1. Introduction

- **Who has the problem:** Unprofessional **home attendants**, professional **home attendants**
- **Problem: Care attendants** don't have centralized tools or tools that fit the variations of their workflows or that community
- **Solution:** community hub, customizable tools, one-stop shop
- **Reference:** care attendants that don't have tools.

Be approximately one page in length.

1. *summarize the societal problem with some reference/date support.*
2. *outline problems and needed solution characteristics.*
3. *introduce your product by name as the solution.*

2. X Product Description

What to do:

- Dynamically track Patients
- Connect caregivers
- Personalized application
- **End user:** Unprofessional **home attendants**, professional **home attendants**
- **Solution:** community hub, customizable tools, one-stop shop
- **HIPAA compliance(not necessary)**

Provide a top-level description of CS 410 product for the average reader. Provide a summary of the solution –- and its goals and objectives. This section should be one paragraph minimum.

2.1. Key Product Features and Capabilities

What does it do? What is significant/unique/innovative about it? What does it accomplish? Describe how this solves the problem.

- Login system
  - 2FA for security compliance
- Tracking basic daily activities(medication etc.)
  - Task lists, status updates, appointments/events
- Offer logs of 30 days Import and export option of that data.(internal documentation)
- Patient Profile Templates

- - Modular profile construction, 'plug-n-play', user-specific, chooses which patient information and how it is displayed
  - Community Board
    - Moderated, Q&A offers community sourced advice
  - Template Library
    - Community and developer-sourced template sharing
  - Questionaire/ identification of users
  - Guided or non-guided UI interaction.
  - Persistent shared patient shared record.
  - Care Calender
  - Audit (Feature usage, ePHI Access)
  - Track data(how we track workflow information)

2.2. Major Components (Hardware/Software)

Provide an overview of the hardware needed to support the solution. Describe how it is structured based on CS 410 MFCD. Define and describe the software to be developed.

- **Backend :** Node+ Express
- **Frontend :** HTML,CSS, javascript and React.
- **Database:** Azure Active Directory, Azure Key Vault, Azure Postgresql
- **Authentication:** Bycrypt.js + JWT
- **2FA:** password/Google authenticator
- **API:** Document4J, Render, Echoxopraxia**.**
- **Hosting:** Vercel
- **UI styling:** Bootstrap

3. Identification of Case Study

- Unprofessional care attendant with no way to track.
- **Professional and unprofessional home car attendant**s with the potential for integration into **outpatient medical care clinic facilities**.

4. work breakdown assignment

a.) Backend Development (Node.js + Express)

Primary: Sean

Secondary: Kai

b.) Frontend Development (Figma (UI), HTML, Javascript, CSS, Bootstrap & Tailwind (front-end framework)

Primary: Vallerie

Secondary: Hector

c.) Testing

Each section should have testing suite of their own

d.) Documentation requirements (SRS 830, etc.)

All.

e.) Database

Primary: Mike

Secondary: Hector

F.) full stacks/lead developer

Primary: Desean

5. Glossary

HIPAA: Health Insurance Portability and Accountability Act of 1996
   The policies by which we must abide when dealing with sensitive ePHI.
ePHI: Electronic Personal Health Information

Care Attendant: An individual Responsible for assisting patients or clients with daily living activities, health-related tasks, and personal care in settings such as home care, assisted living, or long-term care facilities.

MFCD (Modular Functional Component Diagram): A system design approach that breaks a product into modular components to improve clarity, scalability, and maintainability.

Prototype: An early model of a software system used to demonstrate functionality, gather feedback, and validate design decisions.

Usability: The degree to which a software system is easy to learn, efficient to use, and accessible for its intended users.

5. References

Listing of sources.

U.S. Bureau of Labor Statistics. (2023). *Home health and personal care aides: Occupational outlook handbook*.

World Health Organization. (2022). *Health workforce policy and management in the context of the COVID-19 pandemic and beyond*.