

# **Application of Social Containing- Electronic prescription for medication**

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## **1 Abstract**

This paper has as a purpose the development of an innovative application through which will be made an electronic prescription. The application's construction has been held by the use of the Visual Studio 2015 program and the .NET platform. Also VISUAL BASIC has been used as a programming language.

## **2 Introduction**

This thesis focuses on Windows application development techniques needed to medical electronic prescriptions. Since, there is not a single procedure available to doctors to create a medical prescription. This thesis represents a unique application for doctors and pharmacists so as to make their jobs easier. Based on the development of technology, we created this application to manage such issues.

### **3 Overview**

#### **3.1 Purpose and point of exercise**

This paper has as a purpose the development of an innovative application through which will be made an electronic prescription. The idea for it's development has been created to us from the exhortation of our family doctor, who was disappointed from the function of the official application of electronic prescription. He gave us all the demanded information, while at the same time we navigated at the current application and we checked it's set up. The application's construction has been held by the use of the Visual Studio 2015 program and the .NET platform. Also VISUAL BASIC has been used as a programming language.

#### **3.2 Application's description**

Application has as purpose to be installed to all doctors of the Medical Association of Athens and with it's use to allow them to create medical prescription to all of their potential patients. The effect about electronic prescription for the avoidance of needless officialism, will not be printed, but it will be sent to patient's cellphone. After this procedure, the patient will go to the nearest pharmacy, and the pharmacist will find the recipe which has been prescribed to him, then he will give him the drugs and in the end he will close the uncompleted recipe.

For the support of method's description we didn't use the current application, but we made a completely new standalone application. We took the data that we used from open types of information and we kept the susceptible personal data.

Talking in absolutely theoretical level we can confirm that our application can be functioned by her own in cases that there is no access in same application of ministry.

## 4 Experimental Results

At the following chapter we will analyze the structure of the exercise. We separate it to sections with that way so as to be easier it's read and assessment. These sections that we have separate our exercise are necessary for the best understanding of our exercise, but it was not the same with the structure that we configured. This specific structure was convenient better the way of it's presentation, while in the development of our application we followed different ways which lead us to the search of the technology that we used.

## 5 Conclusions

In this chapter we present our finally application:

### 5.1 Main Form

In main form, Doctor or Drugstore can be login with personal id he has taken from administrators. Fill the password box and press button.



## 5.2 Doctor Form

After log-in as Doctor, you can see your personal details. In the first box from second row you can fill with "A.M.K.A." (Personal unique id from Hellenic Ministry of Health).

The screenshot shows the 'e-Prescription Καλωσήρθες Ιατρέ' (Welcome Doctor) form. The background is a collage of various colorful pills. The form includes the following fields and buttons:

- Στοιχεία Ιατρού:** ΑΒΡΑΜΙΔΗΣ ΒΑΣΙΛΕΙΟΣ
- Ειδικότητα:** ΩΤΟΡΙΝΟΛΑΡΥΓΓΟΛΟΓΟΣ
- Τηλέφωνο:** 2107253109
- Αναζήτηση Πελάτη:** Εισάγετε Α.Μ.Κ.Α.
- ΚΩΔΙΚΟΣ Ε.Ο.Φ. - ΟΝΟΜΑ - ΔΡΑΣΤΙΚΗ ΟΥΣΙΑ ΦΑΡΜΑΚΟΥ:** A list of codes and names, all showing '1854104 APOTEL PARACETAMOL'.
- ΚΑΤΑΧΩΡΗΜΕΝΑ ΦΑΡΜΑΚΑ:** A large empty box for listing prescribed drugs.
- Επιλεγμένο Φάρμακο:** A dropdown menu.
- Ποσότητα:** A text input field.
- Καθαρισμός Φαρμάκων:** A button.
- Αποσύνδεση:** A button at the bottom.

Press the button on below and the application show up Customers details

This screenshot shows the same interface as the previous one, but with the 'Αναζήτηση Πελάτη' field filled with '1511010101'. Below this field, a message box displays the following information:

Ονοματεπώνυμο: ΞΕΝΟΥ ΘΕΩΝΗ Διεύθυνση: 1511 Διεύθυνση Πόλη: ΒΟΥΛΙΑΓΜΕΝΗ Τ.Κ: 166 71 Τηλέφωνο: 15110909 e-mail: ΘΕΩΝΗ@mail.com

Doctor choose drugs from list on below, type quantity of drug and press the button on bellow to add new prescription.

