

Ministry of Higher Education and Scientific Research University of Babylon College of Information Technology

**Department of Information Security** 

Study: (Morning)



## **Qr Code Private Messaging System**

A Graduate Project Submitted to the department of Information Security of the College of Information Technology, University of Babylon, in Partial Fulfillment of the Requirements for the Bachelor's degree in the Information Security of Information Technology.

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2023-2024

## Abstract

This research introduces a Qr Code Private Messaging System designed to prioritize user privacy and security. The system allows users to communicate while safeguarding their identities and personal information. To connect with other users, individuals must obtain the recipient's QR code, as the system hides user identities and restricts access to them unless the private QR code is scanned. Security measures include input sanitization to prevent database hacking attacks, password hashing using the 512 hashtag, and storing hashed passwords to minimize damage in the event of a breach. Additionally, secondary authentication is implemented through the sending of a one-timepassword (OTP) to the user's email, ensuring the user's identity is verified and their privacy remains intact. This research sets a new standard for privacy-centric messaging systems, combining anonymity with robust security features.