



ID1354  
Internet applications  
Assignment 4

**Leif Lindbäck**

**[leifl@kth.se](mailto:leifl@kth.se)**

SCS/ICT/KTH

# Goal

- Learn to implement basic **security** and **performance** requirements.
- Learn to implement **long polling**.
- **No new functionality** is added to the ***Tasty Recipes*** web site. Instead you will implement **non-functional requirements**, thereby improving the user's experience.

# Mandatory Task

Implement **security handling** as described in the following subsections on lecture 11.

- File system security
- Input Filtering
- Password Encryption
- Cross Site Scripting
- Impersonation

The **report must clearly show** that you have considered all content in these subsections.

# Limits of Mandatory Task

- You are **not required** to consider the **database security** subsection.
- To set the **username** of the Apache server might be complicated. It is allowed to skip this if facing **severe problems**. However, the report must show that you have tried.
- You **do not have to use HTTPS**, but the report must show where HTTP should be used.

# Optional Task 1

Implement **performance** improvements described in **two** of the following subsections on lecture 11. Note that you are allowed to **skip one** of the subsections.

- Client-side validation
- Caching
- Persistent Connections

The **report must clearly show** that you have considered all content in the subsections you chose.

# Optional Task 2

Implement **long polling** for the comment section of the ***Tasty Recipes*** web site.

Long polling means that comments are **displayed as soon as they are entered**, also when entered in **another browser**.

This is achieved by **re-calling** the function loading comments from server as soon as it has terminated. This is implemented in the **chat-jquery-knockout-comet-mvc** sample application.

Note that there is a **one second delay** when reading comments on the server. Without it, the server would consume too much resources when repeatedly checking for new comments.