T-110.7111 Internet Technologies for Mobile Computing

6.9.2011 Examination

Choose 3 of the 4 topics below and write essays on them. Each topic has additional questions that should be considered in your essay. Discuss other relevant issues as well. Remember to consider what is important and what is not when writing your essay. You may write your essays in Finnish, Swedish or English.

Remember to include the following information in your papers: the course name, date, student ID, name and signature.

1. Mobile cloud: cloud integration in Android and iPhone

   Discuss how Android and iPhone integrate with cloud services. What are the benefits of using cloud services and what are the limitations? Give an example of cloud based service offloading.

2. Design patterns for synchronization in mobile software

   Present two key design patterns for synchronization and state management that are especially useful for mobile software. Consider the benefits and liabilities of the patterns.

3. Mobile platform fragmentation

   Compare three frequently used mobile platforms. What can be said to be the unifying features of the platforms and what are the key differences? Discuss what techniques can be used to cope with platform heterogeneity.

4. Converged communications

   Explain the notion of converged communications. How do SIP and IMS relate this topic? What are the main applications in converged communications?