Masters Dissertation

"Smart Cafeteria" Adaptive And Interactive Mobile Application

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Outline of Thesis

Outline

Thesis Background

"Smart Cafeteria"

- is a part of Smart Campus Project.

http://www.smartcampuslab.it/

- Smart Campus has funded by Trento RISE.

http://www.trentorise.eu/

Outline

Scenarios I

Hungry Students

Scenarios II

Busy Professors

The Problem I

Create "Smart Cafeteria"

Will be supported by:

- web 2.0 Technologies.
- Smartphone application.

The Problem II

"Smart Cafeteria"

application should be

- Adaptive.
- Interactive.

Outline

Objective

Proposed Services

- Mensa Queue Skipper.
- Menu Finder.
- Menu Suggester and Dieting Adviser.
- Customized Menu creator.
- Lunch with Friends.

Outline

Stakeholders

Stakeholders

- System Users.
  - Students.
  - Professors.
  - Researchers.
  - Universitys Administration Officer.
  - Universitys Technical Staff.
- System Administrator.
  - Cafeteria Staffs.

Functional & Non Functional Requirements

Functional Requirements

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Non Functional Requirements

Usability Internationalization Portability Adaptability

Data Gathering & More Requirements

Data Gathering & More Requirements

- Studying Cafeterias Food Menu and Documents.
- Focus Group - 7 participants.
- Questionnaires.

Outcomes

- The application is usefull.
- QR BARCODE.
- UML of application (Use case, Class Diagram, etc.)

Outline

Desktop Prototype

Mobile Prototype

Features of Smart Cafeteria

Outline

Evaluation Methodology

User studies and questionnaire Methodology
Target Users (10) students
Given them 9 tasks to perform
Given them 14 questions to test (i) usefulness, (ii) easy to use, (iii) learnability and (iv) Satisfaction
Both Desktop and Mobile Prototype was evaluated.

Evaluation Result

the result was analyzed calculating Mean(μ) and Standard deviation(σ). Standard Deviation, $\sigma = \sqrt{\frac{1}{N}\sum_i^N (x_i - \mu^2)}$ where Mean, $\mu = \frac{1}{N}\sum_i^N x_i$.

Result for desktop Prototye

Result for desktop

Result for Mobile Prototye

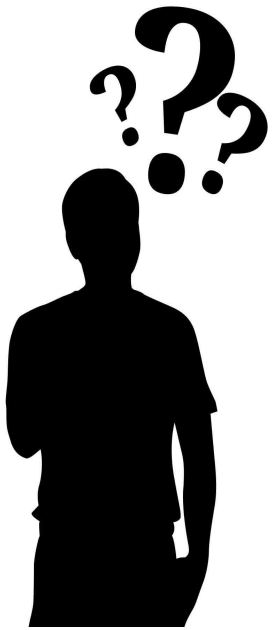
Result for Mobile

Outline

Future Work

Questions

Any Questions



Thanks