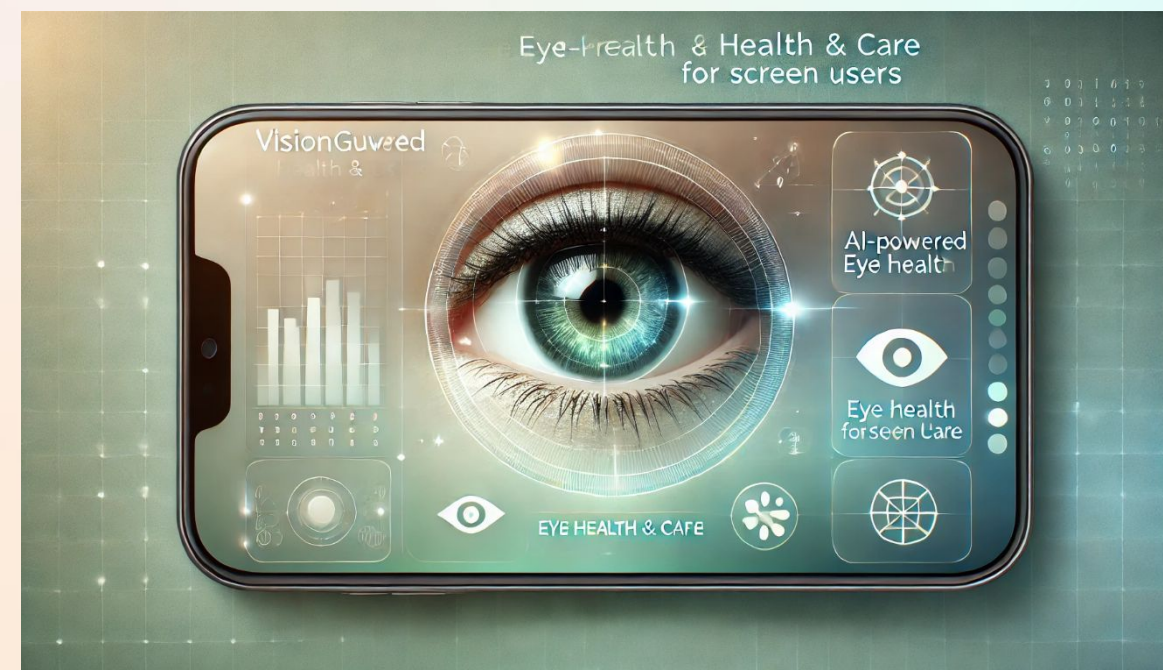
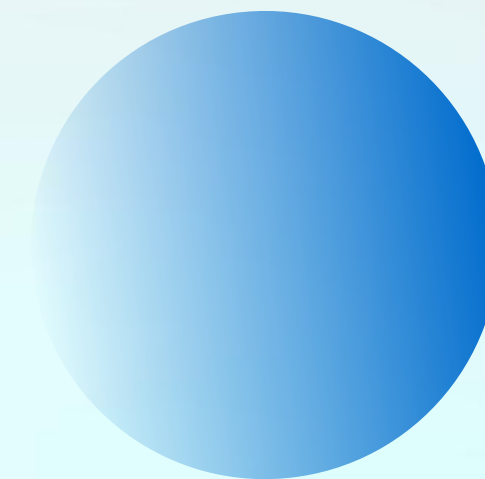


