

Distributed Software Development



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Requirements definition and System architecture BuySafe

Review

- Functionality
- Implementation
- Requirements
- Technology

The goal

- **Protect the people who buy food**
 - Warn them if the product is harmful
 - Contains substances that are harmful
 - Contains substance that can cause allergies
 - Inform them about
 - Manufacturer
 - Contents
 - Quality
 - Shopping advice

The team

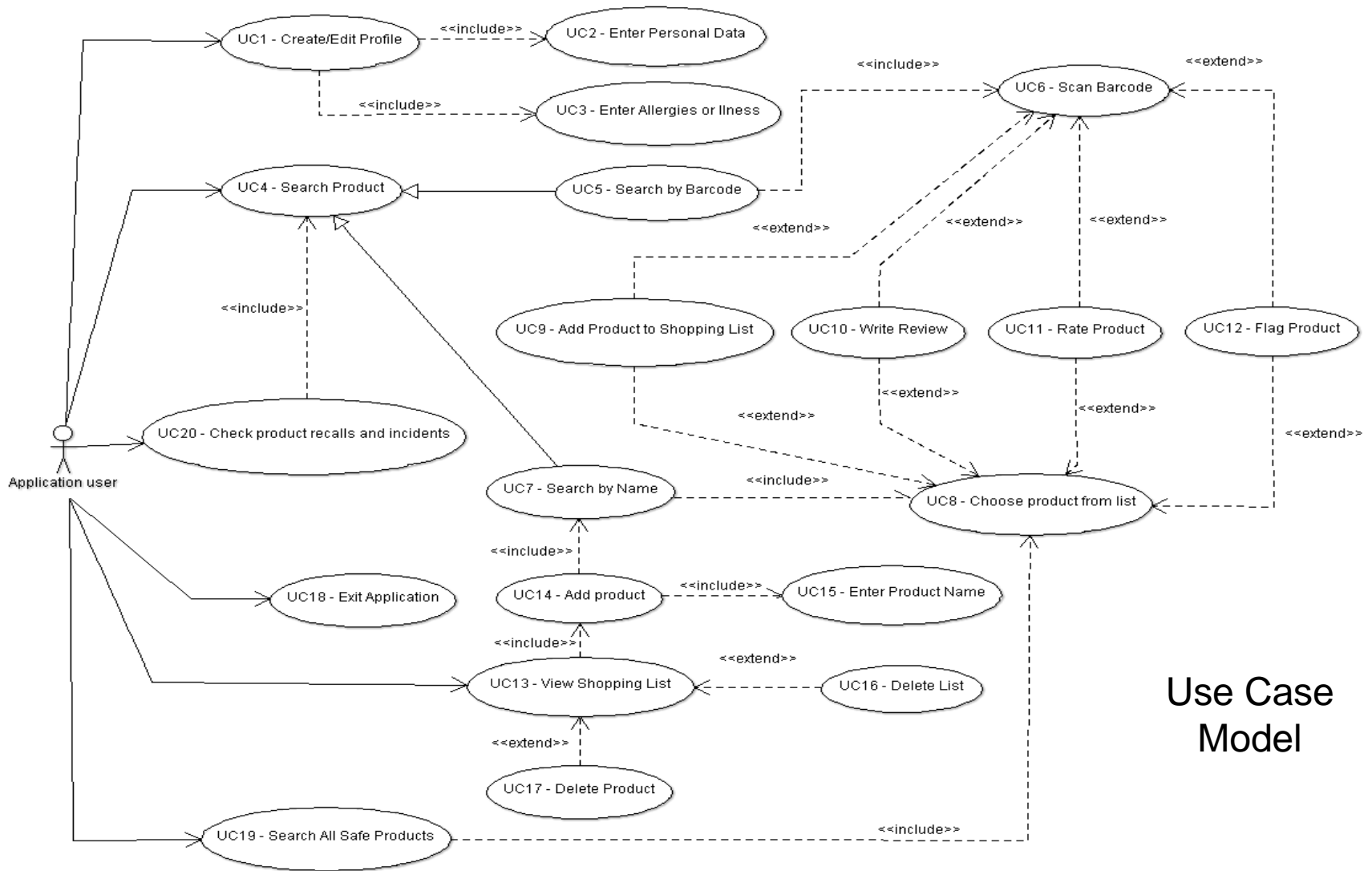
- Development team members:
 - Juraj Murgić – project leader
 - Trevor Jagerfield – team leader
 - Saša Marjančić
 - Želimir Kompes
 - Fouad Yaseen
 - Xiaowei Ma
- Supervisor:
 - Marin Orlić

Functionality

- **Basic**
 1. Create/Edit profile
 2. Search product
 - By barcode
 - By title
 3. View product details
 4. Review and rate the product
 5. Flag the product

