



SmartDiet - Personal Wellbeing Assistant and Diet Planner Mobile Service

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Introduction

- The paper describes a new mobile service that combines features of personal wellbeing assistant and diet planner.
- This paper discusses a series of mobile services for wellbeing and healthcare, part of which are already implemented by our team and available for free download and others are under development.



Introduction (con.)

- Our solution is based on adoption of Smart Space principles to provide user with decisions that will ensure personal comfort and meal requirement of personal healthy diet.
- Currently the main focus of our studies has shifted to exploration of the smart space capabilities in providing a way for communication between different devices participating in SmartDiet service provision chain.



Smart Space Technology

- principle of pro-active service provision
- the smart space platform enables to connect various types of devices into the service provision process
- the smart space content is physically distributed on the multitude of user devices



RFID

- A radio-frequency identification system uses *tags*, or *labels* attached to the objects to be identified.
- Two-way radio transmitter-receivers called *interrogators* or *readers* send a signal to the tag and read its response.
- The readers generally transmit their observations to a computer system running RFID software or RFID middleware.



Smart-M3

- The key idea in Smart-M3 is that devices and software entities can publish their embedded information for other devices and software entities through simple, shared information brokers - a "push"-based information sharing model rather than specific publish-subscribe.
- Another key idea is that Smart-M3 is device, domain, and vendor independent. It is free to use, open source solution available in BSD license.



What is done

- developed client helps a user to control his/her physical activity
- user can calculate ideal weight in terms of the body mass index (BMI)
- reminder to have meal in particular time



Equipment

- PC/Laptop
- Mobile device
- Fridge
- Microwave
- Stove
- TV set
- Medical devices (tonometer, glucometer, etc.)



Use cases

- Reminder
- Shop assistance
- Children and elderly parents control
- Ration control
- Freshness control
- Suitable recipes selection
- Medical parameters control
- Kcal counter
- Physical activity counter



Main Use Cases Defined for the Application

- Edit the personal data
- Track food and activity
- Reminder and scheduling eating time
- Track nutrition value
- Calculate a product
- Do record in journal
- Set target
- Get BMI
- Get help

Helping You Everyday!



Smart M3





Conclusion

- Research is on its first steps of development
- Problem is formulated
- Tools for realization are studied