

# ULTRON 8.0

HACKVENGERS :24-HOURS HACKATHON

20  
25

Presentation Template



FUTURIX.CTECH



FUTURIX.SRMIST



# INTRODUCTION<sup>+</sup>

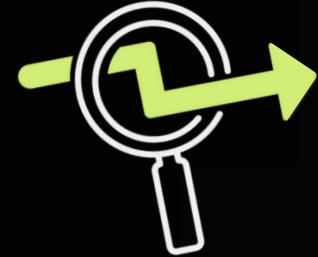
**PROJECT NAME :** *EDU-MATE*

**TEAM LEAD :** *DEEPAK*

**TEAM NAME :** *BLAZE*

**TRACK :** *ED-TECH*

# TEAM MEMBERS



**DEEPAK**  
(BACKEND)



**MEENAKSHI**  
(ML & WEB DEV)



**SABARISH**  
(WEB DEV)



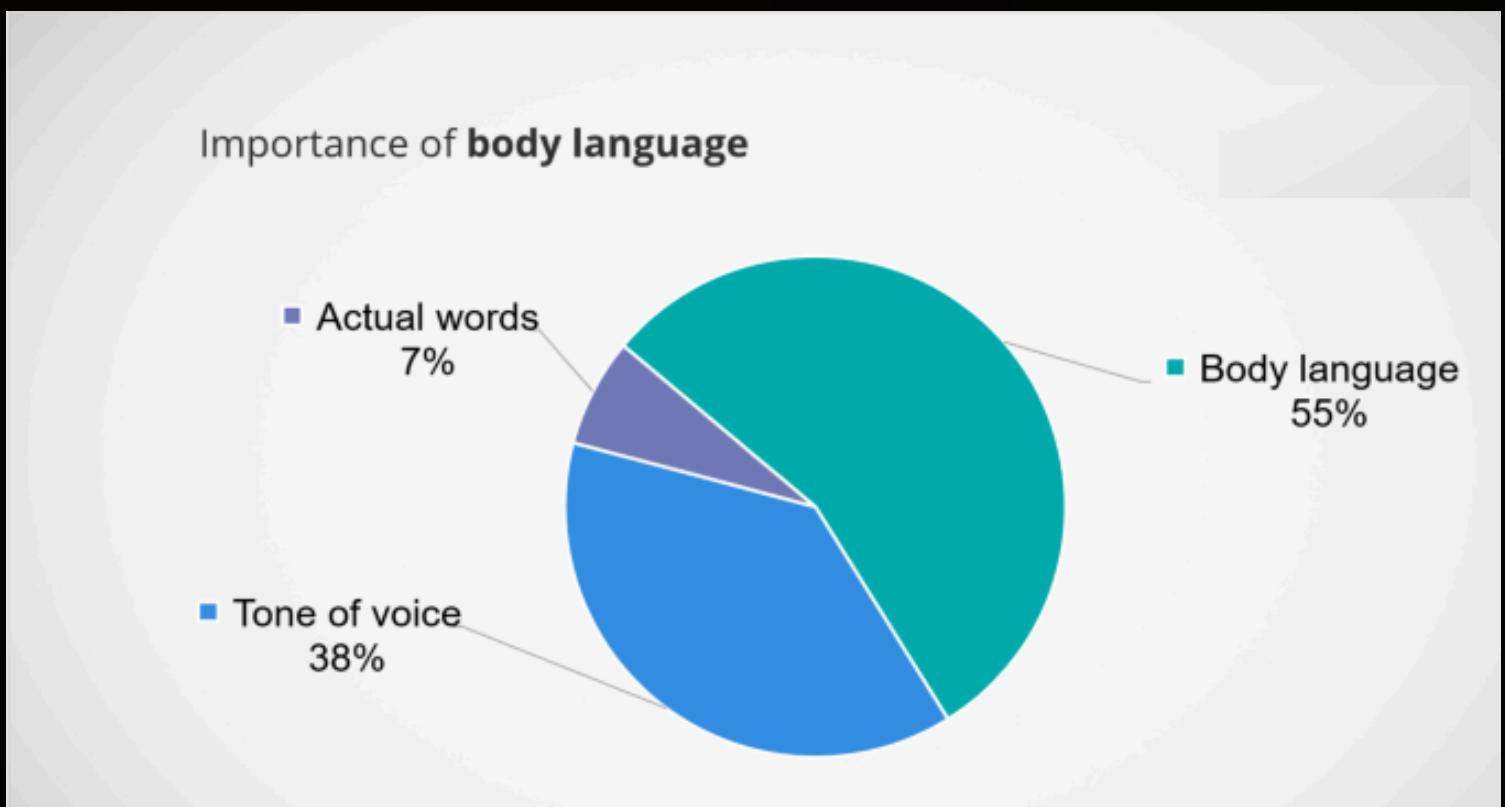
**SAKTHI MUKESH**  
(AI & DATA ANALYST)



**RAGUL G**  
(NLP & CV)

# PROBLEM STATEMENT

The project aims to create an all-in-one platform to address challenges in skill enhancement, interview preparation, and personalized learning. It will offer features like real-time feedback, pronunciation training, AI-powered suggestions, career guidance, Interactive Whiteboard Learning System for problem solving and timely notifications to achieve learning goals, making learning and career development more accessible and effective.





