

# IBM final presentation script

- Script for Final Presentation of IBM Project: PillTrack
- Members: Desirée Constatino, Giovana Marsigli e Isabelle Gomes

## **SCRIPT:**

- **Giovana Marsigli**

Good morning! Today we're going to present our end-of-course work Pilltrack

My name is Giovana, this is Desiree and this is Isabelly.

We'll start with the following question...

## **HOW DIFFICULT IS MEDICATION MANAGEMENT?**

According to data from the Cardiology Society of the State of São Paulo, "it is estimated that half of the 3.2 billion medical prescriptions issued each year are not followed correctly". With this in mind, we have created a system to help patients manage their medication correctly, especially the elderly who need to be monitored and cared for, since they are the age group most likely to forget to take their medication because they use too many drugs or even because they don't pay enough attention, integrating these solutions using technology to provide quality of life.

## **WHAT IS OUR THEME?**

PillTrack is an IOT system for medication management

## **WHAT HAVE WE CREATED?**

Which comes from the development of an IoT system for a box of medicines in order to identify and notify the user in correct time of each medicine, monitoring stock and also enabling remote monitoring by family members, caregivers and health professionals, through warnings and detailed reports.

- **Desirée Constatino**

## **METHODOLOGY**

Our research combines both qualitative and quantitative approaches, utilizing sources such as websites, books, and other literature to understand how a smart medicine box can assist with medication management. We examined aspects of technology, health, and user behavior, focusing on developing a practical solution that benefits everyone, particularly the elderly.

## **EXPECTED IMPACTS**

The anticipated outcomes include improved patient adherence and engagement in following medical prescriptions correctly, leading to:

- A reduction in complications and the need for medical intervention to manage treatment,
- Improvement in disease symptoms, and
- Enhanced assessment and monitoring by doctors and caregivers.

Additionally, it aims to facilitate healthcare professionals' understanding of treatment effectiveness, enabling smaller and more precise adjustments to improve health outcomes.

- **Isabelle Gomes**

## **PILLTRACK SYSTEM**

Our project's innovation lies in the integration of an intuitive mobile app with a smart physical device, providing a set of features aimed at enhancing medication management:

The first is Personalized Reminders: The app will send notifications to patients about dosing times and the stock of medication available. The smart device complements this with visual and audible alerts, ensuring no dose is missed.

The second is Real-time monitoring: The physical device will detect the withdrawal of medication by patients and record the corresponding times. This data will be synchronized with the application, which will store it and generate detailed reports. If a dose is missed, the system will notify the patient and their guardians, if applicable.

The third is Facilitated medical assessment: The app will monitor drug interactions and possible adverse reactions reported by patients. Based on this information, monthly reports will be generated that provide a comprehensive overview of medication use, facilitating medical assessment of treatment efficacy and optimization of results.

## **MAIN CONSIDERATIONS**

Medication management is challenging, especially when it comes to patient adherence to prescriptions. And so PillTrack is here to offer a technological solution with the aim of improving the effectiveness of treatment and patients' quality of life.

## **REFERENCES**

These were some of the references we used to understand a little more about the problem and who we are going to affect with this application.

