Revision Report

Feedback comment: On quantum computing: “I think this topic does not (yet) belong to an introductory course. There is little time to drill quantum computing fundamentals and any networking-specific algorithms and protocols are too fluid.”

How incorporated: We can slightly modify the sentence in the introduction to avoid making it seem that quantum computing must be covered. We will make sure that this is just an example of emerging topics.

Why not incorporated: These fall under emerging topics as indicated in the sentence. The students can just know about what's new in networking, including quantum net. Emerging topics are listed as electives in the KA. We suggest keeping the text here that mentions quantum computing to highlight the importance of this topic in the future.

Date considered: 27 July, 2022

Feedback comment: On Socket APIs listed under Networked Applications: “Not clear how sockets programming will be covered in this course. This alone can take up several hours depending on the depth of coverage and the expectation of student programming abilities.”

How incorporated:

Why not incorporated: The reviewer is referring to the KA as a course, which it is not. However, it is important for learners to have some practical experience associated with the topics in question. Some coverage of socket APIs will give learners a bit of a hands on experience in the topics. The need for some practical experience is important, and hence suggesting to keep this as part of the topics.

Date considered: 27 July, 2022

Feedback comment: On Reliability Support: “Topic ordering: The course follows a top-down approach popularized by Kurose and Ross textbook. In my opinion and experience, “Routing and Forwarding” needs to come before “Reliability Support”. There are many reasons for this: 1) The main motivation for end-to-end reliability comes from packet drops in the network. This is hard to motivate without covering routing and forwarding. 2) Similarly, the need for congestion control will be mysterious to students who have not seen how routers operate.”

How incorporated: Possible solution: What we can do is simply list Routing and Forwarding before Reliability support. However, this is not a course outline with a fixed chronological order of the topics listed.

Why not incorporated: A counter argument: The subcommittee believes that listing it the way it currently is maps well from a layering perspective, and is best to list it this way. The reviewer is referring to the knowledge units / topics from a course perspective.

Date considered: 27 July, 2022.

Feedback comment: On Routing and forwarding: “Elementary queuing concepts need to be discussed in this unit: relationship of queueing with latency, relationship between queue occupancy and congestion, perhaps discussion of queue disciplines and their impact in performance. To be clear I’m not suggesting any serious coverage of queueing theory, rather simple queueing concepts – e.g., arrival rate > service rate can cause queue build up and congestion”

How incorporated: We included a topic related to basic queuing concepts in the introduction and gave examples similar to what the reviewer indicated.

Why not incorporated:

Date considered: 27 July, 2022.

Feedback comment: On Mobility: “WiFi and Cellular are much more important to cover in an introductory course than the other topics.”

How incorporated:

Why not incorporated: Mobility is listed as an elective knowledge unit. We have topics under there related to wifi and cellular as the reviewer indicated.

Date considered: 27 July, 2022.
