Each 6.1800 lecture will come with an outline. You can fill this in during lecture, after lecture, or not at all — it’s entirely up to you how you use it. The goal of these outlines is to help you understand the main points that you should be taking away from each lecture. In some cases we will also include examples of things you should be able to do after each lecture.

In the past, these outlines have proved to be an effective tool for studying for the exams. Note that the outlines are not exhaustive; there will be topics and nuances in lecture that aren’t captured by the outline.

Lecture 13: Application Layer

- Content delivery introduction
  - How does a client/server model deliver content? What is the main downside?
  - How does a CDN deliver content?
  - How does a P2P network deliver content?
- P2P networks
  - How does the BitTorrent P2P network share content? Specifically:
    - What is the .torrent file for?
    - What is the tracker for?
    - What is the flow of communication like? (e.g., who talks to whom?)
    - How are peers incentivized to upload data?
- CDNs
  - What considerations do CDN owners (e.g., Akamai) make when placing their machines? When distributing their content?
  - What feature(s) might a CDN owner (again, like Akamai) take into account when deciding which server is “best” for a particular client?
- We covered three technologies for content delivery. What are the benefits/limitations of each?