Llama Impact Hackathon

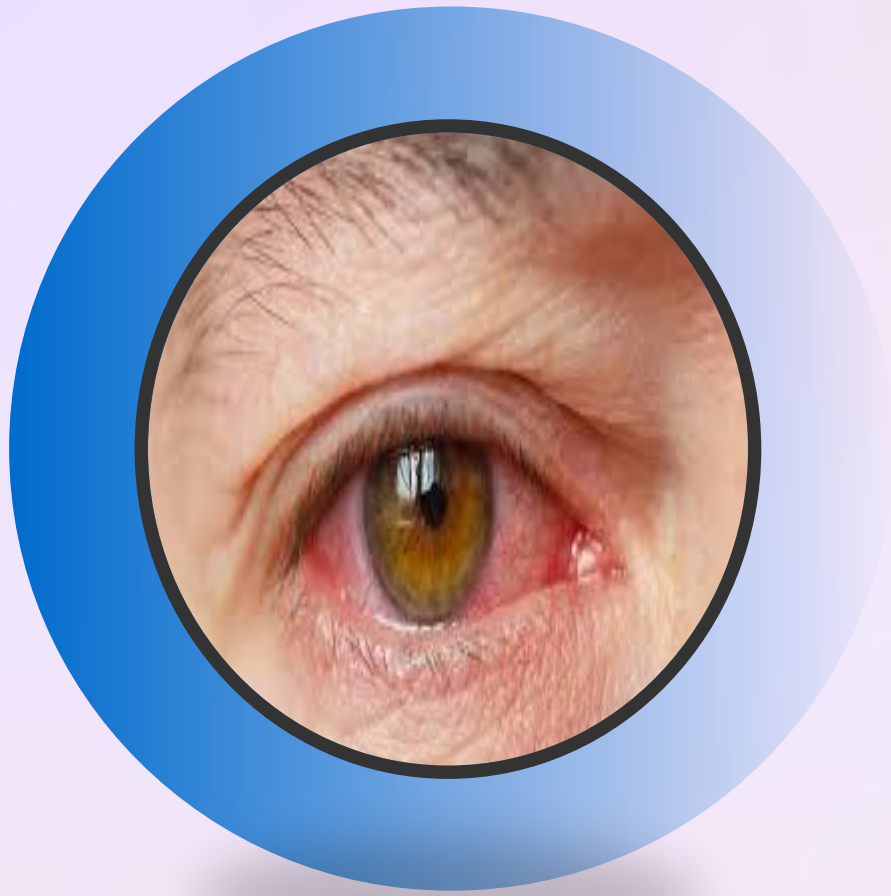


VISION GUARD

AI-Driven Eye Health Monitoring Solution.
Presented by: Team "Clear Sight Innovators"



