

# Integrating AI, Ayurveda, and Modern Medicine for Early Alzheimer's Detection

This presentation introduces a groundbreaking, interdisciplinary approach. It combines Artificial Intelligence, Ayurvedic wisdom, and Modern Medical advancements. Our goal is early detection and holistic management of Alzheimer's disease.





# The Growing Global Challenge

## Irreversible Neurodegeneration

Alzheimer's is a progressive disorder with no permanent cure. It leads to gradual cognitive decline and memory loss.

## Widespread Global Impact

Over 55 million people worldwide live with dementia. Alzheimer's is the leading cause, and numbers are rising.

## Frequently Missed Diagnosis

Diagnosis is often delayed or missed. This is especially true in younger adults. It's due to low awareness, stigma, and lack of affordable tools.

# Bridging Diverse Modalities

## AI-Powered Cognitive Analysis

Utilizing advanced algorithms for precise cognitive assessment.

## Ayurvedic Interventions

Incorporating traditional Unmada treatments for holistic well-being.

## Modern Clinical Referral

Establishing clear protocols for timely medical consultations.

This multi-pronged strategy addresses both early detection and preventive care.



# Diagnostic Gaps We're Solving

1

## Early Detection Void

No screening tools exist for the 20–45+ age group.

2

## Ignored Early Signs

Symptoms like memory slips are often dismissed.

3

## Accessibility Barriers

Brain scans are expensive and unavailable to many.

4

## Digital Solution Need

Strong demand for a low-cost, AI-driven, accessible alternative.





# Project Vision: An AI-Powered Early Risk Assessment Model

## Risk Detection

Analyzes voice samples, memory recall, and lifestyle habits.

## Risk Level Scoring

AI computes a quantitative risk score (0–100).

## Personalized Interventions

Low risk: Ayurvedic advice. High risk: clinical referral + Ayurvedic support.



# Ayurveda + AI: The Research Foundation

## Ayurveda

Alzheimer's-like disorders are categorized as "Unmada."  
Remedies include Brahmi for memory and Ashwagandha for neuroprotection.

## Modern AI Research

Speech biomarkers show over 80% accuracy in early cognitive decline detection.

This project blends the ancient and the futuristic into one actionable tool.



# Target Audience



## Young Professionals

High stress, poor work-life balance.



## People with Memory Lapses

Frequent forgetfulness, confusion.



## Digital Lifestyle Users

Late-night usage, sleep disruption.



## Speech Hesitation

Subtle early indicators often ignored.

# System Architecture Overview



## User Input

- Voice recording
- Short memory test
- Lifestyle questionnaire



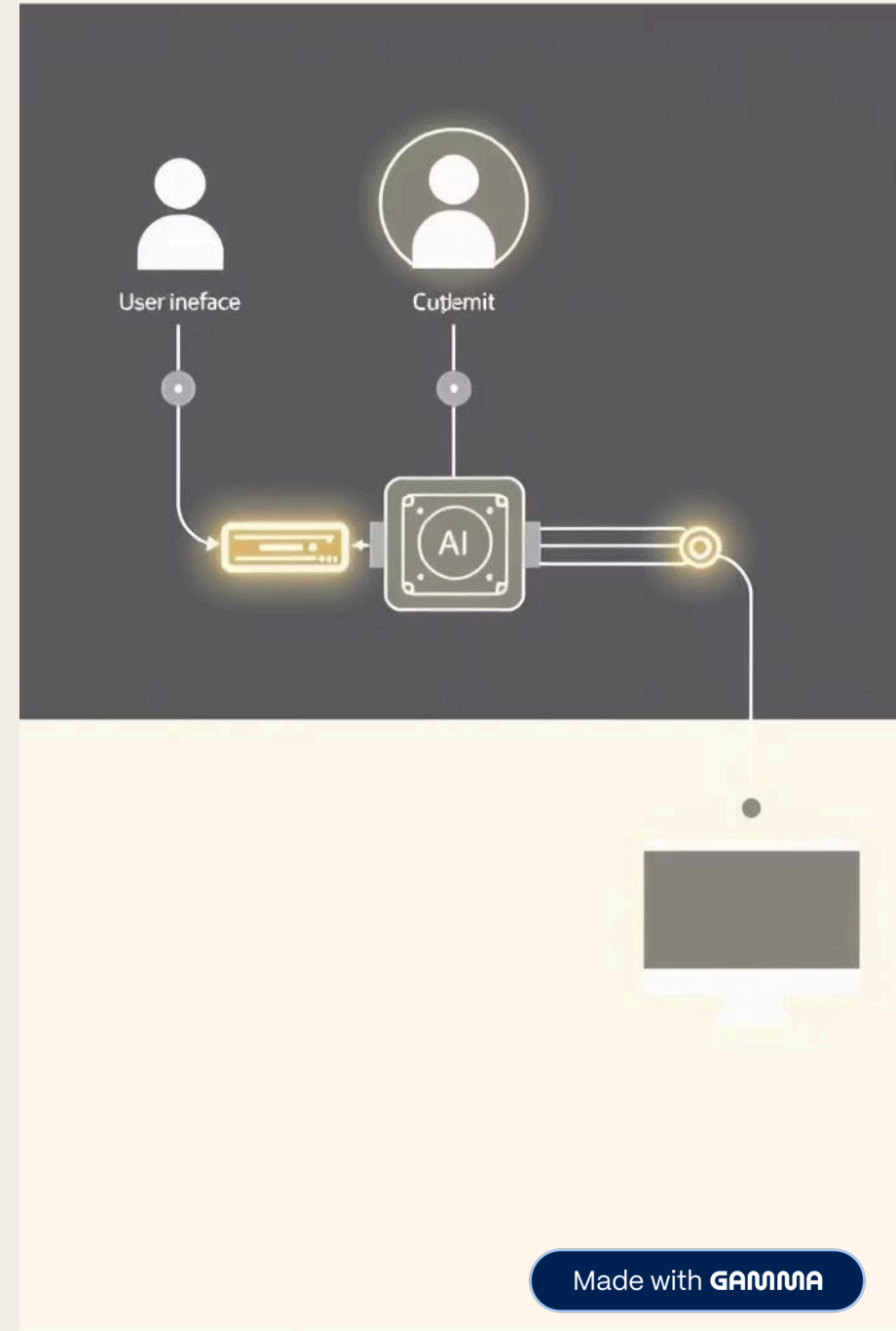
## AI Model Processing

- Speech analysis
- Cognitive pattern scoring
- Lifestyle risk evaluation



## Output

- Risk Score (0-100)
- Tailored wellness tips
- Medical referral if high risk







# Risk Score Interpretation & Recommendation

0-40	Normal	General Ayurvedic wellness practices
41-60	Mild Risk	Ayurvedic diet + Yoga + Lifestyle
61-100	High Risk	Neurology consultation + Ayurveda

