



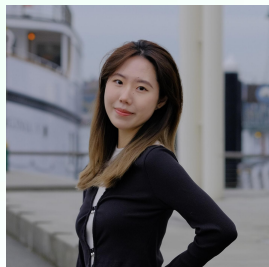
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Understand Your Diabetes Risk with AI



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Problem Context



Nearly 10% of Americans are living with type 2 diabetes



Minority groups experience higher rates of type 2 diabetes.



Traditional prevention methods are lack of engagement and accessibility.

“How might we develop a digital solution to help the U.S. population, particularly the Latino community, to **engage more effectively in diabetes prevention?**”



Key Research Insights

Type 1 vs Type 2 Diabetes

- Type 1: Autoimmune, **Unpreventable**
- Type 2: Lifestyle-Related

Difficulties for Latino Community

- **Language** and cultural **barriers**
- **Emotional** challenges
- **Limited access** to healthcare

Limitations of Existing Prevention Methods

- **Lack customization** for individual differences.
- **Expensive**, requires resources from both healthcare and patients.
- **Lacks immediate feedback** for effective intervention.

Personas

Miguel



Profile: Patient lives far from medical facilities

Goals: Seeks affordable and straightforward diabetes solutions

Pain Points: Struggles with language barriers and low level of formal education

Lucia



Profile: Young student with a family history of diabetes

Goals: Understand type 2 diabetes and her own risk

Pain Points: Struggles with the inaccessibility of current solutions for managing her family's health

Key feature 1:

Conversational Risk Assessment

Welcome! Before we begin, please select your preferred language for our conversation! 😊

D

Multi-language support

English

Español (Spanish)

Dr. Dos

Collect data through interactive dialogue

Awesome! First up, how old are you? Age is an important factor in understanding your health. 📅

D

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▶

D

Dr. Dos

Chat and check your risks level

←

Based on the information provided, we can assess your risk level for type 2 diabetes. **Considering your age, gender, family history of diabetes, and ethnicity, you fall into the medium risk category.** While being young may suggest a lower risk, your family history of diabetes increases the likelihood of developing the condition. Being female and of Asian ethnicity also contribute to a higher risk. Your activity level is a crucial factor in determining your risk. **Engaging in physical activity for only 1-2 days a week and spending less than an hour on daily activity puts you at a higher risk.** Regular exercise helps maintain a healthy weight and improves insulin sensitivity,

Personalized assessment report

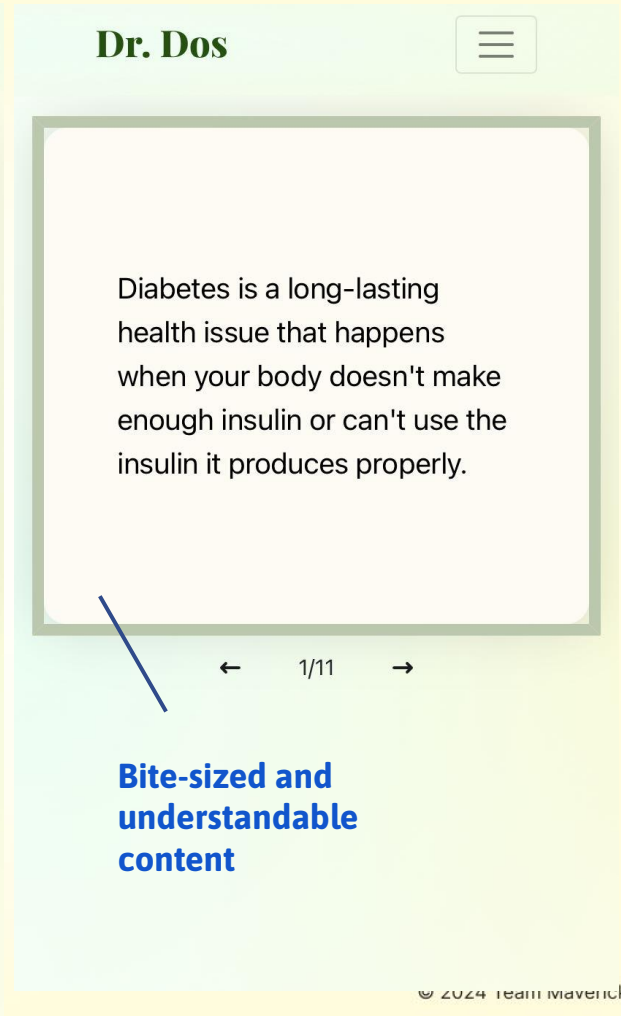
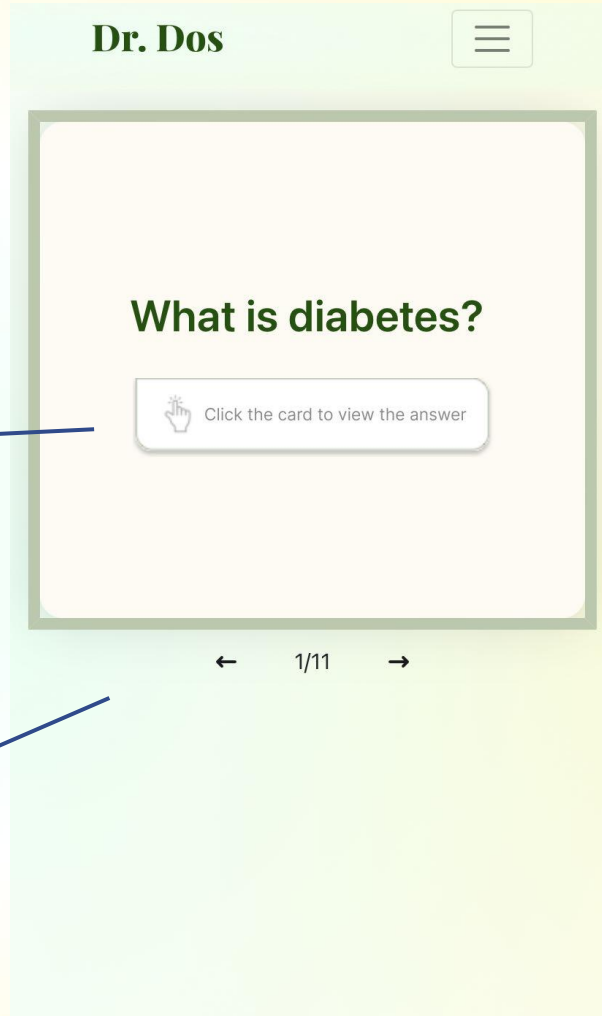
Start chat here...

Key feature 2:

Diabetes Education Flashcards

Click to flip interaction

Progressive difficulty learning



Bite-sized and understandable content

User Testing & Validation

Questions



- Chatbot dialogue easy to understand?
- Flashcard UI intuitive to use?

Feedbacks



- Some questions are text heavy, with new terminologies
- New users might not know the card can flip

Revision



- Breakdown questions with more steps, explain words such as cholesterol, HDL
- Add “Click” icon on flashcards



Ethical Consideration

Values

- **Engagement:**
High **retention** rate
- **Innovation:**
Data-driven solution

Considerations

- **Cultural Sensitivity:**
Avoid bias
- **Health Literacy:**
Easy understanding

Positive Impacts

- **Accessible Healthcare:**
Free & User-friendly
- **Equity:**
For **underserved** population

Next Steps Beyond Capstone

Documentation Handoff

- Record research insights
- Technical specifications (Platform, Integration)

Ownership Transfer

- Github Repository

Future Direction

- Further user testing
- Expand language options