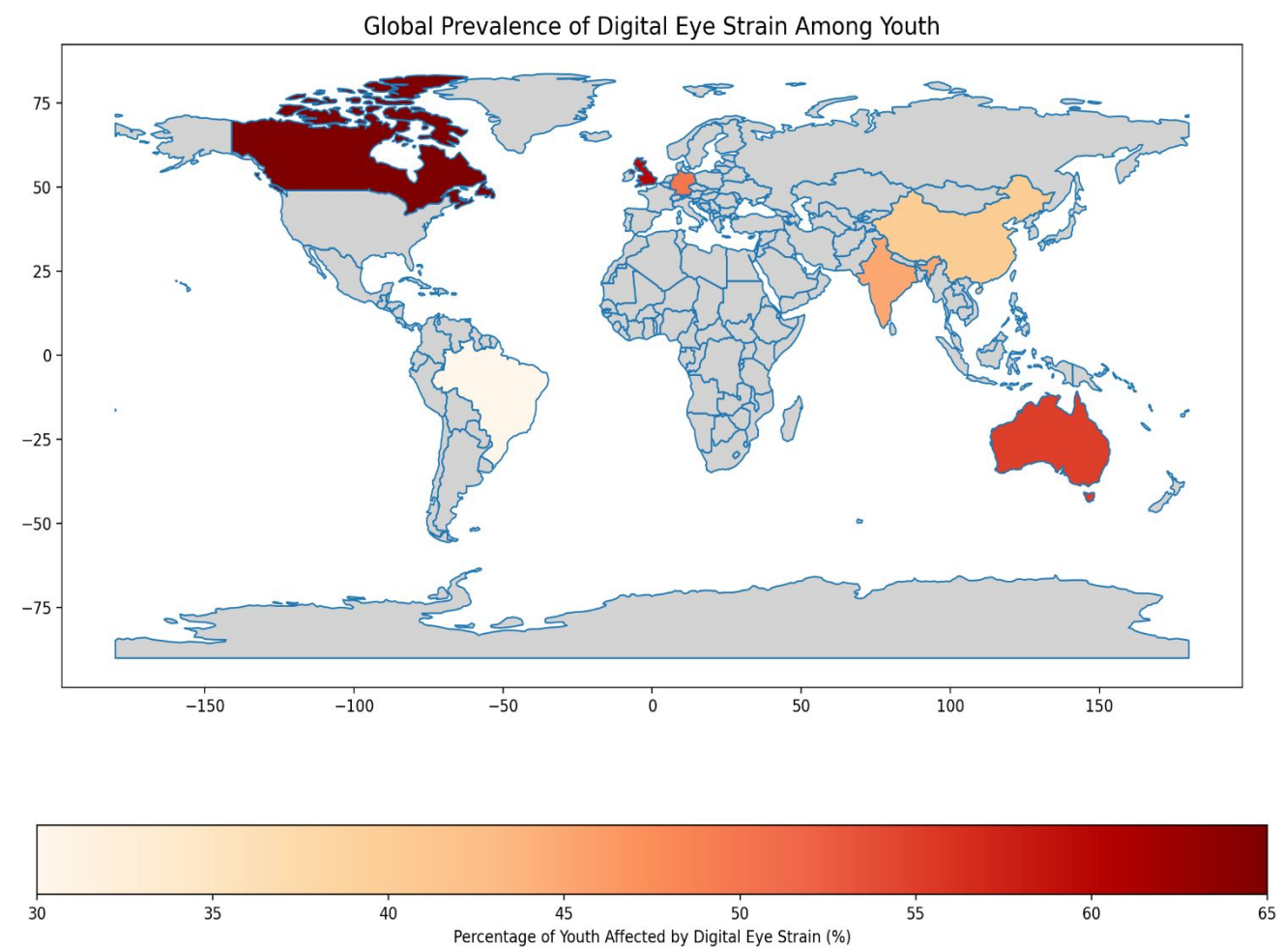
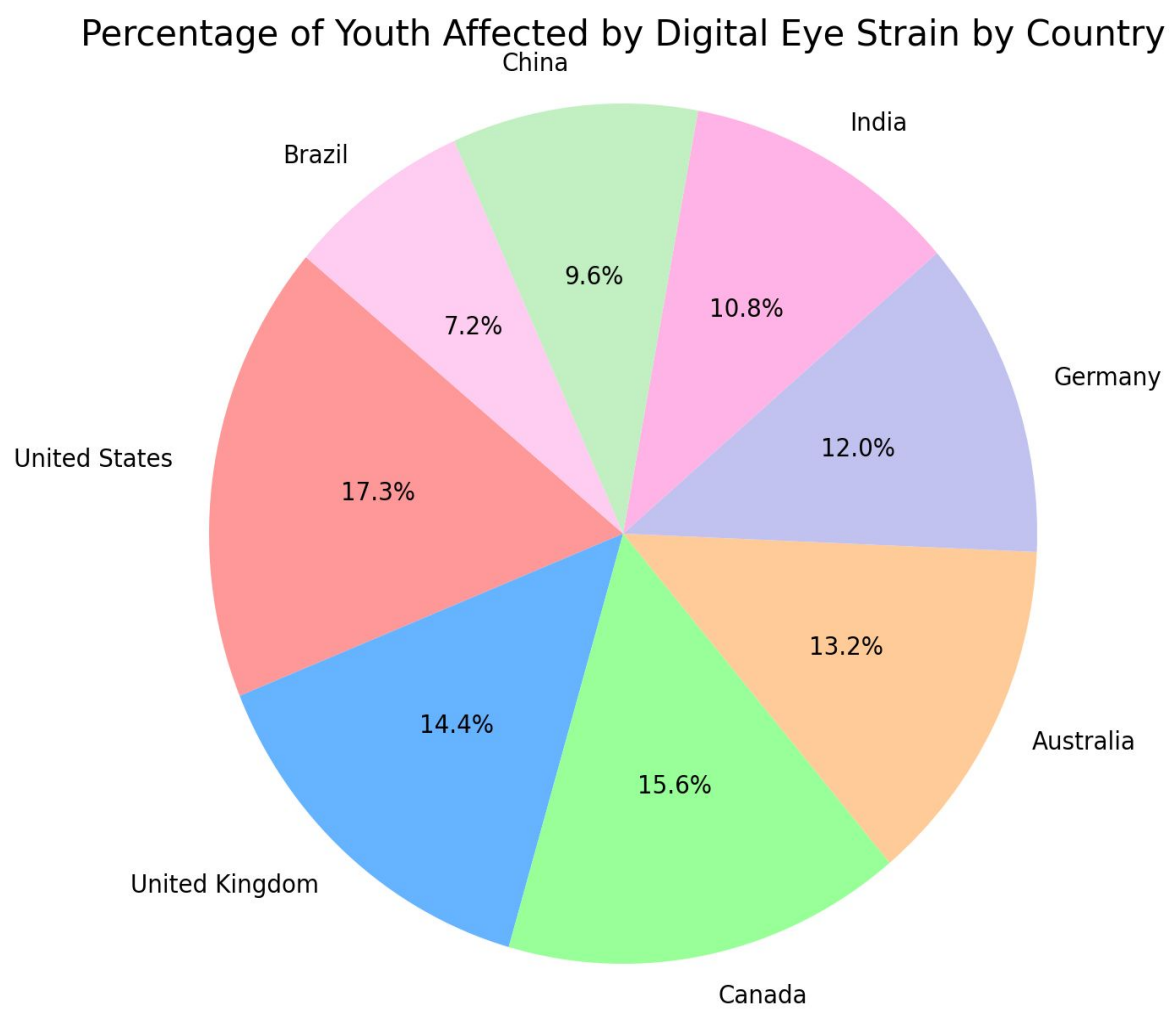
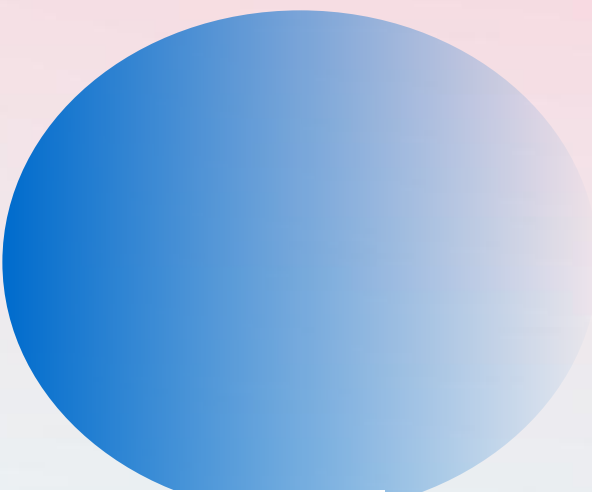
Problem Statement