The system fill list with added drugs on right and show up message on bottom and right of form, which says "Add Complete!"



**e - Prescription**  
**Καλωσήρθες Ιατρέ**

Στοιχεία Ιατρού: ΑΒΡΑΜΙΔΗΣ ΒΑΣΙΛΕΙΟΣ Ειδικότητα: ΩΤΟΡΙΝΟΛΑΡΥΓΓΟΛΟΓΟΣ Τηλέφωνο: 2107253109

Αναζήτηση Πελάτη: 1511010101 Ονοματεπώνυμο: ΞΕΝΟΥ ΘΕΩΝΗ Διεύθυνση: 1511 Διεύθυνση Πόλης: ΒΟΥΛΙΑΤΜΕΝΗ Τ.Χ: 166 71 Τηλέφωνο: 15110909 e-mail: ΘΕΩΝΗ@mail.com

Αναζήτηση

ΚΩΔΙΚΟΣ Ε.Ο.Φ. - ΟΝΟΜΑ - ΔΡΑΣΤΙΚΗ ΟΥΣΙΑ ΦΑΡΜΑΚΟΥ :

- 2816802 APRAXIL LANSOPRAZOLE
- 2101503 APRINOL AMBROXOL HYDROCHLORIDE
- 2339001 APPROVEL IRBESARTAN
- 2339002 APPROVEL IRBESARTAN
- 2339003 APPROVEL IRBESARTAN
- 1482605 APPROXAL AMOXICILLIN TRIHYDRATE
- 1482602 APPROXAL AMOXICILLIN TRIHYDRATE
- 1482602 APPROXAL AMOXICILLIN TRIHYDRATE
- 1482603 APPROXAL AMOXICILLIN TRIHYDRATE

Επιλεγμένο Φάρμακο:

918702 AQUARIUS KETOCONAZOLE

Ποσότητα: 1

Καταχώρηση Φαρμάκου

ΚΑΤΑΧΩΡΗΜΕΝΑ ΦΑΡΜΑΚΑ :

- 1854102 APOTEL PARACETAMOL 1
- 2227601 APOTEL C-500 PARACETAMOL+ASO
- 918702 AQUARIUS KETOCONAZOLE 1

Καθαρισμός Φαρμάκων

Καταχώρηση επιτυχής!

Αποσύνδεση

If you not type quantity the system pop up message box, which says “Please fill quantity of drug”

**e - Prescription**  
**Καλωσήρθες Ιατρέ**

Στοιχεία Ιατρού: ΑΒΡΑΜΙΔΗΣ ΒΑΣΙΛΕΙΟΣ Ειδικότητα: ΩΤΟΡΙΝΟΛΑΡΥΓΓΟΛΟΓΟΣ Τηλέφωνο: 2107253109

Αναζήτηση Πελάτη: 1511010101 Ονοματεπώνυμο: ΞΕΝΟΥ ΘΕΩΝΗ Διεύθυνση: 1511 Διεύθυνση Πόλης: ΒΟΥΛΙΑΤΜΕΝΗ Τ.Χ: 166 71 Τηλέφωνο: 15110909 e-mail: ΘΕΩΝΗ@mail.com

Αναζήτηση

ΚΩΔΙΚΟΣ Ε.Ο.Φ. - ΟΝΟΜΑ - ΔΡΑΣΤΙΚΗ ΟΥΣΙΑ ΦΑΡΜΑΚΟΥ :

- 1854104 APOTEL PARACETAMOL
- 1854105 APOTEL PARACETAMOL
- 1854102 APOTEL PARACETAMOL
- 1854115 APOTEL PARACETAMOL
- 1854113 APOTEL PARACETAMOL
- 1854116 APOTEL PARACETAMOL
- 1854112 APOTEL PARACETAMOL
- 1854114 APOTEL PARACETAMOL

Επιλεγμένο Φάρμακο:

1854113 APOTEL PARACETAMOL

Ποσότητα:

Καταχώρηση Φαρμάκου

ΚΑΤΑΧΩΡΗΜΕΝΑ ΦΑΡΜΑΚΑ :

- 1854104 APOTEL PARACETAMOL 1
- 2816802 APRADIL LANSOPRAZOLE 2
- 2339001 APPROVEL IRBESARTAN 1
- 1854116 APOTEL PARACETAMOL 2

Καθαρισμός Φαρμάκων

Καταχώρηση επιτυχής!

