

# Introduction to Web Science

## Assignment 12

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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.

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# 1 Copyright & Creative Commons (10 points)

## 1.1 Differences

On what grounds can you differentiate between Copyright and Creative Commons?

### 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?
- How can Donald protect his idea when he presents it to the investors?
- Since the investors are investing capital, can they still recover money if Donald wants to go for the Creative Commons licenses? If so, state the ways?

## Answers

### 1.1

Copyright requires reaching the agreement with the creator of an original work before using it since the creator has exclusive rights for use and distribution of copyrighted work according to the law of a country.

Creative Commons is a license that the creator may grant to the third party. The difference is that the copyright is a legislation and CC is a permission to use copyrighted work under certain conditions.

### 1.2

- Donald's idea itself cannot be copyrighted since only implemented work can be protected by the copyright. Copyright of the content (study material) is possible but to make the work free Creative Commons is more suitable option.
- To protect the idea before presenting it Donald need to create a prototype or a blueprint of the idea and copyright it.
- Investors may earn money under Creative Commons License. Since Donald plans to distribute the materials for free investors can not charge money for the content itself. But considering the study materials will be on a website investors can include online advertisements.

## 2 Neutrality(10 points)

- Define the term *net neutrality*.
- Argue for and against the motion on the concept of priority pricing as discussed in Kögler et.al(2011)<sup>1</sup>
- - Explain why?  
"...additional internet capacity would not lead to additional revenues because of the flat rates."<sup>1</sup>

### Answers

- Net neutrality is the principle of free access to open information on the internet according to which, individuals should be able to access all content and applications equally (regarding technical accessibility, integrity), regardless of the source. In particular, Net neutrality is targeting against discrimination and blocking of specific online services or websites by Internet service providers. The principle describes neutrality, i.e. non-discrimination, of data based on the following:
  - Connected platform
  - Used services or program
  - Transferred content
  - User of the medium

While non-discrimination includes not charging differently for data, this is to be seen more in respect of charging differently based on the criteria above; while providers may charge for different access speeds, the costs are not to be coupled to data kind or service or user et cetera.

- There are some arguments for and against net neutrality.

Pro	Contra
Would require inspection of packages, therefore privacy infringement	Different services require more data, distribution not fair for services requiring less data
Bigger companies have greater financial resources, leads to smaller firms, blogs, services et cetera vanishing from the market	Cost based on service might lead to providers using the Internet more efficiently

<sup>1</sup>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.

- Generally, the economically optimal internet infrastructure capacity is always smaller than the capacity that results in maximum utility for infrastructure users. For optimised welfare utilisation rivalries and overload externalities still exist at the peak times. Also the customers who would use most of the incremental capacity are usually not the ISPs major priority when the net neutrality applied.

## 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".

### $\text{\LaTeX}$

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  $\text{\LaTeX}$ engine to LuaLaTeX.