

# INTED **2014**

**8TH INTERNATIONAL  
TECHNOLOGY,  
EDUCATION AND  
DEVELOPMENT CONFERENCE**



# **CONFERENCE PROCEEDINGS**

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## WELCOME INTRODUCTION

**Dear INTED2014 participants,**

It is a pleasure to welcome you all to this 8th edition of INTED.

We live in a constantly changing society where innovation, technology and education are the key to the world's development. For this reason, INTED2014 intends to welcome educational experts from all corners of the world under a common aim: to generate thought-provoking ideas for innovative education and to promote international partnerships.

We have made every effort to bring together participants from all disciplines and cultures. In fact, every year INTED attracts over 600 participants from more than 75 countries world-wide, making it a large annual meeting point for educators, teaching and learning technology experts and researchers.

We hope that your participation to this conference will provide you with an opportunity to share best practices, open your minds to other educational perspectives and explore new horizons.

Valencia, venue of this conference, will provide you with the opportunity to discover a city full of life and history, impressive old and modern architecture and beautiful beaches and natural surroundings.

Thank you very much for coming to INTED2014. We hope that you remember this conference as an inspiring international forum.

We hope you enjoy your time with us!

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## CONFERENCE SESSIONS

### ORAL SESSIONS, 10th March 2014.

Research on Technology in Education (1)  
Video games for learning  
Experiences in Educational/Serious Games  
Web 2.0 and Social Networking  
Quality Assurance in education (1)  
Meet the Keynote  
Experiences in STEM education  
Education and Globalization

Research on Technology in Education (2)  
3D Applications, Augmented and Virtual Reality  
Collaborative and Problem-based Learning (1)  
Technology-Enhanced Learning (1)  
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Evaluation and Assessment of Student Learning  
Experiences in Business education (1)  
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Virtual Universities and Distance education  
Mobile learning  
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Technology-Enhanced Learning (2)  
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Social Media and Computer Supported Collaborative Work  
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### POSTER SESSIONS, 10th March 2014.

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Experiences in Education and Curriculum Design

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PROCEEDINGS INDEXED IN  
**WEB OF KNOWLEDGE**

## MONITORING AND CONTROL OF DISORDERED EATING BEHAVIORS USING MOBILE DEVICES

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Each day an increasingly amount of people suffer from a DEB (Disordered Eating Behavior). Anorexia and bulimia are the most popular DEBs known. Anorexia affects around 1% of female adolescents being the most dangerous range of age between 12 and 17 years old. The main problem to focus on is not only this type of disorders but also psychological disorders as muscle dysmorphia or obesity. According to the WHO (World Health Organization), in 2008 more than 1.4 billion adults were overweight, which means that, more than 10% of the world's adult population was obese. Because of this, the WHO has been forced to give obesity the proportion of global epidemic. Eating disorders have the highest mortality rate of any mental illness. This project's most important aim is to assist doctors and psychologists with the control and monitoring of patients who suffer from anorexia, bulimia, obesity and other eating disorders.

This paper derives from a project that brings together health investigations, concerning eating disorders, and the concept of IoT (Internet of Things). The main objective of this project is to educate about healthy eating habits using current technology such as smart phones, tablets or sensors to monitor the activity.

Smart phones and tablets are gaining more users each day. Spain is the country, in the European Union, where there are more smart phones per mobile phone acquired. This, together with the growing use of tablets, built the idea of patient tracing using mobile devices.

This project consists of an Android Application developed to help health-care professionals educate patients' eating habits and lead them towards healthier habits. Constant monitoring of the patient in different scopes is the main feature offered by this project. It provides a tool for the user to insert the ingested food, within the five different meals of the day, and a tool for the user to indicate his weight so that the health-care professionals can keep track of the patient's eating habits and be able to correct them. Knowing the patients' symptoms and moods during each day makes it possible, for the health-care professionals, to follow the progress of the patient during the treatment. This psychological monitoring will help provide therapies in a more personalized way. Most of the time, patients' psychological problems have nothing to do with eating disorders but they can result in the appearance of DEBs.

On the other hand, the project is also developed to include the direct measurements taken by a series of sensors, provided by the Fitbit device, which return data from the physical activity of the patient. It is also possible for the patient to insert the physical activity practiced if there is no Fitbit device available.

Finally, the automation of the dietary intake data will become a key aspect of this project as this technology will make the application easier to use and will require less effort from the patient offering, for example, a recognition of packaged and unpackaged food. This tool is in process of experimentation for a number of patients in a clinic of psychological and nutritional care, which specializes in DEB treatment.

