

# NEUROSIGHT

Unlock the mysteries of MRI brain scans with our innovative project: Simply upload an image and discover vital insights into tumor presence and classification, followed by detailed explanations provided by our user-friendly GPT model.



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## INTRODUCTION

Welcome to our groundbreaking project at the intersection of healthcare and technology, where we're transforming the landscape of MRI scan analysis. With our user-friendly platform, individuals can seamlessly upload MRI brain scans and receive instant insights into tumor presence and classification, revolutionizing diagnostic processes. Powered by advanced GPT models, our system not only detects tumors but also provides detailed explanations accessible to all, empowering patients and healthcare professionals alike.

Behind this innovation stands our dedicated team, driven by a passion for improving healthcare outcomes. Combining expertise in medical imaging and artificial intelligence, we've created a solution that not only streamlines diagnosis but also enhances understanding. Join us on this journey as we pave the way for accessible, efficient, and accurate MRI analysis, ultimately reshaping the future of medical diagnostics.

## Meet Our Team

Hamza Bin Ashraf

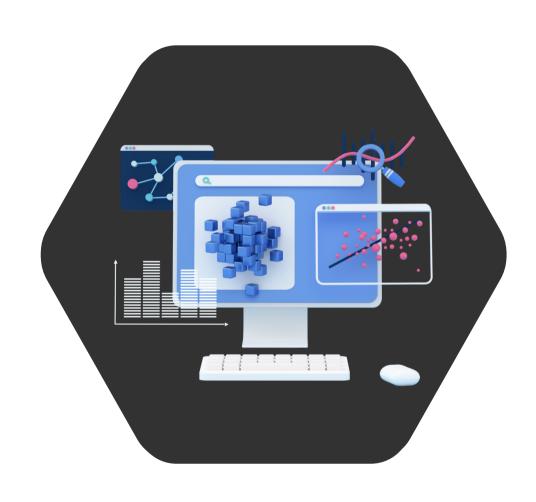
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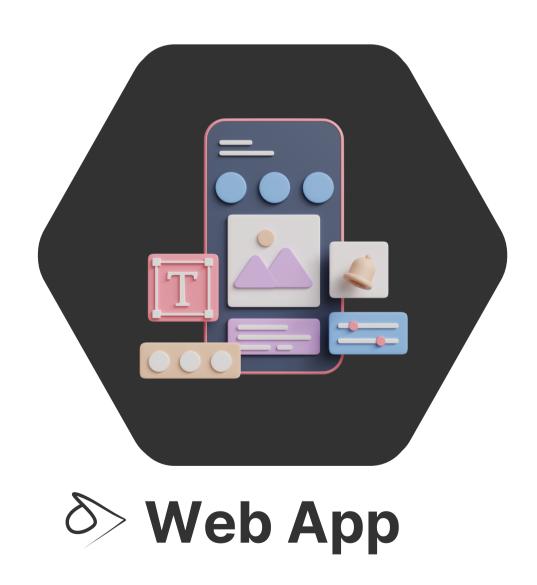
## **TECHNOLOGY STACK**



**Model Training** 

**Solution** Large Language Model





#### MODEL TRAINING

- Deep learning model specifically a custom CNN classifier developed for precise classification of MRI scan images.
- Rigorous training process optimized for accuracy and efficiency, ensuring reliable tumor detection and classification.



# LARGE LANGUAGE MODEL

© Gemini Pro prompts tailored to tumor type ensure concise, clear explanations.

Patients receive essential information on treatment options and prognosis, fostering reassurance.

Bridging medical expertise with patient understanding, our approach offers actionable insights even in the absence of direct medical consultation.



#### **WEB APP**

- Streamlit-based web application streamlines MRI scan analysis with user-friendly image input.
- Seamless processing facilitated by loading model weights followed by image prediction.
- Integration with Gemini Pro ensures instant generation of explanatory text for predicted tumor classes directly on the frontend.



