IN5320 - Exam 2018

Tuesday 4th of December 2018
14.30 - 18.30 (4 hours)

The exam consist of three parts:
1. Short answer questions (40 points)
2. Long answer questions (45 points)
3. Discussion - answer only one of four (15 points)

Maximum points: 100.

Short answer questions 40%

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1. Briefly describe the role of the following languages/concepts in front-end development:
   1) HTML, 2) CSS, 3) JavaScript, and 4) JavaScript frameworks (such as React).

2. What is AJAX?

3. What is REST?

4. What are the main categories of free and open source software (FOSS) licenses, and what are their key characteristics?

5. What is modularization and how is it related to platform architectures?

6. What do we mean when we say that platforms are multi-sided?

7. What do we mean by platform envelopment?

8. What do we mean by platform forking?

9. What do we mean by network effects and how is this concept relevant to platforms?

10. What do we mean by software architecture? Name some examples of different types/levels of architectures found in platform ecosystems.

Long answer questions (45%)

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1. Define platform ecosystems, and discuss the differences and similarities in the definitions of, for example, baldwin and woodard (2008) and tiwana (2013). (10%)

2. Provide a few examples of platform ecosystems. Select one and discuss how it meets the definition and characteristics of a platform ecosystem using concepts from the course literature. (12%)

3. Discuss potential benefits associated with a platform architecture, for example in the areas of innovation, design, and implementation. (15%)

4. In your group project, what were the benefits and challenges of developing within a platform ecosystem? (8%)

Discussion. Answer one of the following questions (15%)

1. Explain what is meant by "boundary resource", and discuss their role in platform ecosystems.

2. Explain why involvement of end-users in the software design and development process can be beneficial, and discuss how platform architectures may enable user-participation in large-scale software development.

3. What do we mean when we say that information systems are socio-technical? Discuss how this perspective can be of benefit when understanding failure, success, and challenges with information technology.

4. Describe the REST maturity model. At what level in the maturity model would you place the DHIS2 API? You should discuss to what extent the DHIS2 API meets the criteria for each level in the model.