SMART INDIA HACKATHON 2025



TITLE PAGE

- Problem Statement ID –
- Problem Statement Title-
- Theme-
- PS Category- Software/Hardware
- Team ID-
- Team Name (Registered on portal)





IDEA TITLE



IDEA / SOLUTION:

Implementation of a **Time-based itunique One-time Handshake (OTH)** Mechanism specialized for low network zones

- **USSD triggered** offline authentication mechanism
- 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 efficiently without internet even in low network zones

Problem Resolution:

- Multifactor authentication system delivers seamless security, excelling even in the most challenging low network zones.
- Eliminates vulnerabilities of traditional 6-digit OTPs, offering unbreachable security that redefines industry standards.

Unique Value Propositions (UVP):

- **Dynamic prompt Stamp** for every Authentication
- Authenication done in less than a second
- ❖ Functions with full efficiency even without Internet
- Quad Level Custom Encryption Algorithm
- Distinct API's enhance Security standards



TECHNICAL APPROACH



Algorithm Development:

Next.js & Express.js - Core technologies used for developing the OTH Algorithm.

Mobile Application Development:

Flutter - Framework used for building the mobile application, ensuring cross-platform compatibility.

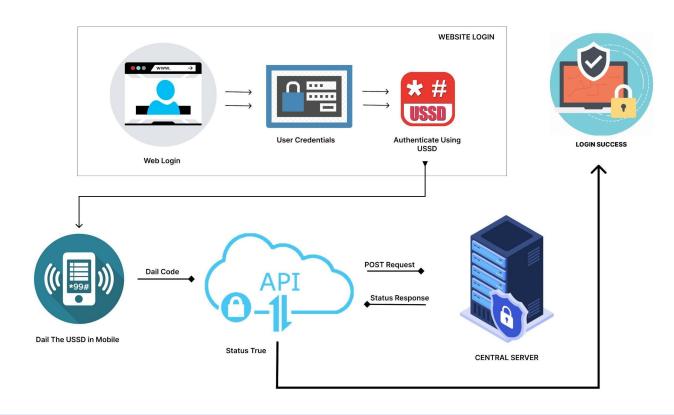
Encryption and Security:

Custom encryption algorithm powered by 8 layer octa 512 bit encryption for secure data transmission and authentication.

Cloud Services:

MySQL - Relational database management PHP - High responsive Rest APIs

PROCESS FLOW ARCHITECTURE



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



FEASIBILITY AND VIABILITY



- Analysis of the feasibility of the idea
 Technical, Financial, Market, Operational
- Potential challenges and risks
 Technical, Financial, Market, Operational
- Strategies for overcoming these challenges

 Methods, principle, Strategies, Algorithms



IMPACT AND BENEFITS



Potential impact on the target audience

Positive- Improvement, Economical, New Opportunities, socialbenefits negative- Cost, Technology Adoption Issues

• Benefits of the solution (social, economic, environmental, etc.)

Social - Improved Access, Empowerment, Reduction

Economic – Productivity, Cost, Market

ENV – Energy, Reduction, Waste



RESEARCH AND REFERENCES



Details / Links of the reference and research work

Elsevier, Science Direct

IMPORTANT INSTRUCTIONS



Please ensure below pointers are met while submitting the Idea PPT:

- 1. Kindly keep the maximum slides limit up to six (6). (Including the title slide)
- 2. Try to avoid paragraphs and post your idea in points /diagrams / Infographics /pictures
- 3. Keep your explanation precise and easy to understand
- 4. Idea should be unique and novel.
- 5. You can only use provided template for making the PPT without changing the idea details pointers (mentioned in previous slides).
- 6. You need to save the file in PDF and upload the same on portal. No PPT, Word Doc or any other format will be supported.

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