SMART INDIA HACKATHON 2022

Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation:

DRDO, Ministry of Defence

PS Code: **NS1162**

Problem Statement Title:

Device an alternatives method for OTP based authentication in areas with weak mobile signal

Team Name: **CODESTRIX**

Team Leader Name: **Gamaliel Das**

Institute Code (AISHE): **C-25028**

Institute Name: **SRM TRP Engineering College**

Theme Name: **One Time Handshake (OTH)**
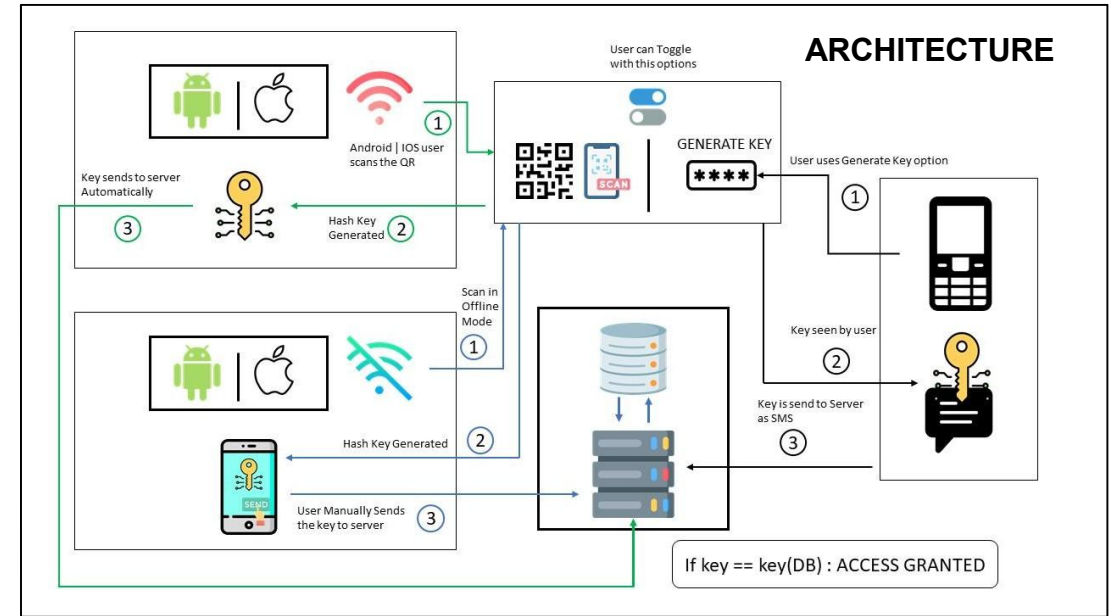
Idea/Approach Details

IDEA / SOLUTION :

Implementation of a Time-based *itunique* One-time Handshake (OTH)

Mechanism specialized for low network zones

❖ Advanced QR based high speed multi-factor authentication

❖ Unique UID,phone number and stamp to auto authenticate/authorize user

❖ Alternative IMEI based OTH methodology for button phone uses

❖ Capability to work without internet even in low network zones

PRODUCT STATUS :

80% product built completed and further build is on progress. Testing and validation process are next to be undergone

TECHNOLOGY STACK:

➢ Next.js & Express JS - OTH Algorithm

➢ React Native - Mobile Application

➢ AES + JWT Custom Algo - Encrypted System

➢ My SQL + Firebase - Cloud Services

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Idea/Approach Details

USE CASES:

SHOW STOPPER:

- **Defence Sectors :** OTH stands as a high speed secured Authentication system that can't be bypassed
- **Low Network areas** - OTH system functions with 100% efficiency even if network disruptions occur
- **Offline mode for any Authentication** - No matter if there is internet or not, authentication won't be compromised
- **People With no Smart Phone** - Alternative way to ensure support for keypad phone users just as smartphone users

- **Highly secured Stand Alone System:** OTH isn't dependent on any external services and fully function by our pure standalone Algorithm
- **Works even in Low Network Zone:** OTH functions with same 100% efficiency even without internet
- **Cross Device Support**- Works perfectly even for feature phones , iOS as well as Android
- **Anti Breach System**- Uncompromisable innovation

CHANNELS: Govt. portals, Industries, organizations etc.

Revenue Streams: Service based model .

Team Member Details

Team Leader Name: Gamaliel Das

Branch : B.E   Stream : CSE   Year : IV

Team Member 1 Name: Vetri Veeran G

VBranch : B.E   Stream : CSE   Year : III

Team Member 2 Name: Gokul K

 Branch : B.E   Stream : CSE   Year : III

Team Member 3 Name: Siva Bharath KS

Branch : B.E   Stream : CSE   Year : II

Team Member 4 Name: Shree Vishnupriya B

Branch : B.E   Stream : CSE   Year : IV

Team Member 5 Name: Bricilla Maria Sumid SVR

Branch : B.E   Stream : CSE   Year : IV

Team Mentor 1 Name: Mrs.Sabeetha Saraswathi

Category : Academic   Expertise: Cloud Computing   Domain Experience (in years): 16

Team Mentor 2 Name: Mr. Vigneshwaran

Category : Academic   Expertise : Machine Learning   Domain Experience (in years): 7