

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 02: Naming

- What are names for in the context of computer systems? At a high level, what do they let us do?
- What are some benefits of using names? (There are many)
- What are the components of a naming scheme?
- What are some of the questions we ask when designing a naming scheme?
- In DNS, what are the names? What are the values? You should also be able to answer more subtle questions about DNS as a naming scheme. For example: can a name map to multiple values?
- How is the DNS organized?
- How does a lookup work? E.g., to retrieve the IP address of www.mit.edu, what does a DNS client do?

Bonus: things you should be able to answer after tomorrow's recitation

- How do caching and recursion improve the performance of DNS?
- What properties of DNS allow it to scale to the size of the Internet?