**keywords:** *disordered eating behavior, educate eating behavior, smartphone app, android, psychological monitoring, sensors, automation dietary intake.*

# MONITORING AND CONTROL OF DISORDERED EATING BEHAVIORS USING MOBILE DEVICES

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## Abstract

Each day an increasingly amount of people suffer from a DEB (Disordered Eating Behavior). A project that brings together health investigations, concerning eating disorders, and the concept of Internet of Things [1] is presented. It is focused on education about healthy eating habits using current technology, such as smart phones, tablets or sensors in order to monitor the activity. Eating disorders have the highest mortality rate of any mental illness, and our most important aim is to assist doctors and psychologists with the control and monitoring of patients who suffer from anorexia, bulimia, obesity and other eating disorders. An Android application has been developed to help health-care professionals educate patients' eating habits and lead them towards healthier life. The automation of the dietary intake data will become a key aspect in this work, as this technology will make the application easier to use and will require less effort from the patient offering.

Keywords: eating disorders, dietary intake, anorexia, bulimia, Internet of Things, IoT, sensors

## 1 INTRODUCTION

As it is well known, certain feeding problems may come from different anxiety disorders, such as psycho-affective, obsessive-compulsive or post-traumatic disorders. These types of behaviours should be controlled not only by a nutritionist but also by a psychologist or psychiatrist who can evaluate and generate control tools to deal with these impulses.

Considering that these kind of disorders are associated, not only with a wrong dietary guidelines, but also to a maladaptive behaviours, it will be required periodic feedback from the patient to detect and correct them more accurately. Generally, a specialized physician often makes an objective review based only on the prescription of a diet and obtaining from the patient some feedback that usually consists in the annotation of the evolution of the weight periodically.

However, due to the incipient penetration of smartphones in our society, the doctor may prescribe a diet that the patient could take advice from the device, in the consulting room or remotely. In order to do this, he would record each food intake based on the patterned menus, the number of portions consumed or even other food intake consumed out of diet.

In addition, according to the records provided by the patient, or following the guidelines of the psychological treatment prescribed by the psychologist, the doctor may even vary the initial diet to adapt it to other phases of treatment. To perform this, he could access and modify, in real time, all those menus, food and portions he believes to be the most appropriate.

Considering that some types of behaviours may come from a non control of impulses front of certain foods, and some impulsive food intakes may be associated with emotional patient situations also some subjective records will be required, such as the state of the patient's mood during the day, if the

subject is under stressing or anxious situations in his day-to-day, or even his health state. This type of emotional situations should be recorded daily in conjunction with those perceptions produced after each food intake, as satiety or similar thrills.

Most diets fail due to the patient's lack of motivation from the patient, either because they should be maintained for extended temporary spaces, or because they require complicated intake records from the subject, records that are monitored by doctor, and the ability to react to incorrect interpretations of the patient or disordered food intakes is lost. A formula to try to overcome this frustration would be through an external support from the pursuit of their achievements or goals. Here, the concept of gamification [2] adapted to health becomes very useful. The system rewards the patients by several factors, among them, for a proper diet tracking, the goal of lose or gain weight, or play sports, or by the amount of exercise performed. The concept of gamification is not new in those aspects related to the health or wellness, existing applications for smartphones that even help you quit smoking [3] or help follow other diets, like the old "diet points" [4], although we discourage these kind of applications without medical supervision.

Several authors [5] investigate on how to automate the registration of food intakes, aided by computer vision technology through their smartphones cameras or any another type sensors. Fundamentally, it attempts to capture the type of food eaten, the portion size, nutritional information or other parameters that help to monitor the diet.

Taking advantage of the current trends of Internet of Things and all the sensors that are appearing on the market, it has been introduced the functionality of automated registration of certain physical exercises through Fitbit [6] product, consisting of a 3D accelerometer which allows us to record the distance covered by the patient daily, weekly or monthly, either walking or running, in addition to recording the consumption of calories in physical exertion.

## **2 PROJECT APPROACH**

At the moment that a doctor is faced with a case of food overweight or deficit problem, the usual prescription is a high-calorie or low-calorie diet that pursues the goals of the patient. The subject will require displaying a record, previously saved by the physician, and also entering the daily food intake, recording some deviations made on the initial diet that will be reported to the doctor. In consequence, the patient will access to the application and will redirect the diet, i.e., he could remotely vary the diet on the application besides the programmed control checks at the clinic, in order to obtain further feedback from him regarding these deviations.

