PASSWORDLESS MFA SYSTEM: CORE PRODUCT DEVELOPMENT

Datasheet

About the project

Technologies

- Angular
- Kotlin
- Swift
- SQL
- .NET

- REST API
- SignalR
- TLS
- MS SQL
- MySql

- PostgreSQL
- SQLite
- Redis

Project size

- 1 Technical Coordinator
- 1 Project Manager
- 1 Business Analyst
- 1 Software Architect
- 6 Software Engineers
- 1 QA Engineer
- 1 Marketing Specialist
- 1 Graphic Designer
- 1 Technical Writer
- 1 Technical Assistant

Duration

14

7 months
From February 2019 – March
2020

Platforms

- iOS
- Android
- Linux
- Windows
- macOS

Result

The developed app allows for 100% secure passwordless authentication on the client's web portal through mobile phones and desktop devices. It is the first highly secure alternative to password-based authentication designed with the end-user in mind. The expanded set of implemented features allows for seamless and fail-safe usage within enterprise environment.

Scope of work

◈ Set up user login verification and biometrics on the authentication server;

◈ Set up generation and providing of one-time password in form of a combination of a picture and a set of alphanumeric characters both to user;

◈ Add a RADIUS-protocol support to set up connections between network equipment and servers;

◈ Implement Full-duplex authentication method using PKI and OTP;

◈ Implement Windows client application that repeats the functionality of a mobile application, including receiving push notifications;

◈ Support for YubiKey protection for additional protection by confirming the user with a token generated by a physical key;

◈ Integrate Windows unlocks;

◈ Create an external API for the possibility of flexible integration with external tools, and automation of user registration;

◈ Implement the ability to integrate NoPass within the RDP gateway;

◈ Improve Single Device Experience for logging in to websites from mobile apps without switching windows;

◈ Perform regression testing using an automated test system within a test farm;

Activities

◈ Architecting a state-of-the-art authentication solution

◈ Implementing innovative security measures

◈ GUI design and development

◈ GUI multilingual support

◈ Use cases creation

◈ CI and CD setup

◈ Publishing in clouds

◈ User experience testing

◈ Functional and acceptance testing

◈ Automation testing

◈ Regression testing

◈ Smoke testing

Project objective

Develop a top-secure passwordless Multi-Factor Authentication solution that has no analogs in the world without clear requirements. Provide the high availability of its usage within corporate environments with lots of connected devices.