In the Digital era, the increased use of Edge Devices among the youth and the rising trends of remote working is leading to many Eye Health Problems such as Dry Eye Syndrome, Redness, Eye Strain, Watering and Blurred Vision. This results due to reduced Blink rate and continuous exposure to Blue light. If left untreated, severe dry eyes may lead to eye inflammation, abrasion of the corneal surface, corneal ulcers and vision loss.



Key Statistics



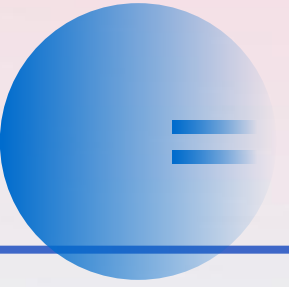
These visualizations provides a clear representation of how digital eye strain affects youth in different countries, highlighting the varying prevalence rates.

An AI-Driven Eye Health Monitoring Solution =

- **Monitor:** Vision Guard continuously tracks user eye health indicators such as screen time, blink rate, and distance from the screen, analyzing user activity patterns to detect early signs of eye strain
- **Analyze:** The app uses AI algorithms to analyze the data collected, looking for patterns that indicate potential issues, such as excessive screen time. It processes this information to generate insightful reports on the user's eye health status.
- **Notify:** Based on real-time analysis, Vision Guard sends timely notifications to remind users to take regular breaks, adjust their screen settings to protect their eyes.
- **Recommend:** Vision Guard then offers personalized recommendations tailored to the user's habits, such as the optimal duration of screen time, exercises for eye relaxation, or adjustments to lighting conditions to reduce strain.



How Vision Guard Works?



■ Installation & Setup

- **Download & Install:** Get Vision Guard from the app store.
- **Permissions:** Allow camera access and necessary permission

■ Background Operation

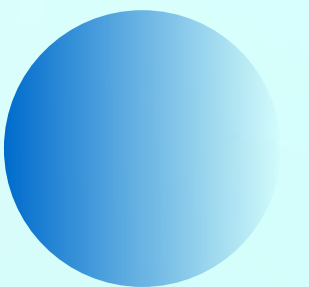
- **Automatic Monitoring:** App runs in the background.
- **Regular Reminders:** Every 2 hours, Vision Guard sends a notification.

■ Eye Health Check

- **Notification Prompt:** Click on the notification to start your eye test.
- **Camera Activation:** App prompts you to take a picture of your eyes, with guidance to keep your face hidden.
- **Quick Scan:** Within 1-2 seconds, Vision Guard analyzes your eye condition.

