
EDGE RUNNERS
lab lab ai
lab lab NEXT
AI/ML API
3.2
OCT 18 - OCT 20
ENROLL NOW

EDGE RUNNERS 3.2

Join our online AI hackathon and dive into app development with Llama 3—don't miss out on the fun!

🚀 Build an app powered by Llama 3.2's capabilities.

💰 Stand a chance to win $5,000 in prizes.

🌟 Win the opportunity to be invited, with transport and accommodation covered, to our upcoming **Giga Hackathons in Barcelona or Geneva in partnership with UNICEF**.

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About Llama 3.2

Llama 3.2 is Meta's latest advancement in open-source large language models (LLMs), designed to make AI more accessible across various platforms and tasks, especially with its new multimodal capabilities. This version focuses on lightweight models optimized for edge devices, while also introducing the ability to process both text and images, broadening the scope of AI applications.

•Multimodal Processing

• Llama 3.2 handles both text and image inputs, perfect for tasks like document analysis, image captioning, and visual question answering.

•Vision-Centric Models

• The 11B and 90B models bring vision capabilities to Llama, enabling applications like augmented reality (AR) and advanced image recognition.

•Lightweight Models for Edge Devices

• Optimized 1B and 3B models enable real-time AI on mobile and IoT devices, with 12K token support and compatibility with Qualcomm and MediaTek hardware.

•On-Device AI

• These models efficiently run on ARM-based devices, providing powerful AI in mobile and edge environments without relying on cloud infrastructure.

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Hackathon Challenge

Build an Edge Compute Solution Using the Full Llama Model Spectrum
Your task is to develop a solution optimized to run on edge devices, leveraging lightweight models such as Llama 3.2 1B or 3B for real-time operations on mobile or IoT platforms. However, you have two options to incorporate larger models in the process:

a. Network-Enhanced Features: You can integrate network features into your solution that allow it to tap into larger models, such as Llama 3.1 405B or Llama 3.2 multimodal models (11B, 90B), running on external servers. These can be used for advanced tasks like complex data analysis or multimodal processing, adding powerful AI capabilities without overloading the edge devices.

b. Development Optimization: Alternatively, during development, you can use the larger models for purposes like **synthetic data generation** (using Llama 3.1 405B) or labeling data with vision models (using Llama 3.2). This approach allows you to train or fine-tune the smaller, lightweight models for your final solution, ensuring that the end product runs entirely on edge devices while benefiting from the advanced capabilities of the larger models during its creation.

The final goal is to produce an edge-ready solution that intelligently combines local performance with the optional power of larger models via network or development-stage optimization

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Side Quest Challenge: AI-Powered Solutions for the Telecommunication Industry in underserved areas.

Your mission, should you choose to accept it, is to build innovative AI-powered tools that can transform the telecommunications industry. The focus can range from optimizing administrative processes and regulatory compliance to enhancing network operations and improving the entire lifecycle of bringing connectivity to underserved areas.

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Side Quest Challenge: AI-Powered Solutions for the Telecommunication Industry in underserved areas.

To complete this challenge, your solution must:

- **Incorporate Multiple Models:** Leverage the capabilities of Llama 3.1 and 3.2 models, incorporating at least two models in your solution.
- **Demonstrate Versatility:** Highlight the full range of these models, from small, lightweight configurations to complex multimodal applications.
- **Emphasize Creativity:** Develop a solution that creatively addresses problems like workflow optimization or connectivity improvements.

Focus on Real-World Impact: Ensure your tool tackles pressing needs within the telecommunications industry, especially for underserved areas.

Bonus Opportunity:

Solutions compatible with edge devices will qualify for both this side quest and the main track challenge.

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Suggested Technologies

Llama 3.1

Llama 3.1 by Meta AI is a state-of-the-art open-source LLM **for advanced NLP**, offering models up to 405B parameters. It emphasizes transparency, safety, and supports open innovation with grants and resources.

👉 Read more about Llama 3.1

Llama 3.2

Llama 3.2 by Meta is an open-source LLM with multimodal capabilities, processing text and images. It's optimized for edge devices, making AI more accessible across platforms and tasks.

