

Department of Computer Science Institute for System Architecture, Chair for Computer Network

## Application Development for Mobile and Ubiquitous Computing

### **"iGrocShop"** Seminar Task - Second Presentation

Group 2 Chayaluck Tummasiri, Pinthip Saengchoowong

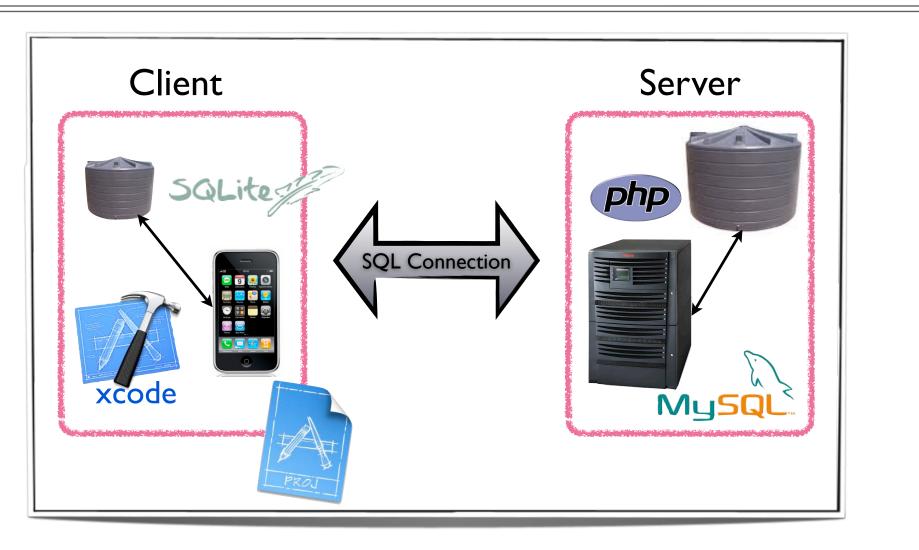


An application that allow users to better manage their grocery shopping lists with provided personal account management that allow users to login/logout of the application for security purpose, inventories section for users to manage their personal lists, store section for users to manage the choice of stores the prefer to have in their application, shopping lists management that allow users to create, update, or delete their personal shopping lists, and lastly a sharing mechanism which allow users to share their shopping lists , stores, or inventories with other peers using the same application.





### Architecture



#### Chayaluck Tummasiri , Pinthip Saengchoowong

## **Technologies**

#### **Xcode IDE**

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DRESDEN

Xcode is as a complete, full-featured IDE built around a smooth workflow that integrates the editing of source code, with the build and compile steps, through to a graphical debugging experience – all without leaving the view of your source code. Interface Builder, Iphone Simulator

Objective-C is a powerful, object-oriented language with a dynamic class system that is incredibly flexible and fast, built as a superset over the standard C language. Objective-C powers the Cocoa and Cocoa Touch frameworks, providing high-level APIs that unleash amazing functionality from a few clear, understandable lines of code. Objective-C 2 includes such modern features as super-fast iteration, and garbage collection tuned for today's multicore Macs.

#### **SQLite**

A software library that implements a self-contained, severless, zero-configuration, transactional SQL database engine. SQLite is the most widely deployed SQL database enginve in the world and the source code for SQLite is in the public domain. Modournettim - Ny Caca App





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## **Technologies**

#### PHP

PHP: Hypertext Preprocessor is a widely used, general purpose scripting language code is processed by an interpreter application in command-line mode performing desired operating system operations and producing program output on its standard output channel. PHP in this case is use to build an API for insert, update, and delete of data in connection with MySQL on the server side.





#### **MySQL**

MySQL is a relational database management system (RDBMS) that runs as a server providing multiuser access to a number of databases. The SQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQLAB, now owned by Oracle Corporation.



### Login / Logout

iGrocShop provides multi-user access and many functions such as inventory management, keep track of stores, shopping list, sharing, and account management.

### Account Management

User can create a new account or change some information of the existing account.





3:13 AM

iGrocShop

NEW ACCOUNT

Username

Password:

### Inventory Management

User can manage inventories that will be used in the application to be understood with the same name.

## Shopping List

The list can be created very easy by selecting from inventory list and put more details such as weight or number





3:04 AM Inventory

 $\Box$ 

0

 $\bigcirc$ 

Fish

Glass

Milk



### Keep track of stores

Each store in the list has many details inside. User can manage a store by creating aisles and putting inventories into the aisles. Moreover, the shopping list an be selected and shown inventories in each aisles.



Carrier 🗢	3:05 AM Store	
aa	51016	0
Netto		۲
orn		۲
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Account	Inventory Store Sh	opping List Share





### Sharing

The stores in the list can be shared to other users by uploading data to the sever. On the other hand, user can see others' data as well.



## Challenges

**Restricted Mobile Device Capabilities** • memory disk • data management **Customer Satisfaction** • usability • data security & safety Heterogeneity in user requirements • personalization and individualization Heterogeneity of input and output device: • input: keyboard, screen • output: display, size, color depth, resolution



## Work Plan

Date	Tasks
~ 31.10.2010	Literatures Review
29.10.2010	First Presentation
~14.11.2010	Database Setup
~21.11.2010	Implementation of LBS
~5.12.2010	GUI Prototyping
~12.12.2010	Server Setup
17.12.2010	Second Presentation
~16.01.2011	System & Usability Test
~22.01.2011	Documentation
28.01.2011	Final Presentation
4.02.2011	Submission of final result



# Thank You for Your Attention