HW5: Network Neutrality

This is an individual assignment and is due Oct. 31st by the start of class.

I. Background

Extreme simplification: Net Neutrality is the concept that the traffic on the internet should be neutral. The idea is that an Internet service provider (ISP), such as AT&T or Comcast, should not be able to discriminate against or block certain content while prioritizing other content. For example, the ISP should not be able to block Google but allow Bing to reach its customers. An ISP should also be application neutral — i.e. if I want to use Firefox instead of a special browser developed by AT&T, I should be able to do so and my traffic should be treated equally. Net neutrality is the way the web/Internet currently works; in other words, net neutrality is the current standard but this is not mandated by law in the US.

This is a large topic and the reading selections below are meant to address the issue from a non-technical perspective. Read the following sources to understand the basics of net neutrality:

1. Introduction to Net Neutrality: Tim Wu Network Neutrality FAQ. Read the main text column on the site.
   http://timwu.org/network_neutrality.html
2. Moyers on America: Net Neutrality: PBS
   http://www.pbs.org/moyers/moyersonamerica/net/neutrality.html

II. Network Neutrality Act of 2006 Debate

There has been much talk about making the current standard of net neutrality law. The Network Neutrality Act of 2006 was one such effort. It was debated in congress but never became law. The debate over this bill and others highlights the arguments for and against net neutrality.

   and the opposing viewpoint:
   Tom Tauke, Say No to "Net Neutrality" Rules, Bloomberg Businessweek, Mar. 16, 2006: http://www.businessweek.com/technology/content/mar2006/tc20060316_119464.htm

III. BitTorrent Incident

In 2007, Comcast was accused of violating net neutrality standards (not laws!) by slowing down traffic from BitTorrent.

   Read — Marguerite Reardon, Comcast Denies Monkeying with BitTorrent Traffic, CNET, Aug.
IV. BitTorrent Fallout

After Comcast was caught throttling (slowing down packets) BitTorrent, Comcast agreed to stop throttling and to disclose its network management practices. Additionally, the Federal Communications Commission (FCC), which regulates communications in the US, proposed net-neutrality rules.

Read — Nate Anderson, FCC Proposes Network Neutrality Rules (and big exemptions), Ars Technica, Oct. 22, 2009: 

V. Outcome of Comcast Case

Comcast challenged the FCC's power to regulate the Internet. Eventually, the court sided with Comcast and ruled against the FCC. There have been more legal challenges around the issue of whether or not the FCC has the regulatory power to govern the Internet, and this decision did not decide whether net neutrality is a “right” that is due to the American people. Legalities aside, the fundamental issue of net neutrality remains.

VI: Assignment:

1. List two arguments for net neutrality and two arguments against net neutrality.

2. In approximately 500 words, summarize your position on the topic of net neutrality. You should think critically about both arguments for and against net neutrality and avoid blanket statements of agreement or disagreement.

3. Using Google or another search engine of your choice, see if you can find a formal position statement on the issue of net neutrality by a large corporation. You might choose: (for example only, you may of course choose another company of interest to you)
   - an ISP such as Comcast, Verizon, or AT&T
   - content provider, such as Netflix, Google, Yahoo, or Amazon
   - a large computer services provider such as IBM, Microsoft, or Apple.

Summarize the company's position and include a link to the position statement. Why do you think the company holds its position? In other words, think about how the business uses the Internet and why the company takes the position on net neutrality that it does.

VII: Submission:

Submit your write-up as a PDF to BB for the assignment “HW5” Be sure to include the honor code statement at the top of your submission.