👉 Read more about Llama 3.2

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Get AI/ML API Credits!

Hey builders! 🚀

Exciting news for the teams who created or joined a team for the hackathon!
We're offering **500 keys with $20 in AI/ML API credits,**

Promo code: AIMLAPI32

Use this on checkout to get a **free subscription week with access to all Llama 3.2 models to supercharge your AI projects!**
With over 100 models from LLama, Qwen and Flux, the AI/ML API covers all your needs, from image generation to computer vision with just one API. ✨

Here's how you can claim your subscription and get started:

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Get AI/ML API Credits!

• Use the **free subscription week with an access to all Llama 3.2 models** to kickstart your project and bring your innovative ideas to life.

• **Promo code** will be available for the **first 500 people** who claim it.

• **Access free subscription week** by registering on **AI/ML API website**, choosing the Startup plan and entering the promo code. Access will be **available starting from October 18th.**

• For the technical support, visit AI/ML API Discord.

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Get AI/ML API Credits!

Important Notes:

- Credits are provided by AI/ML API and are subject to their delivery.
- Lablab is not responsible or liable if AI/ML API does not provide the credits.
- Please note that the AI/ML API is a subscription-based service. If you do not plan to continue using it after the hackathon, please remember to cancel your subscription to avoid any charges.

🎁 **Don't miss out on this incredible opportunity. Gather your team and sign up now!** ⏳✨

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NEXT AI Startup ideas

lablab NEXT is a dynamic, 6-week accelerator program designed to fast-track startup prototypes and MVPs (Minimum Viable Products) into the market. Participants receive intensive, **hands-on guidance from industry experts,** ensuring they have the tools, knowledge, and support necessary for success.

For our top performers from the lablab.ai community, it is an excellent opportunity to bring their innovative ideas to life and make a real impact in the competitive business world. 🌎

💡 **AI Startup ideas:**
Too many duplicate submissions are crowding already saturated areas. This document contains **200 unique ideas, each capable of becoming a successful AI company**—and surprisingly, few of our hackers have explored them 🚀

- Use ideas from this **document** to inspire your hackathon project. Build an AI-powered tool that could form the basis for a startup, leveraging the power of Llama 3.2