All scheduled and regulated diet is based on levels of activity undertaken by the patient. The application would allow him to record these daily activity levels based on some reports that the user would enter depending on the activity, or though the automation of the activity recorded with a series of sensors. At this early stage of the project, it has been introduced a sensor capable of measuring the distance travelled by the patient daily, and the calories consumed for a physical exercise performed.

Also, normally, this type of intervention does not take into account influential variables in eating behaviour, such as psychological issues such, like stress or anxiety, suffered in their day-to-day life, or constant or variable state of mind against daily aspects as work or personal life. It takes no consideration aspects as hunger perception by the patient, i.e., the subjectivity of the patient associated with the above food intake or after them.

On the other hand, it is known that the hypothalamus is the neurological body capable of transmitting messages of thirst, hunger and satiety to the brain, and many of these eating disorders transmit messages in an erroneous way, that is, the subject may not be able to distinguish, for example, between hunger and thirst, even it would not know when the subject is satiated.

As we introduced above, this application will allow this type of subjective variables for further analysis of the type of food and the frequency of intake, in order to refine the type of diet that will be required by

the patient, or the scheduled psychological treatment required to control for dysfunctional behaviours associated with food and generate tools that allow the user to modify these behaviours.

Another aspect to consider is the motivation of the patient. He will be regularly found under remote monitoring by the doctor through this application, which may strengthen or alert depending on the saved records of the associated variables. In addition, one of the major areas covered by the application is the daily recording of food intake, making the objective of the patient a priority and helping him not to fall into apathy or even abandon the diet. The subject will lead to a successful diet if he is strengthened by external factors, for example, the motivational messages received from people facing like him to a similar diet or through badges, automated or not, because of the achieved milestones that will be previously examined by the doctor.

Next, we will address technical aspects of the application that will allow us to record and act on these organic, metabolic, and psychological aspects.

### 3 PROJECT STRUCTURE

#### 3.1 Development Environment.

In order to develop this application, five key tools has been used, , these are: Java [7], Android [8], MySQL [9], JSON [10] and Fitbit. The project consists of an application developed for devices running with Android OS that is why the coding has been programmed in Java using Eclipse [11].

As for the rest of the tools, MySQL provides the database where all the data will be stored, both user and professional data. JSON however will handle the communication of the data from the database in the server to the application installed in the user's device.

On the other hand, Fitbit will give the application an extra feature to provide the best usability as possible. The purpose of Fitbit is to measure a series of parameters and automatically store them in the user's physical profile.

The Android application will be complemented by a web application through which the healthcare-professionals will be able to follow the user's progression. A map has also been included in the application using Google Maps [12]. This application is fit to be used in both smartphones and tablets running Android OS. In the following picture, Fig. 1, we can see a graph with all of the tools used for the development of this project.

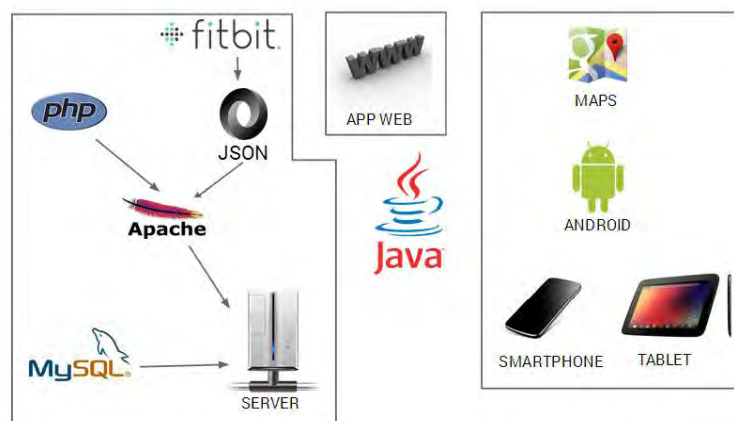


Fig. 1. Development tools.

## 3.2 System for the interaction with the patient.

### 3.2.1 Log in.

For the user to be able to use the applications it is necessary to follow a registration process which will compile the first information for the user's profile and will give him a way to identify himself by a user name and a password. This identification will protect the information managed by the application and will ensure that it will only be shown to the rightful user.