- **All-in-One-Platform** for skill enhancement, interview preparation, and personalized learning.
- **Real-Time Feedback** on facial expressions, posture, speech for better performance.
- Introduce tools to help users improve **Pronunciation and Communication**.
- **AI-Powered Learning Suggestions** to recommend personalized learning paths and resources.
- **Career Guidance** Offer tailored career advice through chatbots based on individual goals and progress.
- Implement an **Interactive whiteboard** for calculations, debugging, and problem-solving.
- **Customizable Interface** allows users to personalize the platform to suit their preferences and needs.
- **Parental/Teacher Monitoring** Enables monitoring features for tracking progress.
- **Real-Time Notifications** by Twilio application for instant updates and alerts.
- Provide 24/7 support and assistance through an **Intelligent Chatbot**.
- **Personalized User Experience** Deliver tailored interactions based on user preferences, goals, and performance.



# IDEA OR PROPOSED SOLUTION

- **Fragmentation:** Combines skill development, interview prep, and learning into one platform, reducing reliance on multiple tools.
- **Feedback and Communication:** Provides real-time feedback on expressions, posture, speech, and pronunciation in mock interviews.
- **Unstructured Learning and Career Guidance:** Delivers personalized learning paths via suggestions and offers career growth plans.
- **Problem-Solving Tools:** Enhances learning with an interactive whiteboard for calculations, debugging.
- **Personalization and Monitoring:** Allows interface customization, parental/teacher monitoring, and personalized user experiences.
- **Instant Updates and Assistance:** Ensures real-time notifications and 24/7 query resolution through a chatbot.
- **Precision and Engagement:** Uses multiple machine learning models for tailored insights, ensuring effective and seamless learning.



# IDEA OR PROPOSED SOLUTION

- **Comprehensive Platform:** Combines skill development, career guidance, interview prep and personalized learning as one solution.
- **Real-Time Feedback:** Enhances communication skills with instant corrections on expressions, speech, and posture.
- **AI-Driven Personalization:** Offers tailored learning paths, career advice, and adaptive interactions through advanced AI chatbots.
- **Interactive Problem-Solving:** Features tools like an interactive whiteboard for calculations, debugging.
- **Seamless Experience:** Includes customizable interfaces, parental/teacher monitoring, real-time notifications and 24/7 AI chatbot support.





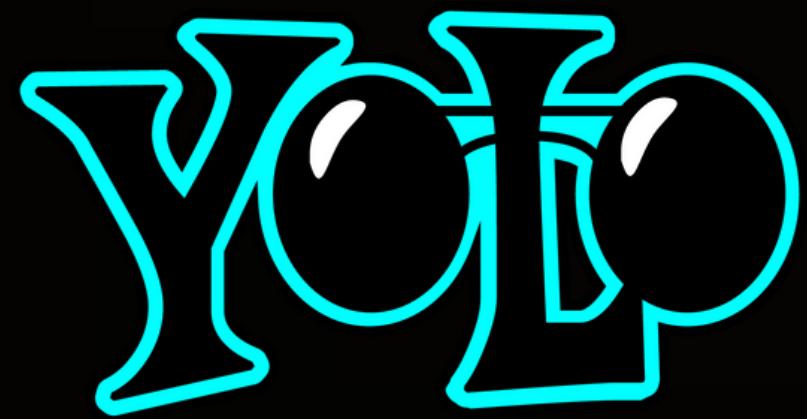
## TECH - STACK USED



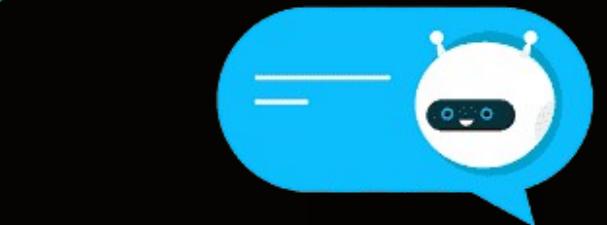
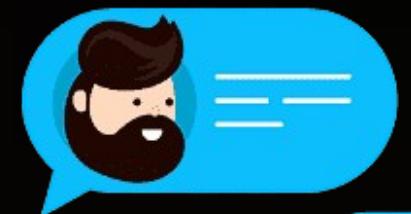
**TensorFlow**