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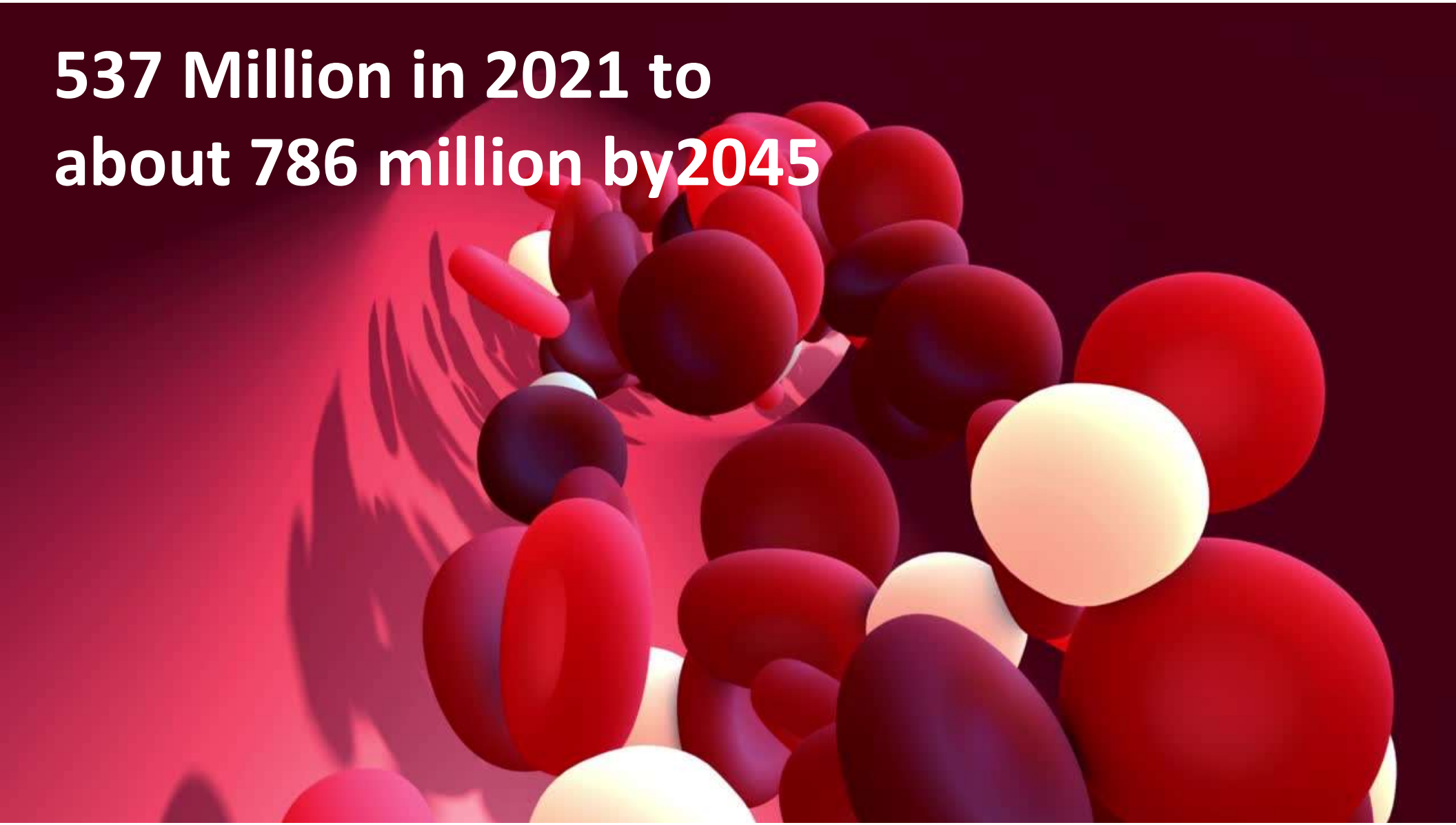
Llama Legends

