1.Abstract

Hawayety represents a groundbreaking step towards the digitalization of citizen identities in Egypt. By leveraging facial recognition or fingerprint scanning technologies, the application aims to streamline identity verification processes for citizens services, law enforcement, government officials, and emergency responders. The primary goal is to eliminate the reliance on physical identification cards and papers , governmental routine and queues by introducing a secure and efficient digital system. This system utilizes blockchain for secure data storage and retrieval. This initiative starts with integrating the Egyptian identification number card and driving license into the system, along with three emergency contacts for added safety for emergency situations and Phone Number .

2.Background

2.1.Motivation :

**1.Bureaucratic Hassles Too Much Red Tape:** Dealing with papers from different government offices can be a real headache, slowing down the whole identification process.

**2.Long Waits Crowded and Slow :**Traditional systems often mean waiting in long lines, making the whole process slow and frustrating.

**3.Identity Confusion hard to Prove Who You Are :** Without proper IDs, proving your identity becomes a real challenge, raising suspicions and causing issues.

**4.Easy to Lose Paper IDs are Fragile :** Paper IDs can be easily lost or damaged, causing disruptions in your daily life.

**5.Risk of Fraud IDs Can be Faked:** Paper IDs can be manipulated, opening the door to fraud and other shady activities.

**6.Social Impact Slow Connections Can Have Serious Consequences :** Slow identification processes can lead to delayed connections with family, and in extreme cases, it can even lead to loss of life. It's high time we adopt more efficient identification methods to avoid these problems.

4.Related Work

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|  | **Estonia** | **Absher** | **UAE** | **Hawayety** |
| **Uses Blockchain(BC)** |  |  |  |  |
| **Tested** |  |  |  |  |
| **BC** | KSI |  | Hyperledger Fabric | Ethereum |
| **BC type** | Hybrid |  | Private | Public |
| **Location** | Estonia | Saudia Arabia | United Arab Emirates | FCAI |
| **Services** | e-voting  e-banking | All e-services | All e-services | e- Civil affairs  e- Traffic |
| **Retrieve identity** |  |  |  |  |
| **Emergency Contacts** |  |  |  |  |