

Elderly Care Management System – Yr 4 Project

-By Qadeer Hussain Date: 06/12/2024



Figure [1]

What are the Core features?

This is a list of features that will be included in this project:

- Security Implementation
- Patient Profile
- Care Planner
- Medical Dashboard
- Roster

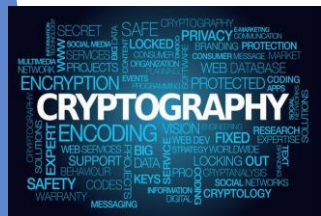


Figure [5]



Figure [6]

What is the project?

- It is a secure web application to safeguard and manage patient data in care centres.
- Digital documentation to streamline workflow.
- Application designed to cater Admin and Carer.

What is Health Level 7 (HL7)?

- Framework for the exchange, integration, sharing and retrieval of health information.
- Most used standard globally.
- HL7 specifies several standards, guidelines and methodologies for health-related systems.

Existing Systems

- Pass App
- Log my Care
- Nourish

Technologies

Here are some possible technologies that could be used for example:

- Python: <https://www.python.org/>
- Django: <https://www.djangoproject.com/>
- MariaDB: <https://mariadb.org/>
- Cryptography lib: <https://pypi.org/project/cryptography/>
- Jupyter Notebook: <https://jupyter.org/>

What is Shared Key and Public Key?

- Shared key is a form of cryptography.
- Also known as Symmetric encryption.
- Method of encrypting data and decrypting data using one key.
- Public key is a form of cryptography.
- Also known as Asymmetric encryption.
- Method of encrypting and decrypting data using two keys.

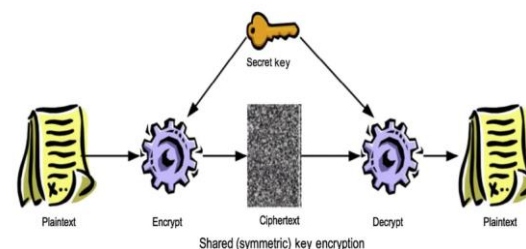


Figure [3]

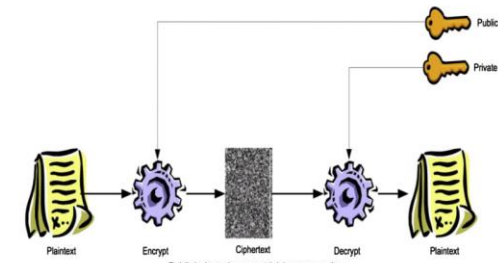


Figure [3]

References

1. (2024) *Elderly care vectors & illustrations for free download* / Freepik. Available at: <https://www.freepik.com/vectors/elderly-care> (Accessed: October 2024).
2. Health Level Seven International, 2024. Introduction to HL7 Standards. [Online]. Available at: <https://www.hl7.org/implement/standards/index.cfm?ref=nav> [Accessed October 2024].
3. ScienceDirect, 2017. Embedded security. [Online]. Available at: <https://www.sciencedirect.com/topics/computer-science/shared-key-encryption> [Accessed October 2024].
4. Augusto Vega, P. B. A. B., 2017. Rugged Embedded Systems. s.l.:Morgan Kaufmann.
5. Cryptography images – browse 869,371 stock photos, vectors, and video (2024) Adobe Stock. Available at: <https://stock.adobe.com/search?k=cryptography> (Accessed: October 2024).
6. (2024a) *Healthcare System Images - free download on Freepik*. Available at: <https://www.freepik.com/free-photos-vectors/healthcare-system> (Accessed: October 2024).