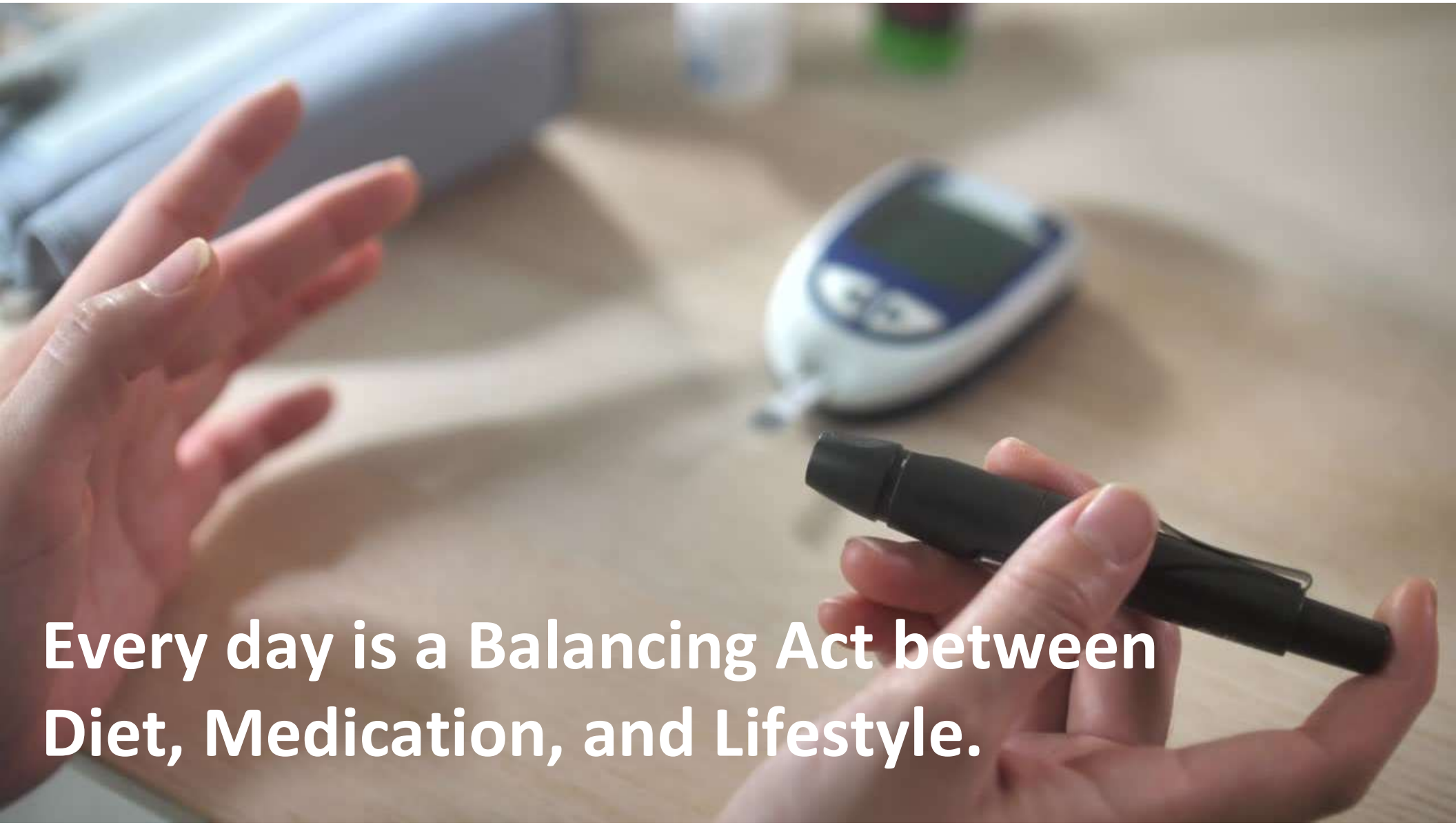
Personalized Diabetes Plan

Diabetic Cases are in Rise

International Diabetes Federation (IDF)

537 Million in 2021 to about 786 million by2045




Every day is a Balancing Act between
Diet, Medication, and Lifestyle.


Llama Legends
PERSONALIZED DIABETESE PLAN
https://lablab.ai/event/next2-edge-runners

Objectives

- Improve health outcomes for diabetic patients through personalized diet plans.
- Address the gap in tailored nutritional guidance for diabetics, leveraging cutting-edge AI technology

Features Overview

01 Personalized diet plans

Diet plans based on individual needs.

02 לךשט כף|ת

Tips on diabetes management.

03 לךטמכלאשף ל ףאךטכלאשי

Interactive questionnaires to customize plan

04 שתףאט ףקט |פףש

Enhancing comprehension

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הד

Cloud-Based AI Services

Hugging Face’s TinyLlama.

זד

Data Handling

Secure and compliant data storage

זו

API Integration

Seamless integration of AI models with custom backend logic.

04

Maintenance and Updates

Continuous integration and deployment pipeline

Hackathon Challenge

Future Recommendations

Use Meta's Llama 3.2 models to generate synthetic datasets and train smaller models optimized for edge devices like smartphones, laptops, IoT devices, and tablets.

Key Objectives:

