the consumers and allow them to use is as long as they abide by a set of restriction, for example : Attribute the work to the original author, do not use for commercial reasons, do not modify the original work, or allow the modification as long as you let subsequent users the use of your modified work alike.

1.1.1 Case Study

Let us consider that Donald has an idea to develop a study material for the poor children from his area who cannot attend a school. But in order to have this idea as a product, he needs some financial help from investors so that he can collect materials and also to set up a website where kids can study for free using the materials and videos he makes for them. But Donald wants it to be completely free and shareable so that it can help anyone.

- Can Donald's *idea* be copyrighted?
  Answer
  No, since the idea is not yet a creative work, only when it is put into an expression as a working prototype or product that it can be copyrighted.

- How can Donald protect his idea when he presents it to the investors?
  Answer
  The idea itself is hard to protect, one way would be if he can manage to make the investors sign some form of confidential agreement that allows him to hold them accountable, but since you can't "own" an idea, there is no guarantee that it can be protected.

- Since the investors are investing capital, can they still recover money if Donald wants to go for the Creative Common licenses? If so, state the ways?
  Answer
  Generating revenue is still possible under Creative commons licences, some of the ways it can be done are :
  - The product can become a way to promote the investors
  - The investors can still run advertisement alongside the product under CC
  - Crowdsourcing, raising funds from contributions.

2 Neutrality(10 points)

- Define the term *net neutrality*.
  Answer
  Net neutrality is the fact of treating every data equally through Internet, regardless of origin, destination, application, content, or communication protocol. Any entity that is regulating the Internet infrastructure should not discriminate between data packets by either slowing or prioritizing some over the others.

- Argue for and against the motion on the concept of priority pricing as discussed in Kögler et.al(2011)[1]
  Answer
  We believe that the concept of priority pricing could be a move in the right direction, as long as "the best effort traffic" for non-quality-sensitive services satisfies a certain minimum level of quality. This solution will allow a more optimum use of the Internet infrastructures capacity by exploiting any scarce resources according to the value of the services. In case of congestions and overload, the infrastructure will be able to handle the situation much better since it has knowledge about which services have priority, resulting in a more efficient traffic management from the ISP and better fit the quality expectation from the users as long as these congestion happen in short time slots and the capacity is handled accordingly.

- - Explain why?

  > "...additional internet capacity would not lead to additional revenues because of the flat rates."[1]

  Answer
  When overprovisioning, up to a certain point, the cost of an additional capacity unit is lower then the additional utility it provides, but beyond that, the use of these resources becomes higher then the additional utility. Since flat rate offer a fixed price for a certain bandwidth, and users differ on their usage of this bandwidth, many are heavy users who will exploit what they can from the capacity every time it is incremented. In the end, the operator wont have any incentive to invest in the infrastructure without figuring out a way to amortize their outlays.

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[1]Berger-Kögler, U. and Kruse, J. (2011) 'Net neutrality regulation of the internet?', Int. J. Management and Network Economics, Vol. 2, No. 1, pp.3–23.

Important Notes

Submission

- Solutions have to be checked into the github repository. Use the directory name `groupname/assignment12/` in your group's repository.

- The name of the group and the names of all participating students must be listed on each submission.

- Solution format: all solutions as *one* PDF document. Programming code has to be submitted as Python code to the github repository. Upload *all* `.py` files of your program! Use `UTF-8` as the file encoding. *Other encodings will not be taken into account!*

- Check that your code compiles without errors.

- Make sure your code is formatted to be easy to read.
  - Make sure you code has consistent indentation.
  - Make sure you comment and document your code adequately in English.
  - Choose consistent and intuitive names for your identifiers.

- Do *not* use any accents, spaces or special characters in your filenames.

Acknowledgment

This latex template was created by Lukas Schmelzeisen for the tutorials of "Web Information Retrieval".

LaTeX

Currently the code can only be build using LuaLaTeX, so make sure you have that installed. If on Overleaf, there's an error, go to settings and change the LaTeXengine to `LuaLaTeX`.