■ Feedback & Recommendations

- **Real-Time Results:** Vision Guard assesses if your eyes are fit for screen use.
- **Recommendations:**
 - **Screen Safe:** You're OK to continue using the screen.
 - **Break Alert:** You need a break to rest your eyes.



Tech Stack

t



API's

- Fast API
- Python

React Native

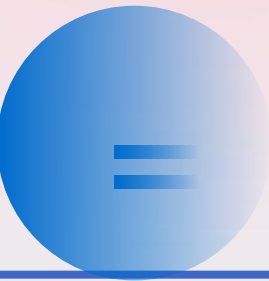
- Expo CLI
- N groq for running Fast API

Generative AI Model

- Llama-90B-vision-preview
- groq
- Python



Benefits of Vision



Guard

❑ Reduced Eye Strain

By reminding users to take breaks, Vision Guard helps reduce eye fatigue and strain, which can lead to better long-term eye health.

❑ Increased Productivity

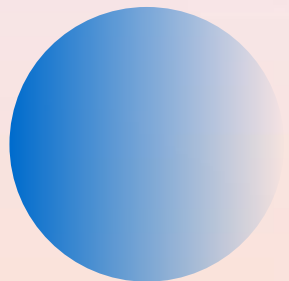
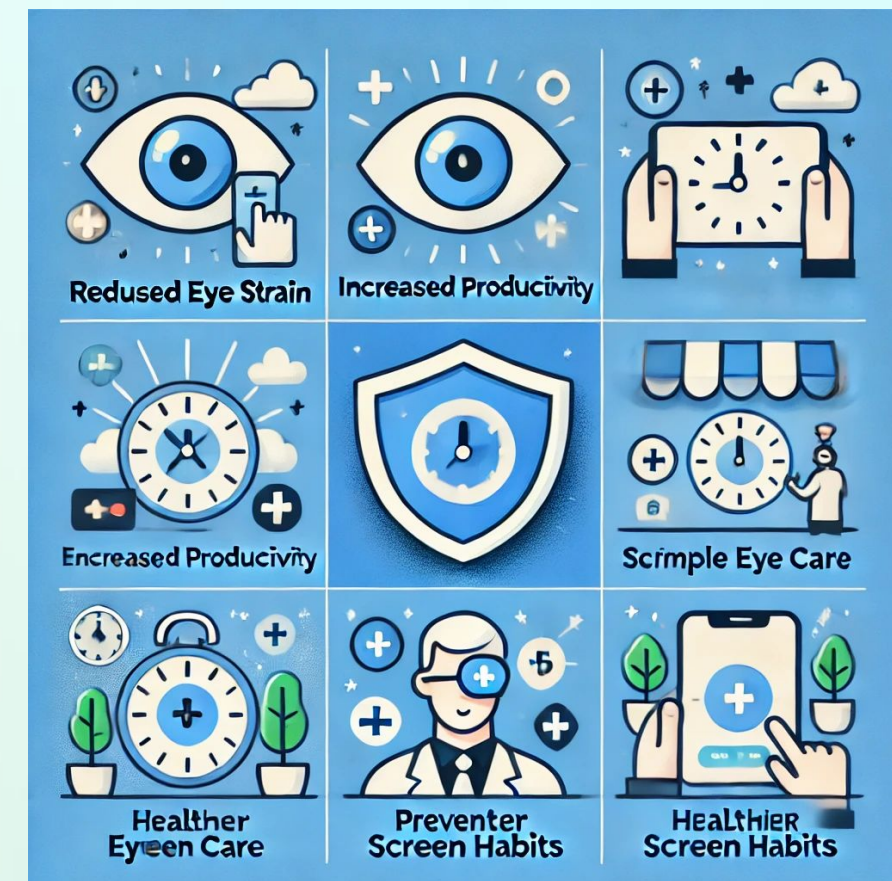
Users can focus on their work or studies without constantly worrying about their eye health, knowing that Vision Guard will alert them when it's time for a break.

❑ Preventive Eye Care

Regular monitoring allows Vision Guard to detect signs of eye fatigue early, empowering users to manage eye health proactively rather than reactively

❑ Healthier Screen Habits

With regular reminders and insights, users can develop healthier screen habits that lead to improved overall well-being.



Monetization Strategy

Sustainable Growth and Monetization

❑ Data for Research:

With user consent, anonymized data for research purposes.

