

# 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?

**Answer:**

1.1. Copyright does not allow the use of the authors work without his approval. Creative Commons is actually a license that is applied to a work that is protected by copyright. Creative commons provides licensing structures authors can use to license their copyrighted work to anyone willing to abide by the licensing terms. This way the author can save time by not having to write permissions for each individual interested in using his previous work.

1.1.1. Donald's idea can be copyrighted, but since he would like his content and services to be free, the best way would probably be to use Creative commons for that purpose.

An idea by itself can not be protected. But, investors don't work on ideas, they invest in them, let others execute, and then get their return if the idea makes profit.

If Donald went with the Creative commons license investors could possibly return their money, but with more risk. Donald could monetize his idea by adding ads to his website since he has identified a narrow market (kids who are studying). Even though he went for the Creative commons license, he can still charge for his service and the investors could pressure him to actually start charging for the use of his services. Also, Donald can release his content under an Attribution Non-Commercial No Derivatives license which means that when someone wants to commercialize his work, he can charge them if he wants.

## 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>

Answer:

Net neutrality means that any data packet of any service should be treated equally, independent of origin, destination and type of service. Kögler et.al(2011)

In practice, an ISP can not put a higher value on packets for his special service, and when there is a congestion, he should not be able to promote these packets over any other packets.

In the paper, the author argues that priority pricing should be implemented to help with temporary internet overload. He argues that a lot of packets from a quality-insensitive low value service could have a high impact on a quality-sensitive high value service. The author thinks a high value service should pay more to get higher priority in a situation of congestion.

- For  
    The user gets the opportunity to choose what matters the most to him, for what he needs, he will pay, for what he doesn't he will not.  
    Market demand will control the priority of content.
- Against  
    If Netflix and Amazon have to pay more to the ISP-s, the consumers will also have to pay more to Netflix and Amazon.  
    This way, the IPS-s actually don't have an interest of expanding the network and augmenting the infrastructure any more.  
    The ISP can 'blackmail' anyone who provides the same service as they do, which is not a fair competition.

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<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.

## 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.