

# remember-me 记住我

帮助阿尔兹海默症患者回忆过往与记录生活。A web application to help Alzheimer's patients remember the past and record their lives.

Demo: https://h5.hust.online/remember-me

This repo is Unique Studio Hackday 2023 competition repository, powered by Bingyan Studio.

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## Product Design 产品设计

**Remember-me** specifically designed for Alzheimer's disease patients to recall and document their past memories. In the era dominated by generative AI products like ChatGPT and Midjourney, we are exploring new forms and applications while focusing on whether AI can help humanity delve into previously inaccessible corners, enabling technology to reach every individual and create unique user experiences.

**Remember-me** 是专为阿尔茨海默症患者设计的回忆与记录工具,利用生成式人工智能技术为他们提供独特的用户体验。在当今以 ChatGPT、Midjourney 等为代表的生成式 AI 产品席卷全球互联网的趋势下,我们关注着如何利用 AI 技术深入到曾经不可及的角落,让科技触达每一个个体,并为特定人群带来特殊的帮助。

Our product aims to provide a unique user experience for Alzheimer's disease patients, utilizing generative artificial intelligence technology. It serves as a tool to assist them in reminiscing about their past lives and preserving their precious memories. Alzheimer's disease is a neurodegenerative condition that impairs memory and cognitive functions, making it challenging for patients to recall past experiences and significant individuals. Through interaction with our product, patients can revisit their memories through textual, auditory, and visual representations, rekindling past joys and emotional connections.

我们的产品致力于帮助阿尔茨海默症患者回忆过去的生活和记录他们的珍贵回忆。这种神经退行性疾病会导致患者记忆力和认知功能的丧失,使他们难以回忆起过去的经历和重要的人物。通过与我们的产品互动,患者可以通过文字、声音和图像的呈现方式重温过去的记忆,重新感受曾经的喜悦和情感连接。

Our product goes beyond being a mere memory aid; it also reaches a broader audience and various contexts. In addition to Alzheimer's disease patients, it caters to other individuals with memory impairments, such as the elderly and those with post-traumatic stress disorder. It offers specialized assistance and support, allowing them to re-establish connections with the

past and alleviate feelings of loneliness and distress they might experience.

我们的产品不仅仅是一个回忆工具,还能触及更广泛的人群和场景。除了阿尔茨海默症患者,我们的 产品也适用于其他记忆力减退的人群,例如老年人和创伤后应激障碍患者。它可以为这些人提供特殊 的帮助和支持,让他们重新建立与过去的联系,并缓解他们可能感受到的孤独和沮丧情绪。

Furthermore, our product aims to provoke social reflection and convey social value. By addressing Alzheimer's disease and memory impairment issues, we seek to raise public awareness and concern regarding these cognitive disabilities. Through product promotion and related activities, we advocate for society's care and support for these specific populations, stimulating discussions on healthy aging and cognitive well-being.

同时,我们的产品不仅仅是一种实用工具,还有潜力引发社会思考并传递社会价值。通过关注阿尔茨海默症和记忆力减退问题,我们希望能够促进公众对于这些认知障碍的认知和关注。我们将通过产品的推广和相关活动,呼吁社会对于这些特定人群的关怀和支持,推动社会对于健康老龄化和认知健康的思考。

Most importantly, our product brings forth an entirely new user experience. Through interactive engagement with our AI system, patients can communicate with it in a natural and friendly manner, akin to chatting with an understanding friend. Whether through text, voice, or imagery, our product presents memories and records in a personalized way, delivering a warm and enjoyable experience for the users.

最重要的是,我们的产品将带来全新的用户体验。通过与我们的 AI 系统互动,患者可以以一种非常自然和亲切的方式与它交流,就像在和一个理解自己的朋友聊天一样。无论是通过文字、语音还是图像,我们的产品将以个性化的方式呈现回忆和记录,为用户带来温暖、愉悦的体验。

Our product harnesses the power of generative AI technology to provide special assistance for Alzheimer's disease patients, reach a wider audience and various contexts, provoke social reflection and convey social value, and, ultimately, deliver a novel user experience. We firmly believe that through the power of technology, we can create meaningful products that help these specific populations to reclaim lost memories and improve their quality of life.