It is extremely important to point out that at the time of the registration two groups of users are developed, one for users who will be followed by health-care professionals, which are patients of the clinic who is testing the application, and the independent users of the application.

### 3.2.2 User options.

Once the log in is done correctly, the user gains access to the main activity panel. In this activity we can access the user options by clicking in the application's logo. A sidebar menu will be shown with 6 options: Home, Profile, Log out, Unsubscribe, About and Information about the clinic. We can see these options (in Spanish) in the screenshot shown in Fig. 2.

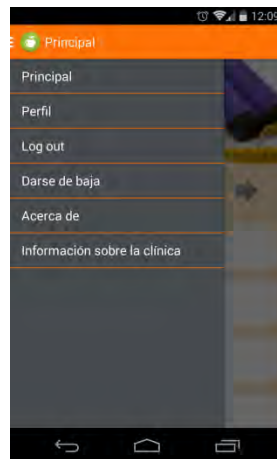


Fig. 2. User options.

- Home will take the user to the main activity of the application.
- Profile shows all the personal data that the user has indicated in the registration process and will give him the possibility of modifying it.
- Log out will no longer remember our user and password in the device with which the user is accessing the application.
- Unsubscribe makes it possible to the user to erase all his data from the database when he no longer wants to use the application.
- About option gives information about the developers, authors of the images included in the application and privacy policy of the application.
- Information about the clinic provides the contact information of the clinic that is in process of testing the application with real patients.

### 3.2.3 Home.

It is by the main activity of the application that the user can access the most important features of this application. It contains the tools for monitoring food intake, physical activity, psychological state and weight. We can see an example of the home activity in Fig.3.



Fig. 3. Home activity

This home activity is shown for each day so that both user and health-professionals are able to introduce and control the data for each day. It is possible to move to different dates by using the calendar option or the arrows shown beside the date.

#### 3.2.4 Profile.

As it is said before, the user must fill in the form of registration to create a user profile and be able to use the application.

First the form asks the user to introduce some personal information such as name and email address. Then some information about the user himself like date of birth, weight or height. And, finally, some information about the user's habits such as the frequency of physical activity during the week, the sports that the user practices regularly or the kind of physical effort made by the user during his working hours.

Therefore, the series of data asked in this form are very valuable for the health-care professionals who can make a first evaluation profile of the patient and can lead them to the first treatment or path to follow to make a diagnosis.

All this primary data can be seen and modified by the user at any time to adapt to the changes that his routine can suffer.

#### 3.2.5 Introduction of food intake.

There is a whole process for the purpose of controlling the food intake of the user. It begins with giving the user the opportunity to introduce the food intake divided by meals, this is, separating the aliments that the user has eaten during the five ideal meals in a day; breakfast, first snack, lunch, second snack and dinner.

Once the user has selected the meal in which he wants to introduce the food intake he can do so. It is important to bear in mind that there are two different ways of introducing the food intake. The first one is by recommendation of the health-care professionals, this is, following an agreed diet. The second one is to introduce an aliment ingested outside the agreed diet. This second method is the one used by the independent users due to the fact that they are not followed by health-care professionals.

The process for the introduction of food intake included in a scheduled diet is made as follows.

First, the user is able to see the aliments for the diet programmed for that meal and in that day. This diet has been introduced by the health-care professionals using a web application and it has been stored in the database. After that, the user selects the aliment he has ingested and introduces the amount he has ingested, measured in portions, and confirms. Eventually, once the user has confirmed the food intake, it remains stored in the database.



The second process for the introduction of food intake begins with a list of aliments that comes from the database. The user searches for the aliment he has ingested and selects it. Once the selection is made he introduces the amount eaten using the same process used in the first method.

All this information about food intake can be seen and modified by the user at any time and it is also accessible for the health-care professionals to evaluate the evolution of the patient.

In addition, there is the possibility for the user to introduce the level of satisfaction with the meal indicating the level of satiety he is feeling from one to five.

The introduction of food intake is very important at this point. The aim of this project is to be a first step towards a totally automatic insertion of food intake. Some recent research [5] introduce new aspects about the automation of the insertion of food intake to give nutritional information and, at the same time, not to require too much effort from the user. Something like bar code or QR code reading could be used for this purpose. To be able to give all this information, the Internet of Things (IoT) becomes an excellent tool. Being able to identify the food by itself somehow will provide the information needed.

