Digital Pharmacy

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**Introduction:**

In 2020 the COVID pandemic took everyone by surprise forcing countries to close their borders and instore new restrictions and policies. Business had to adapt by quickly finding ways to work remotely due to lockdowns. The pandemic has really affected everybody especially the elderly and people in the risk category.

How would the people with chronical illnesses, who are now at risk each time they venture outside get their medication?

The Digital Pharmacy is a project aiming to provide a general solution to small and medium size pharmacies in implementing online purchasing. Buy enabling customers to purchase their prescription based and over their counter medication safely from home. This would help removing risks associated with COVID. In addition, it would allow pharmacies to expand their customer base.

**Project Description:**

This project aims to showcase how an online shopping solution could be implemented for digital pharmacies.

*The Web page*

The first thing is to create an interface for customers to interact with. It is easiest done via a Webpage or an application. In our project we decided to create a Webpage. The customer will be able to open it via the browser, select the desired medications and input all the information necessary.

Using HTML, React JS with some styling from Bootstrap CSS we created a simple Demo version of the Digital Pharmacy.

Graphical user interface, application, website

Description automatically generated

The main function of the web page is to select the drugs and collect data, such as email address, …..) necessary to complete the whole process. All information about the drugs is contained in a data table implemented with AirTables. The AirTable is linked to the web page and acts as a back end data base.

Graphical user interface, application, table

Description automatically generated

This way it is easy for any employee to add or remove a certain drug. In addition, it allows to specify which drug is sellable over the counter and which ones need a prescription from a doctor.

After selecting the desired medications some personal information will required in order to complete the order.

Graphical user interface, text, application, email

Description automatically generated

*Camunda*

The whole business process was described using BPML in Camunda modeler. The customer will start the process by completing an order on the web page as shown in the previous section.

Diagram, schematic

Description automatically generatedNext, the order will be received by an employee of the pharmacy. At this stage it is important to know if the medication is prescription based or over the counter. For this during the next step (drug assessment) a DMN table has been implemented, in which all the drugs are annotated as prescription or over the counter. This way the process can decide which way it will follow.

If the drug is prescription based, then the process will follow the upper path and the next step will request the customer to provide a prescription. (See next section).

If the medication is over the counter, then the order will move forward without requesting any additional documents.

*Integromat*

Graphical user interface, diagram, application, Teams

Description automatically generated

