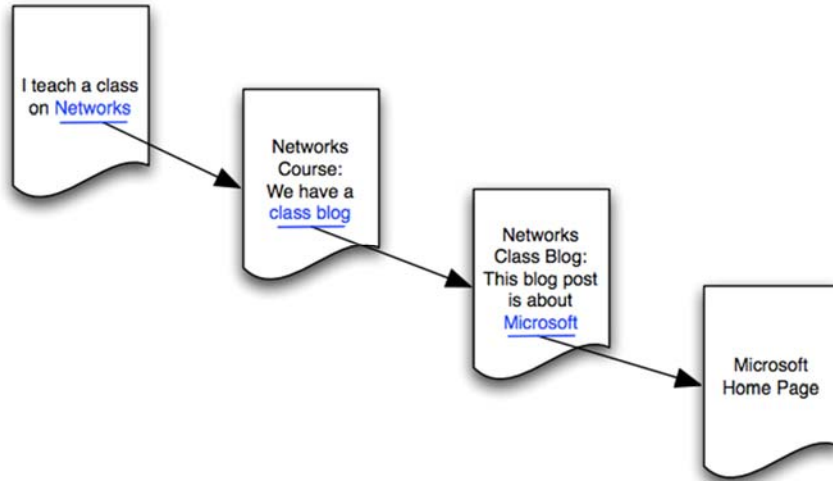


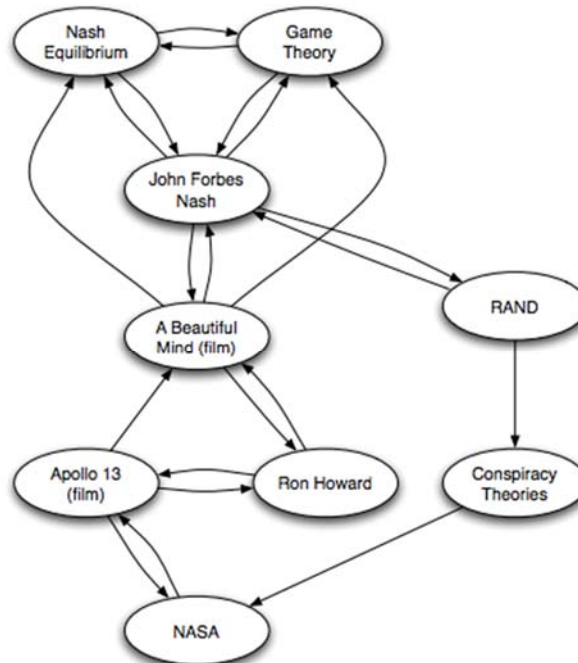
I. Organize Web Pages as a Network



The use of a network structure truly brings forth the globalizing power of the Web by allowing anyone authoring a Web page to highlight a relationship with any other existing page, anywhere in the world

Hypertext (in blue underlined): to replace the traditional linear structure of text with a network structure, in which any portion of the text can link directly to any other part.

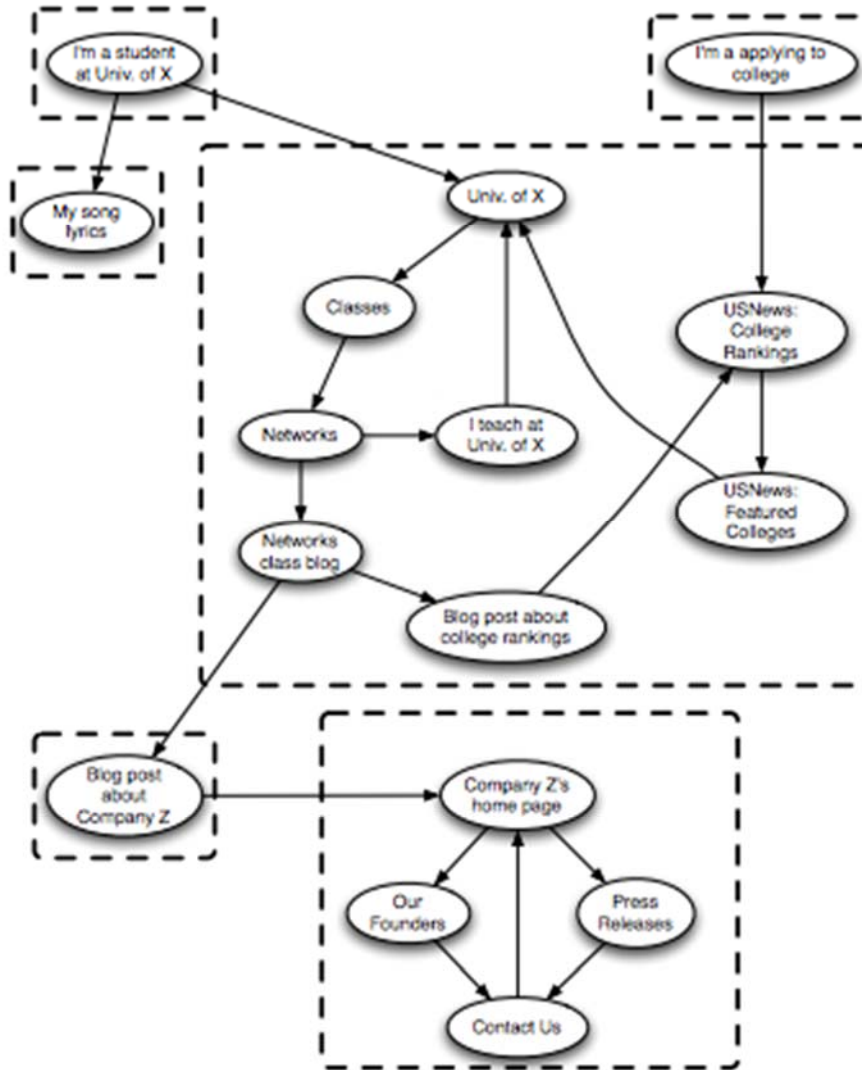
Hypertext is like citation, and can be displayed in **direct graph**:



From Chapter 13, Networks, Crowds, and Markets: Reasoning about a Highly Connected World. By David Easley and Jon Kleinberg. Cambridge University Press, 2010. Complete preprint on-line at <http://www.cs.cornell.edu/home/kleinber/networks-book/>

II. Strongly Connected Graph

Reachability Properties: identifying which nodes are “reachable” from which others using paths.



A Strongly Connected Component (SCC) in a directed graph is a subset of the nodes such that:

- every node in the subset has a path to every other;
- the subset is not part of some larger set with the property that every node can reach every other;

From Chapter 13, Networks, Crowds, and Markets: Reasoning about a Highly Connected World. By David Easley and Jon Kleinberg. Cambridge University Press, 2010. Complete preprint on-line at <http://www.cs.cornell.edu/home/kleinber/networks-book/>

III. WEB 2.0

Reading: <https://www.cbsnews.com/news/what-is-web-20/>

How Web 2.0 is different from Web 1.0? Watch this video:

https://www.youtube.com/watch?v=NLIgopyXT_g

- What are the 8 key characteristics of Web 2.0?

- What are some major technologies of Web 2.0? Choose one of them and explain how it can be identified through Web 2.0's characteristics.