Αποσύνδεση

Παρακαλώ συμπληρώστε το ποσότητα του φαρμάκου

Close

Finally, the button on bottom and right clear the list from added drugs and the system show up message on below, which says “Delete Complete!”

**e-Prescription**  
**Καλωσήρθες Ιατρέ**

Στοιχεία Ιατρού: ΑΒΡΑΜΙΔΗΣ ΒΑΣΙΛΕΙΟΣ    Ειδικότητα: ΩΤΟΡΙΝΟΛΑΡΥΓΓΟΛΟΓΟΣ    Τηλέφωνο: 2107253109

Αναζήτηση Πελάτη: 1511010101    Ονοματεπώνυμο: ΞΕΝΟΥ ΘΕΟΝΗ Διεύθυνση: 1511 Διεύθυνση Πόλη: ΒΟΥΛΙΑΤΜΕΝΗ Τ.Κ: 166 71 Τηλέφωνο: 15110909 e-mail: ΘΕΟΝΗ@mail.com

ΚΩΔΙΚΟΣ Ε.Ο.Φ. - ΟΝΟΜΑ - ΔΡΑΣΤΙΚΗ ΟΥΣΙΑ ΦΑΡΜΑΚΟΥ:

- 2101503 APRINOL AMBROXOL HYDROCHLORIDE
- 2339001 APROVEL IRBESARTAN
- 2339002 APROVEL IRBESARTAN
- 2339003 APROVEL IRBESARTAN
- 1482605 APROXAL AMOXICILLIN TRIHYDRATE
- 1482602 APROXAL AMOXICILLIN TRIHYDRATE
- 1482602 APROXAL AMOXICILLIN TRIHYDRATE
- 1482603 APROXAL AMOXICILLIN TRIHYDRATE

Επιλεγμένο Φάρμακο:

918702 AQUARIUS KETOCONAZOLE

Ποσότητα: 1

Καταχώρηση Φαρμάκου

Καθαρισμός Φαρμάκων

Διαγραφή επιτυχής!

Αποσύνδεση

The finally button on bottom and center you log-out and navigate to main form.

### 5.3 Drugstore Form

After log-in as Doctor, you can see your personal details. In the first box from second row you can fill with "A.M.K.A." (Personal unique id from Hellenic Ministry of Health).

**e-Prescription**  
**Καλωσήρθες Φαρμακοποιέ**

Στοιχεία Φαρμακείου: Ονομασία: Φαρμακείο Πάτρας Διεύθυνση: Πανντοίων 3 Πόλη: Πατρέων Νομός: Αχαΐας Τ.Κ: 262 23 Τηλέφωνο: 2610466553, 2610466555 e-mail: patrafarmakeio@ecpyg.gov.gr

Αναζήτηση Πελάτη: 1511010101    Ονοματεπώνυμο: ΞΕΝΟΥ ΘΕΟΝΗ Διεύθυνση: 1511 Διεύθυνση Πόλη: ΒΟΥΛΙΑΤΜΕΝΗ Τ.Κ: 166 71 Τηλέφωνο: 15110909 e-mail: ΘΕΟΝΗ@mail.com

Συνταγή προς εκτέλεση:

- 1854104 APOTEL PARACETAMOL 1
- 2484001 ARANESP DARBEPOETIN ALFA 2
- 2604701 APSODERM SALICYLIC ACID 1
- 451201 AQUASOL A+D RETINOL PALMITATE VITAMIN D 1

Εκτέλεση Συνταγής

Αποσύνδεση

The system fill list on left with drugs to completion, and pressing the button on right completed prescription.

The system show up message on below of button, which says “Prescription Completed Successfully!”



The finally button on bottom and center you log-out and navigate to main form.



## References

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