**PYTHON**



**YOLO [ LIVE TRACKING ]**



**AI ASSISTED  
CHATBOT**

JS



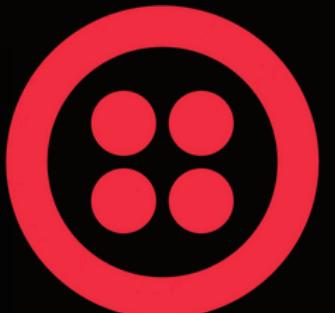
**JAVA SCRIPT**



**NLP [ SPEECH  
RECOGNITION ]**

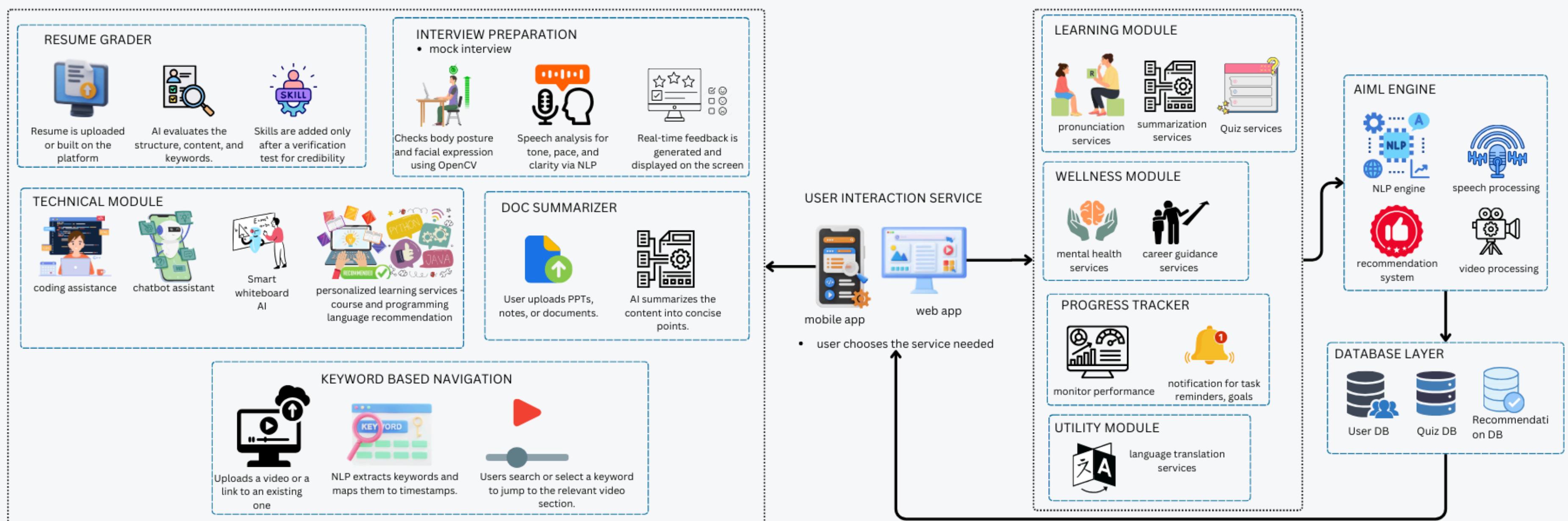
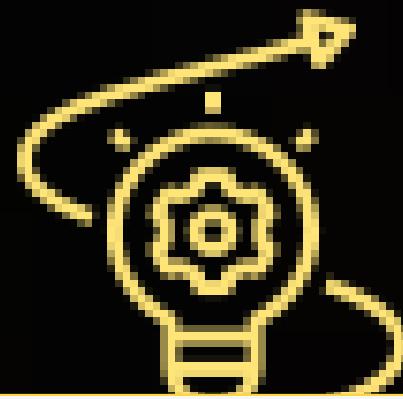


**DATA  
SCIENCE**



**twilio**

## FLOWCHART / ARCHITECTURE DIAGRAM



# FEASIBILITY & SCALABILITY

## **Feasibility :**

- **Advanced Technologies:** Leverages NLP, AI, and Machine Learning for analysis and personalization.
- **Efficient Integration:** Uses YouTube APIs for video navigation and algorithms for resume grading.
- **Streamlined Development:** Built with React.js and Flask for efficient and scalable design.
- **Real-Time Features:** Offers Twilio notifications, 24/7 AI chatbot support.

## **Scalability :**

- **Modular Design:** Easy feature addition without disrupting existing functionality.
- **Cloud Flexibility:** Scalable infrastructure to handle increased traffic and data.
- **Resource Optimization:** Automated systems for efficient resource allocation during high demand.
- **Adaptable Architecture:** React.js and Flask ensure smooth scaling for growing users and tasks.



# IMPACT AND BENEFITS

- **Enhanced Learning:** Personalized paths and real-time feedback improve skill development and communication.
- **Career Growth:** Structured guidance and resume grading boost job readiness and opportunities.
- **Efficiency:** Centralized platform reduces time and effort with seamless access to tools and features.
- **Inclusivity:** Customizable interfaces and parental/teacher monitoring make it accessible for diverse users.
- **Scalability:** Supports growth with modular design, AI-driven insights, and cloud infrastructure.

# Thank you

***“AN INVESTMENT IN KNOWLEDGE PAYS THE BEST INTEREST”***