There is a new sensor in the market that gives an example of what could be done using IoT, this sensor is called "TellSpec" [13] and it could be implemented in the application in the future. It consists of a device that includes a laser spectroscopy to analyse the chemical composition of any food. This device would avoid the manual selection of a food and would provide directly the chemical values in which we are interested in and would make it easier to develop a calorie calculation.

Avoiding to the user the process of introducing the food intake manually will give the application a more usable character.

As far as other applications available in the market, there is a main difference to point out. An average application for personal health control provides a series of data to the user depending on the food intake, the physical activity, etc. This application has been implemented also to give this type of data, however it offers the control and monitoring made by health-professionals which gives the user a more personal approach for a future treatment.

### *3.2.6 Introduction of symptoms and moods.*

There are two options in the main activity of the application for the monitoring of the psychological state of the patient.

As far as mood is concern, the monitoring is divided in morning, evening and night. The user can select from a list, coming from the database, the different moods he has suffered and indicate them divided in this three periods.

On the other hand, concerning symptoms, the user selects, from a list, the symptoms he has suffered during the whole day and they get stored in the database.

The monitoring of the psychological evolution of the patient is crucial since disordered eating behaviours have a psychological origin in them as well as a key aspect to work on during the treatment. That is why, the control and monitoring of the patient is done not just by a nutritionist but also by a psychologist.

### *3.2.7 Introduction and monitoring of weight.*

The weight can be stored in the database once a day and, with the going of the days, the user is able to see his progress thanks to three different graphs. The first graph shows the evolution of the weight of the user in the last seven days, the second in the last month and the third in the last three months. These graphs have been developed using the AndroidPlot API [14] adapting the view to the application together with the parameters. In the following figure (Fig. 4) we can see an example of the evolution of one user's weight in the last month.





Fig. 4. Weight evolution in the last month.

### 3.2.8 Balance of calories.

The balance of calories options consists of a series of data to inform the user of his ideal state and the state in which he is at the moment. This activity is thought to support the user's knowledge of his progress and have a clear view of the final objective to achieve. It consists of five simple parameters. In the following paragraphs the calculations made are explained.

The first value that is shown is the ideal Body Mass Index (BMI) [15] of the user. It is taken from a table that gives a range of values for the BMI depending in the age of the person.

The second parameter is the current BMI of the user. This is a calculated taking into account the height and weight of the user.

The third value is the recommended calorie intake that is calculated using the Harris-Benedict equation [16]. It begins with the calculation of the Basal Metabolic Rate (BMR) [17] which is different for men and women and finishes with the calculation of the daily recommended calorie intake taking into account the frequency of physical exercise of the user.

The fourth value is the amount of calories ingested by the user during the selected day, for this calculations it has been enough to calculate the sum of the calories of the aliments and amount of them ingested by the user.

The last parameter is the amount of calories burnt by the user during his exercise. This value comes either from the self-monitoring or from the data recalled by Fitbit.

We can see an example of the activity showing this data in the following screenshot (Fig. 5).



Fig. 5. Balance of calories.

### 3.3 System for the registration of physical activity.

#### 3.3.1 Self-monitoring of physical activity.

The self monitoring of physical activity consists of the manual introduction of the exercise made by the user. For this procedure, the user can select one the sports the he practices regularly. This sports have been indicated in the moment of the registration and can be seen and modified through profile in the menu of user options. The user has to select one of these sports and then indicate the time he has spent practising this sport. We can see this process in Fig. 6 and Fig. 7.

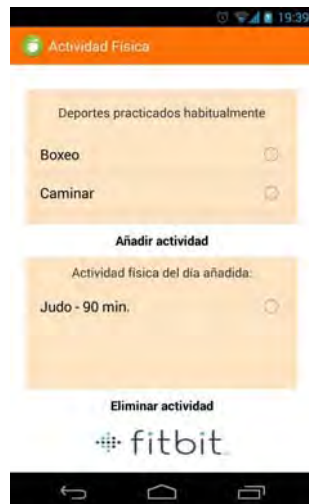


Fig. 6. Regular sports



Fig. 7. Introduction of the activity

Taking into consideration the sport, the time of the exercise and some physical parameters of the user, it is possible to calculate the amount of calories he has burnt during the exercise.

#### 3.3.2 Automation of the process to monitor physical activity: Hardware activity monitoring.

The second system for the registration of physical activity is to use external hardware to measure the exercise of the user. For this matter IoT is basic. Using IoT's sensors capabilities it is possible to monitor in real-time the activity of the user during the day and every day [18]. In the article "The Internet of Things and Next-generation Public Health Information Systems. Communications and Network" the authors point out that the IoT sensors for personal health purposes and the data measured should be implemented for base populations, which is, the average user.