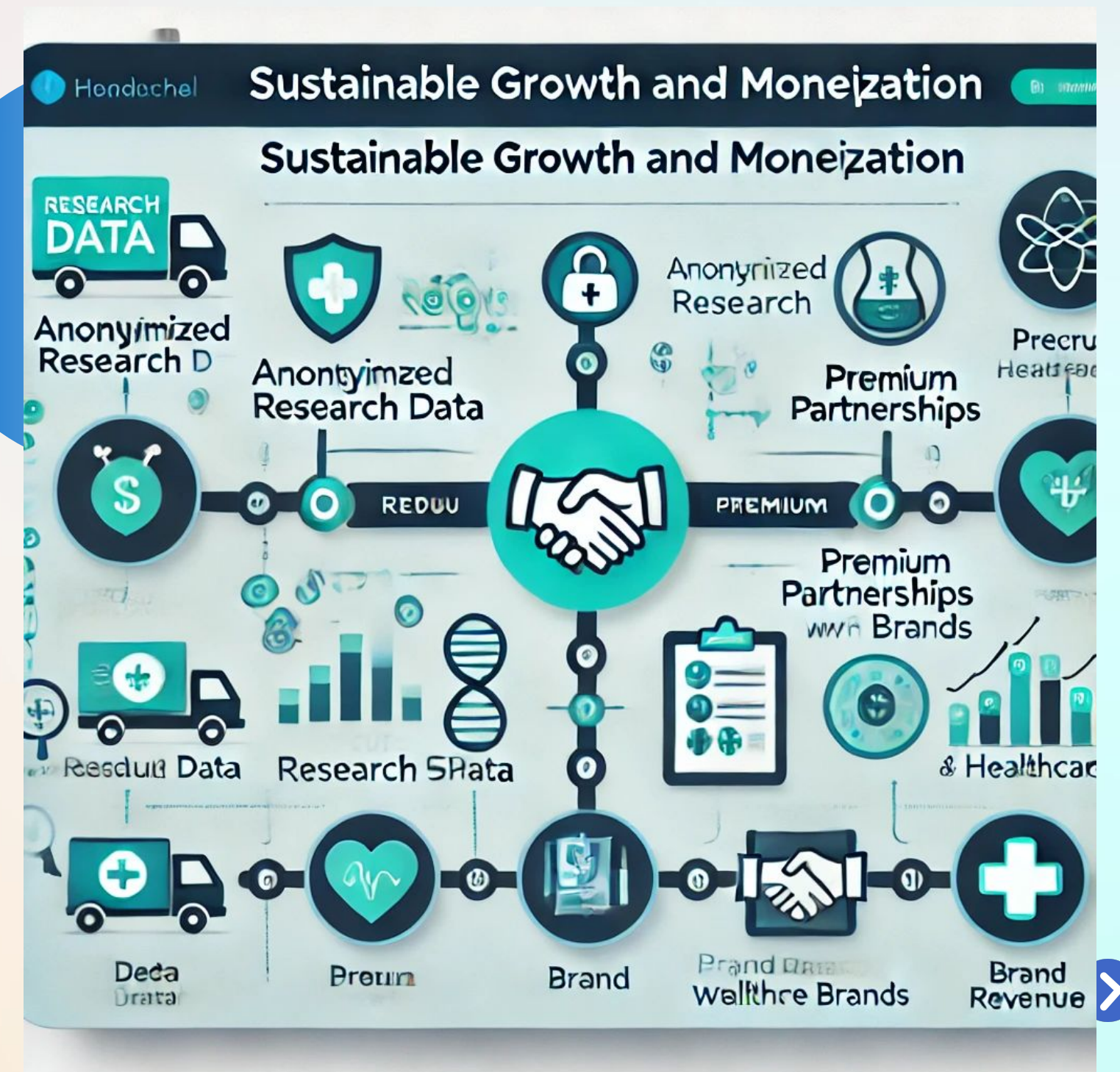
❑ Premium Partnerships:

Collaboration with healthcare brands for affiliate revenue.

