DementiaCare

A Digital Companion for Alzheimer's & Dementia Patients.

By Sindhu Raj

Logo - Dementia

Problem Statement.

Alzheimer's/Dementia patients face profound challenges, including memory loss, reduced self-worth, and difficulty communicating. These issues not only affect the patients' quality of life but also place immense emotional and physical stress on their caregivers.

Possible Solution.

There is a clear need for a solution that not only helps patients reconnect with their memories but also supports caregivers in managing daily interactions. this project, 'A Digital Companion for Alzheimer's & Dementia Journey' proposes an innovative app to help patients access memories, structure interactions, and improve their overall well-being.

Target Audience.

1. Patients
2. Care Takers
3. Patients Family Members

The Approach.

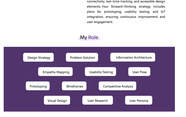
My approach to developing the DementiaCare app reflects a comprehensive, empathetic, and user-centered methodology.

I adopted an empathetic, user-centered design approach, engaging directly with dementia patients and caregivers to understand their daily challenges.

Through interviews and journey mapping, you identified key needs, leading to the integration of AI features like conversation and health insights.

My approach aims to foster solutions with device connectivity, real-time tracking, and accessible design elements, thus "Forward-thinking strategy includes potential for future enhancements like AR and IoT integration, ensuring continuous improvement and user engagement.

My Role.



Design Thinking Process.

I employed a human-centered design approach, beginning with empathetic research to understand the challenges faced by dementia patients and caregivers. This informed the definition of core problems, leading to ideation of AI-driven solutions. I then developed prototypes focusing on accessibility and planned for iterative testing and integration with smart devices.

Project Timeline.

Emphatize Phase.

Qualitative Research

By conducting in-depth interviews with dementia patients, caregivers, and family members, this approach provided rich, firsthand insights into their daily experiences, challenges, and needs.

Interview Questions

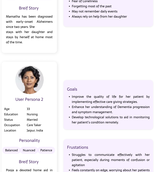
- How challenging is it for you to manage or track your patient's medications on a daily basis?
- How do you currently handle scheduling and managing appointments?
- Would you appreciate AI assistance in analyzing patient data to identify trends or potential health issues?
- How useful would an AI-driven alert system be for reminding you and your patients about medications, appointments, and potential health concerns in real-time?
- How important is it for an app to have a user-friendly interface with easy navigation?
- What concerns do you have about integrating AI into your current workflow for managing patient care?
- How important is it for you to receive training and ongoing support when using AI tools in patient care?
- Would you find it helpful to have the option to share your patient's progress and information with healthcare providers or caregivers through a digital app?

Key Insight Derived

- Caregivers face challenges in tracking medications, personalized reminders and history tracking are essential
- Patients benefit from customizable reminders to manage daily routines independently.
- An intuitive and empathetic interface enhances usability for patients and caregivers.
- AI features like conversational support and routine predictions are perceived as helpful aids.
- Efficient scheduling and communication tools reduce stress for both patients and caregivers.

Define Phase.

User Personas



User Persona 1

Age - 68
Gender - Male
Status - Married
Occupation - Retired Teacher
Location - Sears Hills

Personality

Calm | Thinker | Creative

Brief Story

Bernetha has been diagnosed with early-onset Alzheimer's since two years. She lives with her daughter and stays by herself at home most of the time.

Goals

- Need to do basic daily activities by her own
- Need to be independent in her decisions
- To keep track of everyday routine
- Help in doing simply household chores
- Need to take medicines with out missing

Frustrations

- Fear of loneliness
- Forgetting most of the past
- Miss not remember daily events
- Always ask to help them her daughter

User Persona 2

Age - 75
Gender - Working
Status - Married
Occupation - Care Taker
Location - Sears Hills

Personality

Relaxed | Nurtured | Patience

Brief Story

Pooja is devoted home and in Pune, cares for elderly people with Alzheimer's and Dementia. Her daily routine involves forgetfulness, stress, and emotional toll on her, exacerbated by communication barriers.

Goals

- Improve the quality of life for her patient by providing personalized care and support.
- Enhance her understanding of Dementia progression and symptom management.
- Develop technological solutions to aid in monitoring her patient's condition remotely.

Frustrations

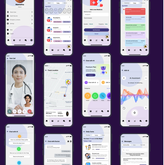
- Struggles to communicate effectively with her patient, especially during moments of confusion or agitation.
- Feel overwhelmed or stuck worrying about her patient safety, especially when she exhibits wandering behavior.

Empathy Mapping

Journey Mapping

High-Fidelity Wireframes

User Flow



Typography & Colors.

Font Used

Inter

Inter font is a elegant and modern sans-serif font. It looks professional. It has more readability and variety of options.

Inter Bold	**Inter Medium**
Inter Regular	Inter Light

Color Used

Visual Design

Prototype

https://www.figma.com/proto/DIBqiwkxuS3ftp0Gen2bpb/untitled?node-id=0-1&t=xoEkwvqqqPqZfu7c-1

Thank you for your time :)

By Sindhu Raj | Human Centered Design | Pace University | NYC