Introduction to programming
for non-IT people

Organized by

CaboLabs
Healthcare Informatics, Standards and Interoperability

Supported by

SPIS
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DE INFORMÁTICA EN SALUD

Workshop goals

The goal of this workshop is to get closer to the basic concepts of programming and how software works, for students and professionals of areas not related with IT, but that are interested in informatics, software and technology, particularly for clinicians, nurses, allied health, and other people related with health care.

Why this workshop?

The offers in training in computer areas at the introductory level are scarce. For our area of work in Health Informatics, we noticed a great interest of doctors, nurses, clinical technicians and biomedical informatics, without knowledge in programming, to have a base in this area, both for personal interest, and to be able to improve communication with computer equipment as part of shared projects. This workshop emerges as a first approach to the world of programming for this audience.

This workshop will allow you to improve the communication with IT people, allow you to participate on health IT teams, and better understand current technical decisions and be part of future decisions in e-health projects.

Target audience

This workshop is mainly for professionals and students of the clinical area and biomedical informatics, with an interest in computer science, and in particular in the development of computer programs.

Program

Module	Topics
1. Introduction	+ Internal components of a computer + Computers only understand numbers + Computer programs + Introduction to programming languages + Groovy as a reference language + Examples of first programs
2. Data types and operators	+ Basic data types on Java and Groovy + Variables and types + Basic operators (assignment, arithmetic, comparison, logic) + Concept of no value (null) + Demonstration of types, variables and operators
3. Object Oriented Programming (OOP)	+ Introduction to OOP + Entry point to programs (main method) + Input and output to the terminal + Flow control: if/else-if/else and switch/case
4. Data structures and UML	+ Introduction to data structures + Working with Lists and Maps + Working with queues (FIFO) + The software development process

Modality

This workshop is offered online and on-site for companies, organizations and events. To request a quote please contact info@cabolabs.com

It is also offered online with live/synchronous sessions or on-demand with pre-recorded sessions. This modality works in established periods, generally twice a year. To get notification when the next enrollment period opens, sign to the Waiting List found here: https://www.cabolabs.com/education

For the online editions:

- We have a virtual campus with the materials and a forum
- We have a videoconference tool to provide the live online sessions
- All the session are recorded to watch later
- All the materials needed for each module will be available before the correspondent session

In the on-demand modality, the only difference is pre-recorded sessions will be published each week. This modality is ideal for people studying or working that could not assist to the online sessions.

Certification

CaboLabs will emit PARTICIPATION certificates for all the students that sign up to this workshop.

About the trainer

The course will be delivered by Pablo Pazos Gutiérrez, who designed the workshop summarizing more than 12 years of experiences working with Mirth Connect and HL7 standards.

Bio

Pablo is a Computer Engineer from Uruguay, specialized in the eHealth domain. Director of CaboLabs: Health Information Systems, Standards and Interoperability, and creator of the courses delivered through CaboLabs. With 15+ years of experience in eHealth, 600+ trained professionals from 20 countries. More info: https://cabolabs.com/founder

- Computer Engineer degree, Universidad de la República, Uruguay
- Director at CaboLabs Health Informatics
- openEHR Ambassador for Latin America
- Coordinator at openEHR community in spanish
- Qualified Member of the openEHR standard editorial committee

www.CaboLabs.com

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