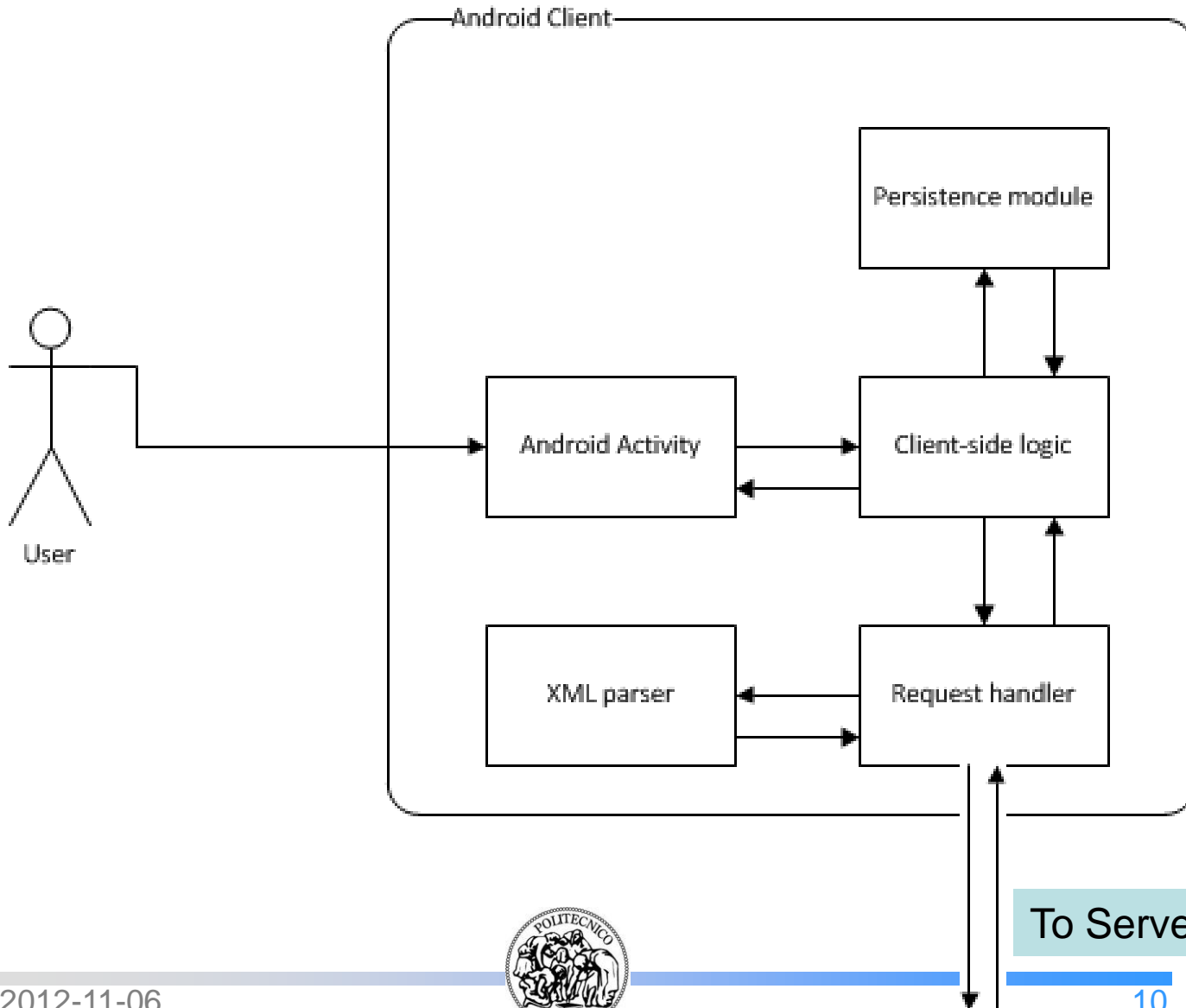
Functionality

- Optional
 1. Product comparison
 2. Product shopping list
 3. Schedule DB updates (server)
 4. Real-time parsing from other data sources (server)

