T-110.5121 Mobile Cloud Computing

12/2014 Examination The use of a calculator is ok. All other material is forbidden.

Remember to include the following information in your paper: the course name, date, student ID, name, and signature. You can answer in English, Finnish, or Swedish.

Choose 3 of the 4 topics below and write essays on them. Each topic has additional questions as hints on what kind of material you should include. Discuss other relevant issues as well. Remember to consider what is important and what is not when writing your essay.

In some questions you are required to state your own views. Pay attention that you also justify your opinions.

1. Virtualization

Describe what is virtualization. Why is it important for cloud computing? What kind of different virtualization techniques are available and what are their essential differences?

2. Cloud technologies

You have been nominated to a project manager responsible for the development of a new cloud service for your company. What kind of aspects would you need to consider in selecting the cloud platform and provider? Besides technical aspects remember to also consider the costs and future use of the platform.

3. Offloading

Describe how mobile applications can benefit from offloading. What kind of applications are most suitable for offloading? What kind of offloading techniques exists? What kind of difficulties will arise with offloading?

4. Web performance

You are responsible for the web site of you company. Customers are complaining that the web site is slow to use, especially with mobile devices. What would you do?

In your reply you may want to touch the reasons of the slow speed of your site and of the ways you could improve the situation. Remember that you may not be able to fully control what kind of platforms your clients are using.