In the case of this application, Fitbit has been introduced to fulfil the purpose of measuring the physical activity of the user using sensors. Fitbit consists of a sensor that measures the activity of the user and gives back some parameters. Using the Fitbit API, it has been possible to access this parameters and include them in the application using JSON tool. In this case, it is only interesting to include three parameters: distance, elevation and burnt calories.

There is an specific activity in the application that shows this parameters if they exist. The amount of burnt calories is also included in the total of daily calories burnt by the user.

Apart from Fitbit, there are many other sensors that could be implemented in this case such as Amiigo [19] or Basis [20]. Eventually, this part of the project is meant to achieve the total monitoring of the user, not just the regular activity but also other health parameters including heart rate, body temperature or sleep tracking.

### 3.4 System for navigation using Google Maps.

Last but not least, there is the navigation using Google Maps.

As we said before, the application is being tested by a clinic and on real patients. The aim of this project is to be introduced in different clinics or health-care systems to help the professionals with the monitoring and control of disordered eating behaviors. Due to this it is convenient to show the contact information of the corresponding clinic to the user.

For this purpose we have an option in the user options menu. Together with the contact information there is a map included. This map is shown using the maps API provided by Google and it points the location of the clinic. Moreover, if the user clicks on top of the map he is automatically driven to the location of the clinic but in the application Google Maps where he can, for example, calculate the route to get there.

## 4 CONCLUSIONS

A new solution to monitor and control disordered eating behaviors remotely is presented. This solution was implemented in a mobile phone application because these devices are a valuable and powerful tool to introduce regularly food intake and psychological aspects. Additionally, we have listed technical aspects of the application that will allow endocrinologists, nutritionists and psychologists to record and act on organic, metabolic, and psychological aspects of the subject to control the diet correctly.

Moreover, this application enables us to the early detection of new disorders of the patient, as psycho-affective, obsessive-compulsive or post-traumatic disorders that were not discovered in a previous exam. On the other hand, disciplines as psychology, medicine and engineering have joined in this app to help patients to change eating behaviours in a more direct and faster way, and a new sensor based on the activity of the user has been incorporated to relieve him of some data introduction and to help professionals with more accurate parameters.

In conclusion, with the emergence of the Internet of Things technology, automatic dietary intake data will be a reality close in time, and the aim of this project is to streamline the appearance of this kind of solutions to lead people towards healthier life.

## REFERENCES

- [1] Internet of Things (IoT), [http://en.wikipedia.org/wiki/Internet\\_of\\_Things](http://en.wikipedia.org/wiki/Internet_of_Things)
- [2] Gamification, <http://mobihealthnews.com/27298/four-factors-driving-gamification-in-healthcare/>
- [3] Quit now!, <https://play.google.com/store/apps/details?id=com.EAGINsoftware.dejaloYa&hl=es>
- [4] Dieta de los puntos, <https://play.google.com/store/apps/details?id=com.rareartifact.dietapuntos3AB1354D>
- [5] Steele, R. (2013). An Overview of the State of the Art of Automated Capture of Dietary Intake Information. *Critical Reviews in Food Science and Nutrition*.
- [6] Fitbit, <http://www.fitbit.com>
- [7] Java, <http://www.java.com/>
- [8] Android, <http://developer.android.com/>
- [9] MySQL, <http://www.mysql.com/>
- [10] JSON, <http://en.wikipedia.org/wiki/JSON>
- [11] Eclipse, <http://www.eclipse.org/>
- [12] Google Maps, <http://maps.google.com>
- [13] Tellspec, <http://www.tellspec.com>

- [14] AndroidPlot, <http://www.androidplot.com>
- [15] Body Mass Index (BMI), <http://www.cdc.gov/healthyweight/assessing/bmi/>
- [16] Harris J. A., Benedict, F.G. (1918) A Biometric Study of Human Basal Metabolism. Proceedings of the National Academy of Sciences, pp. 370–373
- [17] Basal Metabolic Rate (BMR), <http://www.diabetes.co.uk/bmr-calculator.html>
- [18] Steele, R., Clarke A. (2013) The Internet of Things and Next-generation Public Health Information Systems. Communications and Network.
- [19] Amiigo, <http://www.amiigo.com>
- [20] Basis, <http://www.mybasis.com>