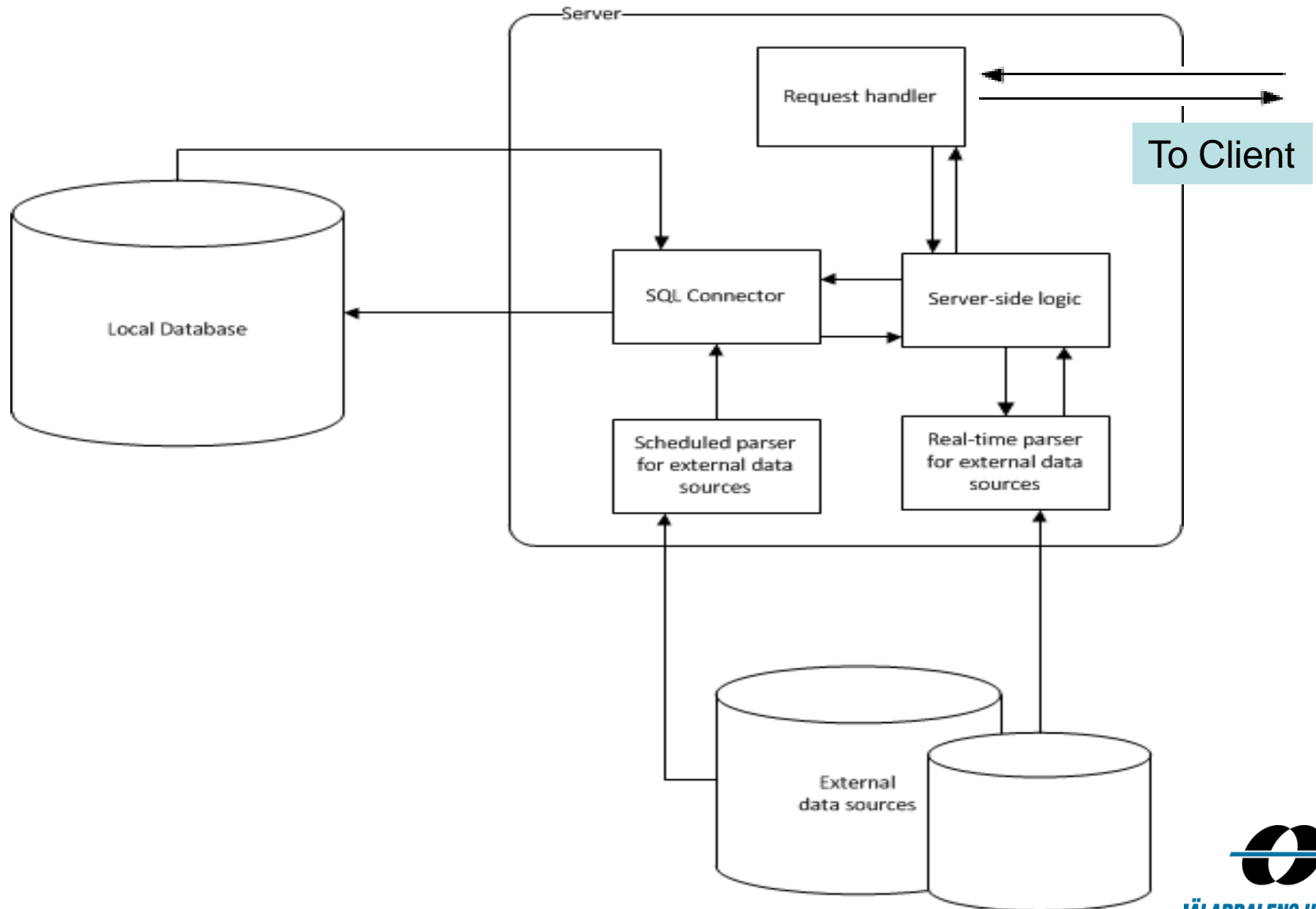


Use Case Model

System Architecture

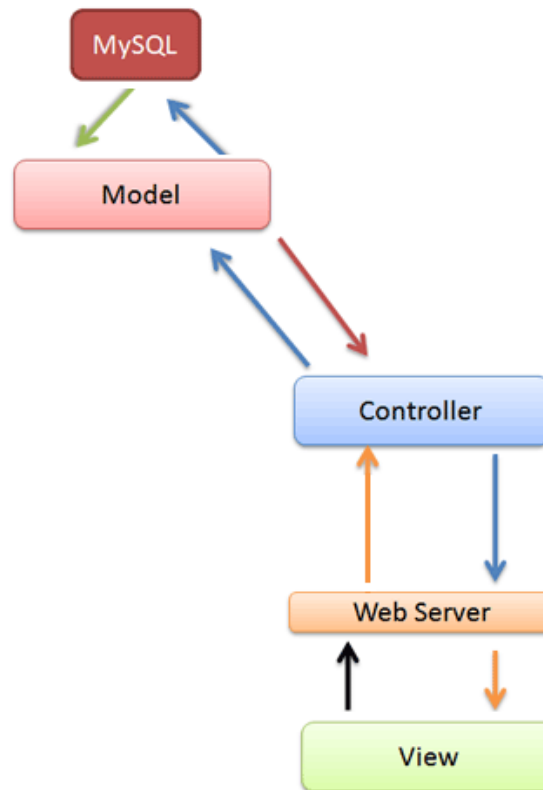


System Architecture



MVC design pattern

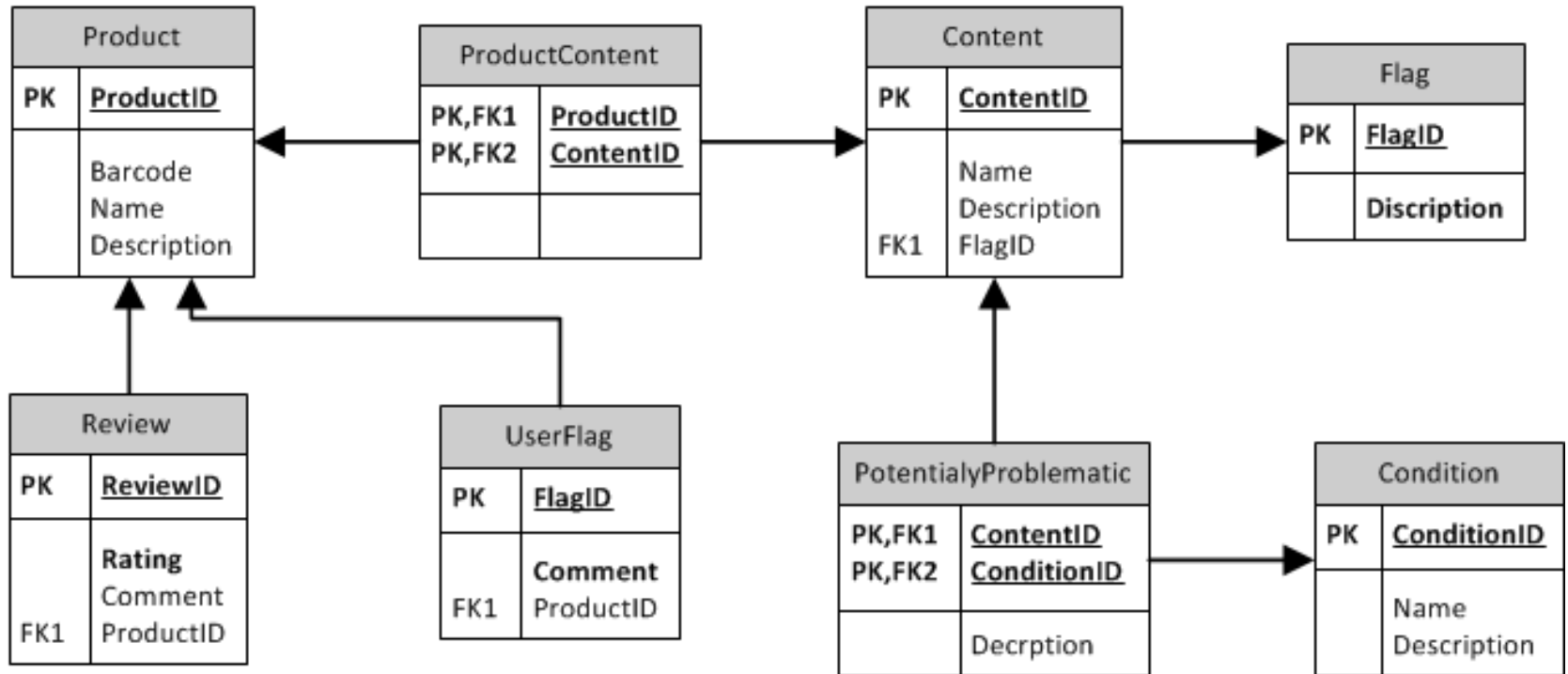
MVC



Server interface

Method definition	Response
searchProductsByName(String name)	list of products
getProductByName(String name)	product
getProductByBarcode(String barcode)	product
getProdcutByName(String name, String parameters)	product
getProdcutByBarcode(Integer barcode, String parameters)	product
flagProductByName(String name, String flaggDescription)	Bool successful
flagProductByBarcode(Integer barcode, String flaggDescription)	Bool successful
reviewProductByName(String productName, String review)	Bool successful
revirwProdcutByBarcode(String productName, String review)	Bool successful

ER diagram



Additional requirements

- Database
 - Fast searches by name nad barcode
- Data integrity
 - Alow data from diferent data sources
- Susceptibility to testing
 - Test each layer individually
- Interoperability
 - Interface to the client (view)

Additional requirements

- Performance
 - Response time < 10 sec
- Usability
 - Three click rule
- Security
 - Insure user privacy
- Interface
 - Content is from a reliable data source

Technologies

- Client
 - Java
 - XML
- Server
 - Java
 - Apache Tomcat
 - Apache Struts 2

Technologies

- Data base
 - MySQL
- Data gathering
 - C#
 - Python

Stay healthy, BuySafe



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Questions?