

# Web Application Programming Practical Work--- By Guoliang Li

Brief introduction: the general idea of the web application programming is to design a management system for inventory of products. It can provide the functions of user authentication, products management including products loading from MySQL database, setting the status of the products, editing the item information of the products, and delete record of the products, and information feedback, weather services, and browser location indication.

## View structure of the application:

When surfing on the url: <http://home.tamk.fi/~e4lguoli/practicalwork/main.html>

You can see the main page of the application. On the main page is the navigation bar on the top of the page including navigation items of product center, about, contact and login or Sign up which can be linked to corresponding pages. Under the navigation bar is the weather today, below it is the location information, and then practical work information indicating that it is for this job. Under the condition of NOT authentication, you cannot access to any other pages except for login or sign up page.

Clicking into login page, you can login to the system. Here please input email as [li.guoliang@eng.tamk.fi](mailto:li.guoliang@eng.tamk.fi) and password: abc, then you enter into an user authenticated page showing the welcome information, you UID, name and Email information. Or you can go to the sign up page to register a new account to login to the system. After authenticating successfully, you can access all the pages without any problems:

Clicking product center on the navigation bar, products will be shown to you. On products page, products in the database are all listed. All the product items can be added, modified, delete, status change between active and inactive and all of these actions can be updated to the database. You can also search and filter and products by inputting keywords on the filter input box, results for the searching and filter will display immediately reflecting what you have inputted.

On about page, it gives basic some introduction on the application.

Contact page, you can leave your comment with your login name and email. Validation will be done during your input, you will get hints when the input if your comment is less than 5 words. Human verification also needs to get correct calculation result. After this, you can see the comments to my email account: [li.guoliang@eng.tamk.fi](mailto:li.guoliang@eng.tamk.fi). My email account will receive your comment right away in case you have registered the validate email.

You can log out the system by clicking the logout page.

## Main features for the applications are:

- 1 Single page with more than three views from the navigation menu. Different views do not need to reload.
- 2 Weather data is read from the server of [openweathermap.org](http://openweathermap.org)
- 3 CRUD operation on the data on the MySQL database.
- 4 Search and filter features for the products
- 5 Smart layout solutions that can be accessed from both PC and mobile devices which have various sizes of screen.
- 6 Input form validation using AngularJS and CSS. The status of the input box will change the color during the input status. Hints will be given in-time if the two password do not match etc. Human verification input box will become red to warn the wrong input of none-integer character.
- 7 Use animation to indicate the loading of the database. Once finish loading, the animation stops.
- 8 Use Modal popup which is provided by UI bootstrap to edit and modify the product items.
- 9 User toaster which is user-friendly interface to popup information for the users.
- 10 Use google map to indicate the location of the visitors.
- 11 When changing the status or update of the product, there is transition of color to indicate the process.

## Reference:

1 <http://www.angularcode.com/> 2 <https://github.com/ishworthapaliya/cmd-crm>

3 <http://www.slimframework.com/> And other materials searched from internet. June,2015