❑ Advertisements

❑ Subscriptions

No ads, connect you to eye health Practitioners



Future Developments

=

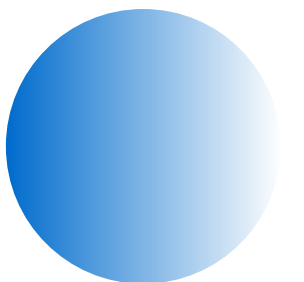
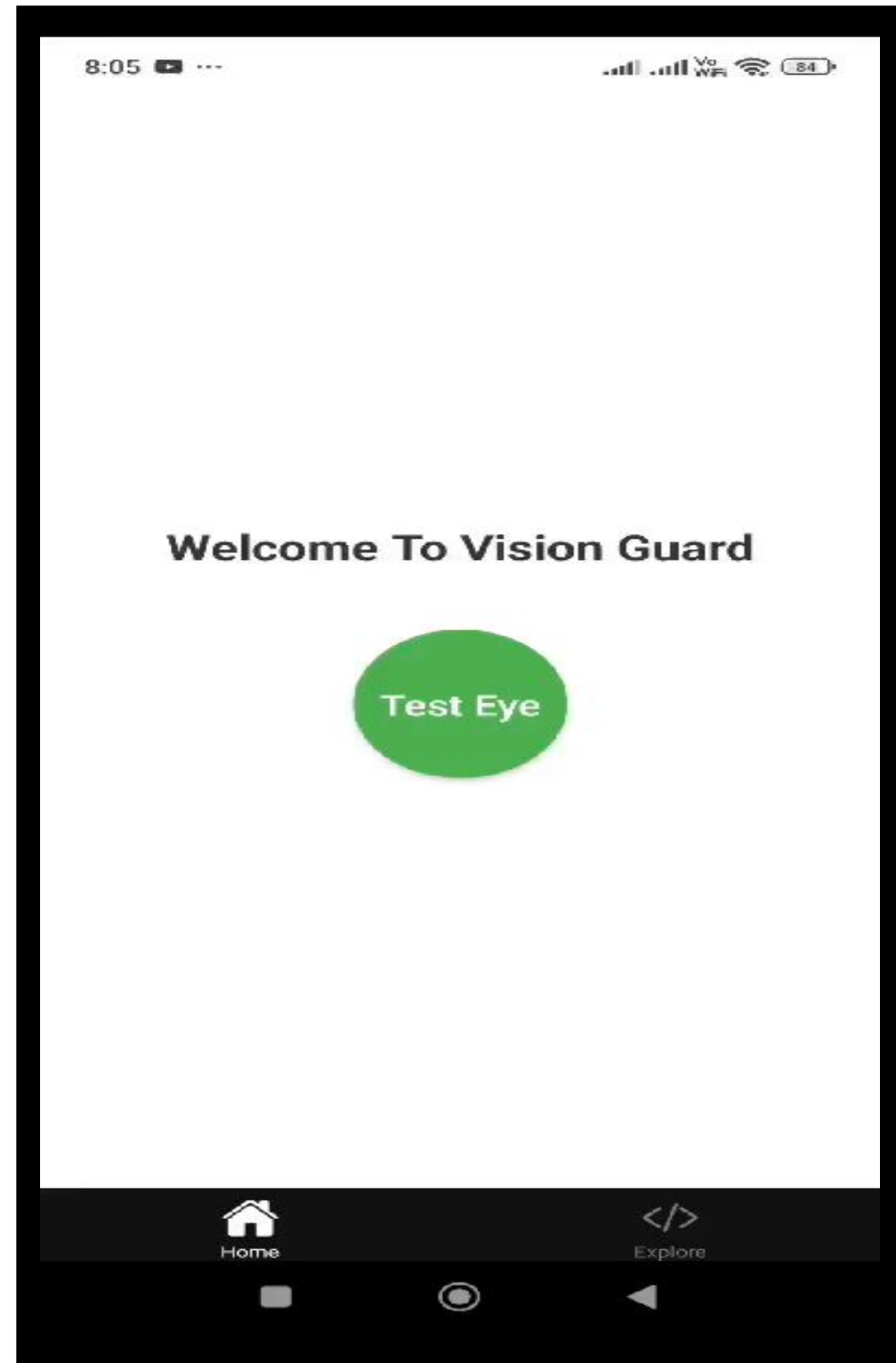


Future Plans for Expansion

- ☐ Partnerships with healthcare professionals for medical recommendations.
- ☐ Telemedicine integration for direct consultations
- ☐ Add more Features and improved user experience.

>

Demo Video Showing How “VISION GUARD” Works



Meet Our **Team**



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