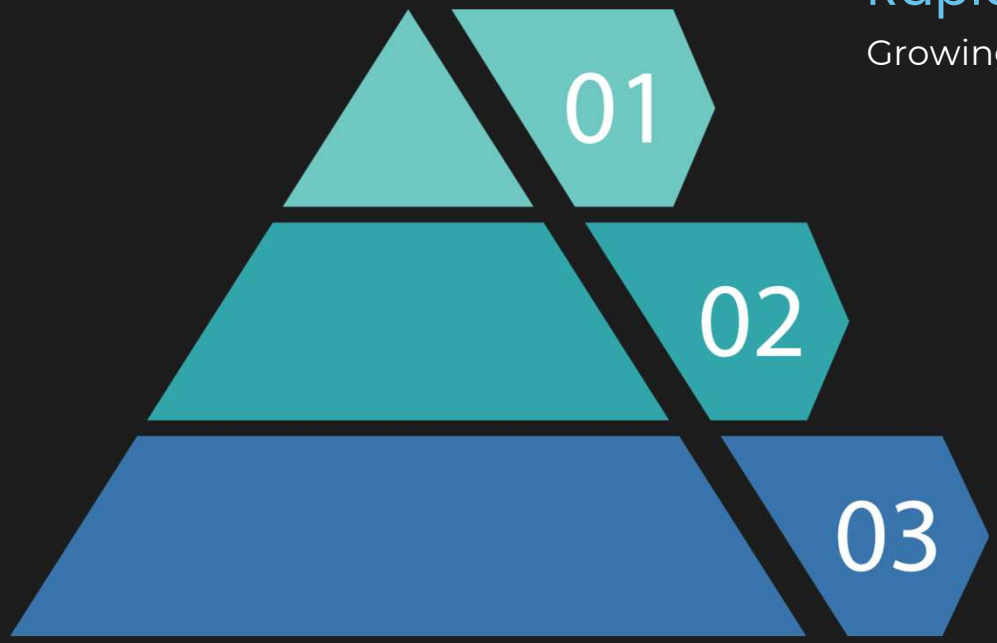
Generate Synthetic Data: Utilize Llama 3.2 to create high-quality, diverse datasets.

Optimize Models: Train and optimize smaller models (e.g., TinyLlama, Phi-3) for edge device performance.

Deploy on Edge Devices: Develop cloud prototypes designed for seamless deployment on edge devices, ensuring efficient local data processing.

Showcase your innovative solutions and the potential of running sophisticated AI models on edge hardware!

Market Value



Rapid Market Expansion

Growing demand for personalized healthcare solutions.

Long-term Value

Establishing a foothold with a scalable, AI-driven solution

Increased Adoption

Significant potential to reduce healthcare costs and improve life quality for millions of diabetics worldwide

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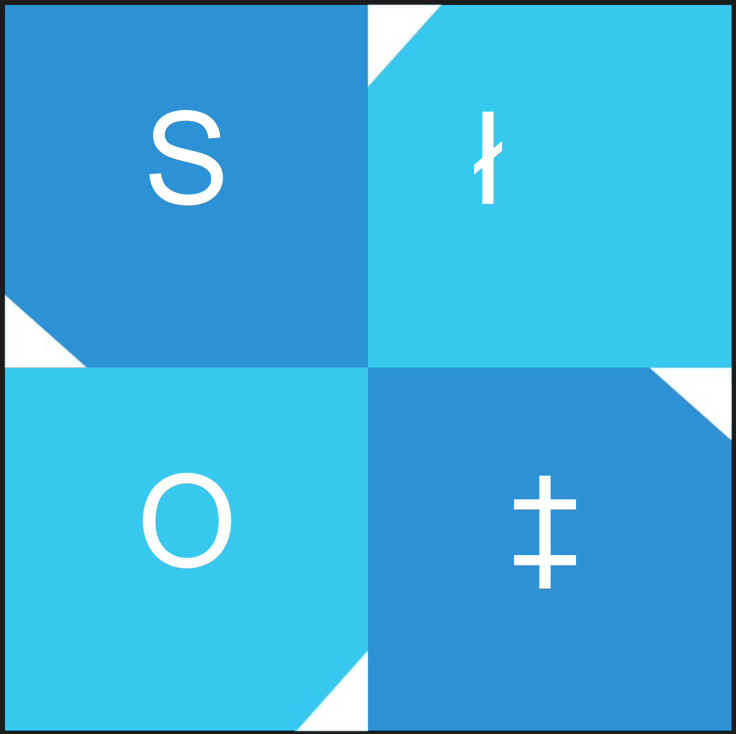

STRENGTHS

- Advanced AI-driven personalization
- Strong focus on diabetic health and compliance

WEAKNESSES

- High dependency on third-party AI APIs
- Initial data privacy and security concerns

OPPORTUNITIES

- Expanding market for health tech solutions
- Partnerships with hospitals and health insurers

THREATS

- Regulatory and compliance risks
- Technology adoption rate among target demographic

