MECD 2023/2024

Security and Privacy

Case Study 1: Understanding the protocols behind STAYAWAY COVID

1. Introduction

STAYAWAY COVID is a voluntary initiative designed to support the Portuguese Health Authorities in their efforts to screen and combat COVID-19. This project is built using the React Native framework and is based on the Decentralised Privacy-Preserving Proximity Tracing (DP^3T) project. DP3T is a sophisticated system designed to ensure secure and privacy-focused proximity tracing on a large scale. Its primary objective is to provide a robust technological foundation for slowing down the spread of SARS-CoV-2. This is achieved by simplifying and expediting the process of notifying individuals who may have come into contact with the virus, allowing them to take appropriate actions to break the transmission chain. The system is meticulously designed to minimize privacy and security risks for both individuals and communities, while also guaranteeing the highest level of data protection. *Ref: https://github.com/stayawayinesctec/stayaway-app*

I have included several links below to assist you in gaining a deeper understanding of STAYAWAY COVID and DP3T:

Official repository for the STAYAWAY COVID mobile application: https://github.com/stayawayinesctec/stayaway-app

DP3T: Decentralized Privacy-Preserving Proximity Tracing: https://github.com/DP-3T

DP3T White paper: https://github.com/DP-3T/documents/blob/master/DP3T%20White%20Paper.pdf

2. What to do?

In this case study, you are supposed to:

a) Research about the DP-3T protocol.
b) Understand the privacy preserving techniques used in STAYAWAY COVID.
c) Reason about the scenarios in which it may be harmful for privacy.

After doing your research you must:

d) Write one page report (English or Portuguese) including references (no cover page is required).
e) Submit your report in *inforestudente* platform.

Deadline: *November 01, 2023*