# A small Test / repetition

Talk and discuss with your neighbour following questions and concepts

## The layered communication model:

How many layers does the internet model have (the model from the book)?

What is the name of each layer and which order do they have?

What is the primary purpose of each layer?

Which addresses do they have if any?

What is the horizontal communication?

What is the vertical communication?

What is a header?

What is a protocol?

## Application layer:

What is the purpose of the application layer?

Which types of computers (equipment) is part of the application layer communication   
(routers, servers, switches, hubs, PCs, mobiles)?

## HTTP:

What is http? What is it an acronym for?

What is the purpose of the http?

Which port is http using?

Which transport protocol is below the http?

How is the http request header built up?

Describe the different fields in the request header? And what does the different field means?

How is the http response header built up?

Describe the different fields in the response header? And what does the different field means?

## Socket programming

How the client- server architecture does works?

Describe the most important C#-classes in a **client** for TCP programming.

Describe the most important C#-classes in a **server** for TCP programming

## REST Service

What do we use REST for?

What is the purpose of the REST?

Which application protocol is below the REST service (or are REST using)?

Which functions can REST do? And how are the mapped into the protocol?

The REST Service are working on resources, how is this mapped into the protocol?

Where does the REST service have the information for the e.g. new resource in the protocol?

In the REST service response, where in the protocol is the requested information?

What is CORS?

When is CORS necessary to set up (run)?

Which part in a communication is exchanging CORS information?

## REST Service in C#

Where can you set up the route for your REST service?

How do you set up the http methods?

How do you get the information from the URI part of the request (e.g. …/api/Item/**5**)?

How do you get the information from the body part of the request?

How do you get query information from the URI part of the request (e.g. …/api/Item/search?max=xx&Min=yy)?

How do you set the response status code?

How do you set up help pages (swagger) for your REST service?

How do you set up CORS for your REST service?