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Demo

Personalized Diabetes Plan

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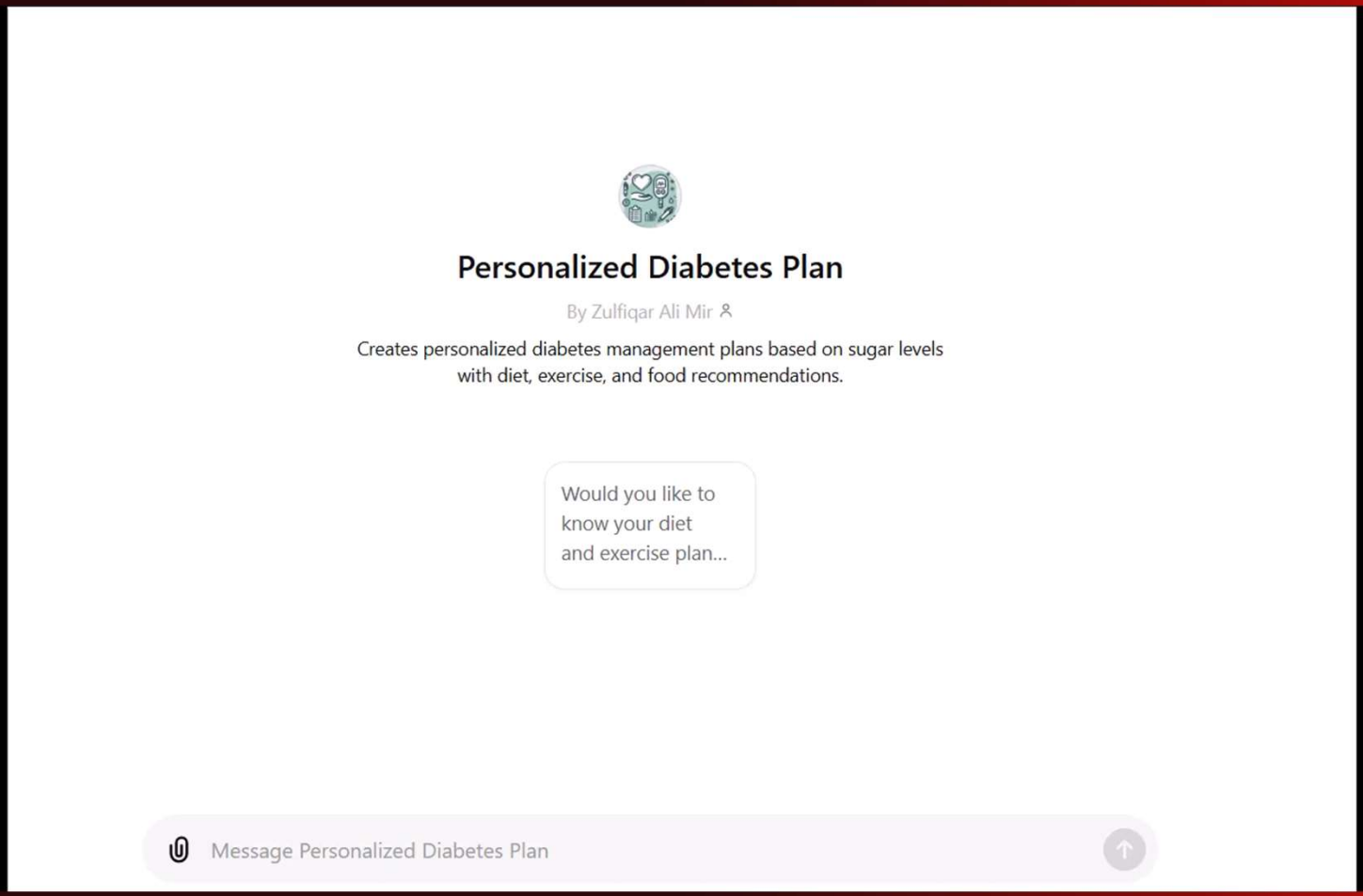
Personalized Diabetes Plan



Llama Legends

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Thank You!

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