Lab 1

a. Read the following article:
   http://files.catwell.info/misc/mirror/2003-martin-fowler-who-needs-an-architect.pdf

b. Watch the following video: https://www.youtube.com/watch?v=DngAZyWMGR0

c. Explain clearly why software architecture is important

d. Explain what the difference is between software architecture and software design

e. Explain what makes software architecture so difficult.

f. Explain clearly the main differences of software architecture in a traditional waterfall project and software architecture in an agile project.

g. Suppose you need to define the architecture for a large expensive system, and it is important that this system is future proof because this system will be used for at least 20 years. Explain how you can design a future proof system.

h. List all the tasks you can think of that a software architect needs to do in a software development project.

i. For each of the following qualities, give at least 1 technique that you know to increase this quality:

   1. Performance
   2. Availability
   3. Resilience (against failure)
   4. Reusability
   5. Maintainability

What to hand in?

1. One PDF of part c, d, e, f , g, h and i