

#### **Problem Statement**

- The increasing global prevalence of skin cancer underscores the need for early detection, accessible diagnostic tools, and effective triage to prioritize highseverity cases
- Limited access to specialized dermatological care often delays diagnosis, leading to poor outcomes

### Solution

- The AI-powered Skin Cancer Detection App enables early diagnosis through image analysis, mole tracking, and triage of high-severity cases for prioritized medical attention.
- It combines user-friendly tools, educational resources, and dermatologist-validated AI to deliver over 95% diagnostic accuracy.

# Benefits of our solution - how it helped in BET

★ Our solution boosts profitability by enabling early detection, reducing costly late-stage treatments, and improving patient retention. It lowers expenses through operational efficiency and proactive monitoring, while driving revenue growth via premium services, broader market reach, and triage prioritization.

# Challenges

- **AI Model Development:** 
  - Data Quality and Quantity: Training the AI model requires a large, high-quality dataset of skin lesions, which can be difficult to obtain.
- **Image Capture Consistency:**
- User Variability: Users may capture images with varying lighting, angles, and distances, affecting analysis quality.
- Integration with Healthcare Systems
- · Interoperability: Integrating the app with existing healthcare systems for seamless data sharing can be complex...

### **Technology Details**

- Backend: Python (Flask), Convolutional Neural Network (CNN) sequential model
- Frontend Mobile app: React native
- Deployment: AWS (EC2)
- Database: SQL

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#### **Screenshots**