我们的产品旨在通过生成式 AI 技术,为阿尔茨海默症患者提供特殊帮助,并触及更广泛的人群和场景,引发社会思考并传递社会价值,同时带来全新的用户体验。我们相信,通过科技的力量,我们能够为这些特定人群创造出有意义的产品,帮助他们重拾失去的回忆,改善他们的生活质量。

#### Features 功能

- Users can independently upload pictures and written memories from specific time periods. These memories will be collected and organized in the backend, preparing them for AI-driven responses. 用户可自行上传特定时间的图片与文字回忆。这些回忆会被后台收录并整理,为AI回答做准备。
- Users can retrieve and read their memories at any time, eliminating concerns about memory decline. 用户可以随时提取回忆并阅读它们,再也无需担心记忆衰退带来的问题。
- Users can directly ask the AI questions and obtain specific memory information through intelligent organization and search capabilities. 用户可以通过向 AI 直接提问,通过 AI 智能整理与搜索获取特定的回忆信息。
- Presenting users with a relationship map of individuals, intelligently recognizing the
  connections between characters based on the memories uploaded by the user. 向用户展示
  人物关系图谱,它是通过用户上传的回忆智能识别人物关系而得。
- Prioritizing user privacy, independent user accounts ensure that users cannot access the memories of other users. 注重用户隐私,独立的用户账号使得用户无法访问其他用户的回忆。

#### Expandable Features 拓展功能

- By intelligently recognizing and generating event tags, character relationships, and emotion tags based on user memories, we can provide patients with a more comprehensive and profound reminiscence experience and understanding. This aids them in reestablishing connections between memory fragments and gaining a better understanding of past events and emotional experiences they have undergone. 根据用户回忆智能识别并生成事件标签、人物关系、情感标签等,为患者提供更全面、深入的回忆体验和理解,帮助他们重新建立记忆片段之间的联系,并更好地理解过去所经历的事件和情感体验。
- Memories are categorized and intelligently extracted based on event tags, character relationships, and emotion tags, allowing for the intelligent retrieval of memories under different labels. 根据事件标签、人物关系、情感标签对回忆进行分类,智能提取不同标签下的回 忆。
- Creating individual profiles for every person related to the patient, intelligently extracting personal information and event records related to that person from the memories. 为每一个与患者有关的人物建立身份简历,从回忆中智能提取与该人物相关的个人信息与事件记录。
- Integrating AI speech recognition and synthesis, the system converts user's oral questions into text and transforms AI responses into speech to better serve visually impaired individuals. 接入 AI 语音识别与播报,将用户口述问题转换为文字,并将 AI 回答转化为语音以更好地服务视障人群。
- Intelligently recognizing task reminders (such as medication reminders) from memories and sending push notifications to users. Providing a task completion monitoring system that alerts relevant personnel in case of regular non-completion. Offering an emergency assistance button to ensure timely help for vulnerable groups in case of emergencies. 从回忆中智能识别事项提醒(如定时吃药等)并以消息推送方式提醒用户,提供事项完成监控系统,若定期未完成则及时向相关人员做出警报。提供紧急事项求助按钮以使弱势群体在遭遇紧急情况时及时得到救助。
- Extracting memory fragments from memories and using AI to generate missing images through drawing. Creating intelligent memory videos that visualize the memories. 从回忆中提取记忆片段并通过 AI 绘图补充缺失的图片,智能生成回忆视频,让回忆可视化。
- Supporting user-friendly formats such as mobile apps, mini-programs, and other platforms. 支持 APP、小程序等更加用户友好的方式。

## Demo 演示

Demo deployed at https://h5.hust.online/remember-me

### Technical Details 技术细节

- The backend utilizes the Golang web framework echo and incorporates JWT middleware for identity verification and user authentication. 后端使用 Golang Web 后端框架 echo,结合 JWT 中间件进行身份验证与用户鉴权。API document: https://github.com/ligen131/rememb er-me/blob/main/docs/api.md
- Front-end design Figma: https://www.figma.com/file/RId4GyA52xC7dKBRnKbfoT

### **LICENSE**

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