

Introduction to Web Science

Assignment 12

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

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

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Team Name: Uniform

Team Members: Jalak Arvind Kumar Pansuriya, Madhu Rakhal Magar, Pradip Giri.

1 Copyright & Creative Commons (10 points)

1.1 Differences

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

Answer:

Copyright is granted to individual or organization to protect their creativity or an innovation for certain years and in certain location. And Creative Common is build on Copyright on which copyrighter give up some of its right to freely use his innovation or creativity if the users follows certain rules or procedures. As for example you can freely use any image of flickr if you provide the attribution back to the owner. In other word you can say that Creative Common is relax version of Copyright.

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 Common licenses? If so, state the ways?

Answers:

1. Copyrights protect expression and patents protects inventions, and neither protect ideas. This means Donald's idea to develop cannot be Copyrighted. But his idea can lead to innovative of education platform which can be Copyrighted. So along with Donald's Idea and education platform can be copyrighted.
2. Since Investors didn't invest only on idea they need prototype. So Donald can produce the prototype of the education platform and protect his idea using this educational platform.
3. Investors can still make money from this platform if Donald use Creative Common License. Since copyrighter can use their own term to use the platform. Donald can use terms which directly helps the platform such as who ever distribute his content should attribute Donald platform which helps to generate a traffic to the platform. Donald's can put different advertisement on the platform as means of revenue. Can

create special features on the platform which are only access to the paid user like personalized feedback, One to One coach etc.

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)¹
- - Explain why?
"...additional internet capacity would not lead to additional revenues because of the flat rates."¹

Answer:

1. Net neutrality is a principle which guides Internet provider and Government regulating the Internet not to discriminate on user data based on location, gender, content, website, platform, application, type of attached equipment, or mode of communication.
2. We found that Priority Pricing helps Quality sensitive services like video calling, VOIP, online games, online trading and other services whose business usefulness depends on the instance transfer of data. These services are useless and will go out of service if their data are not transferred on time. If ISP follows the strict net neutrality then data of Quality sensitive services and other normal services(file sharing, video streaming) should be treated equally means Quality insensitive services will use all the network and cause Internet traffic which results in delay, packet loss and jitter. So by paying some more price, quality sensitive service can use Internet capacity to do their business. As we said before, we didn't mean that Priority pricing is the best. Although, priority pricing makes Internet service more expensive if you want to use Quality sensitive services. Internet capacity is overloaded only in pick hours and free on other off hours and Priority Pricing forces you too pay more in off hours.
3. If ISP installs bigger capacity to tackle the problem of pick hour Internet traffic and charges the flat rate for all costumers, it only increases the operation and maintenance of the infrastructure. Its infrastructure won't be fully used in off hours.

¹Berger-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".

L^AT_EX

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 L^AT_EX engine to LuaLaTeX.