### VALUE PROPOSITION

# **Enhanced Diagnostic Precision**

Our platform utilizes advanced technology to detect and classify tumors in MRI scans with unprecedented accuracy, leveraging custom CNN classifiers and state-of-the-art GPT models.

#### Accessibility and Empowerment

Our user-friendly web application provides clear and understandable explanations generated by Gemini Pro, empowering individuals to make informed decisions about their healthcare journey.



#### **Time and Cost Efficiency**

Our streamlined process reduces the time required for MRI analysis, enabling quicker diagnosis and treatment initiation, ultimately minimizing unnecessary medical procedures and associated costs.

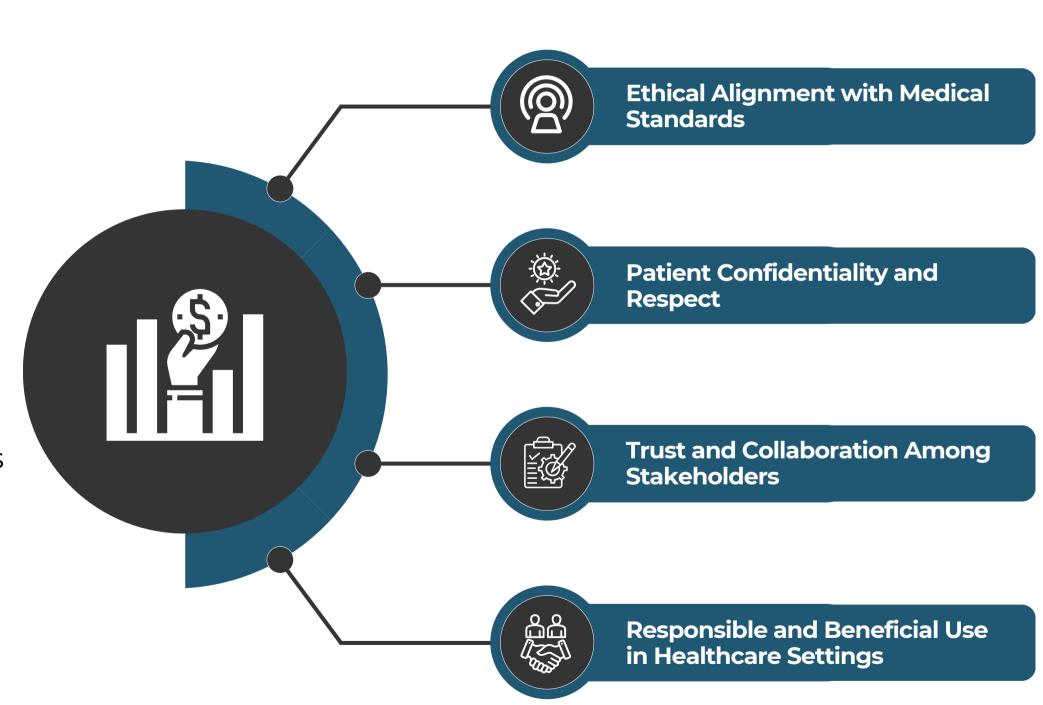
# Advancing Healthcare Innovation

By integrating cutting-edge technologies, our project pushes the boundaries of innovation in medical diagnostics, facilitating collaboration between technology and healthcare sectors to improve patient outcomes globally.

### ETHICAL CONSIDERATIONS

Ethical adherence is paramount, ensuring alignment with medical standards. We prioritize patient confidentiality, fostering trust. Our platform operates with integrity, providing accurate guidelines for responsible use in healthcare settings.

Committed to upholding ethical standards, we prioritize patient well-being. Our platform guarantees respectful guidelines, fostering trust among stakeholders. Through ethical practices, we ensure responsible utilization of our solutions in healthcare.



# CONCLUSION

our project represents a pivotal advancement in healthcare technology, offering accurate and accessible MRI analysis while prioritizing ethical standards. With a commitment to patient wellbeing and collaboration among stakeholders, we envision a future where our innovations contribute to improved healthcare outcomes worldwide.



