Midterm Review Questions

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EC 511

Note: this set of questions is not intended to be exhaustive!

Questions

- What are the most important protocols that form the base of the Web infrastructure?
- Describe and discuss properties of each one.
- What are the main elements that influence a web page download time?
- What is the protocol family used to access e-commerce sites from wireless devices?
- What are the main features of this protocol?
Questions

- What are the main issues in Web server architecture and how they affect performance?
- What are the main elements of Web Services? Describe the protocols and standards involved?

Questions

- What are CDNs and how do they work?
- Who are the customers of a CDN company?
- When is it advantageous to use CDNs?
- What is the difference between scaling up and scaling out?
- What are the functions of load balancers?
Questions

- What kind of switching and forwarding methods can be used?
- Describe each one.
- Give examples of some load balancing criteria.

Questions

- What is a Web cluster?
- What kind of criteria should be used to compare Web clusters?
- How can these criteria be quantified?
Questions

- What is the only benchmark for e-commerce?
- Who developed this benchmark?
- What are the main features of this benchmark?
- What is a performance model?
- What are the uses of a performance model in the context of e-commerce?

Questions

- What are the two main types of parameters of performance models?
- Define response time.
- Define availability.
- Define throughput.
- How does one compute the maximum throughput of an e-commerce site?
Questions

- How should one characterize the workload of e-commerce sites?
- Describe the impact of robots on e-commerce site performance.
- What are the main types of technologies used to implement applications in e-commerce sites? Describe each one of them.