Mam our project title is "Skin cancer Disease Diagnosis Using ML & Design Thinking Framework"... We are cotinuing this project to phase 2 mam…. We've created an AI-powered web application that helps detect skin cancer early. Users can upload a skin image and get instant analysis showing if it looks dangerous or normal, with confidence scores of 95% with help of 1000+ trained datasets from Kaggle…

RELATED WORKS

- Just says "cancer/no cancer"
- No guidance on next steps
- Complex to use
- No confidence scores

Our Project in Phase 1:

- Gives detailed 8-type classification(**Actinic Keratoses, Basal Cell Carcinoma, Benign Keratosis, Dermatofibroma, Melanoma, Melanocytic Nevi, Vascular Lesions, Normal Skin**)
- Provides food diets & doctor connections
- Simple web interface anyone can use
- Shows accuracy percentage for transparency

Phase 2 Implementation:

1. **Doctor Integration - Direct appointment booking**
2. **Mobile App** - For easier access on phones

HOW IT HELPS SOCIETY

1. Early cancer detection increases survival rates
2. Instant results vs weeks waiting for appointments
3. Free screening reduces unnecessary doctor visits and also cost reduction
4. **Reduces Fear** with Clear guidance instead of anxiety

AI implementation in our project

5. **Smart Image Analysis** with AI examines skin patterns like an expert doctorby recommending food diets and suggestion of doctor names
6. Trained on 10,000+ medical images that are got from kaggle
7. Gives results in 3 seconds with better accuracy

ML TECHNIQUES USED IN OUR PROJECT

- **SUPERVISED LEARNING which will Train the HAM10000 dataset from kaggle**
- **DEEP LEARNING with MobileNetV2 architecture for skin lesion analysis**
- **DATA AUGMENTATION for rotation, flipping, zooming and adjust the brightness of the uploaded image**
- **IMAGE PROCESSING will resize All images to 224×224 pixels**
- **CLASSIFICATION ALGORITHMS it will Distinguish 8 skin conditions**
- **FEATURE EXTRACTION for visual detection**