Transforming an Idea into Med AI Explorer: A Radiologist’s Journey Using Generative AI to Build a Functional Tool

Poster No.: C-27961

Congress: ECR25

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Disclosures:
Lounes Bensid: Founder: Med AI Explorer
Laurent Tabech: Nothing to disclose
Riyad-Naël Otmane: Nothing to disclose

Keywords: Artificial Intelligence, eHealth, CT, MR, Ultrasound, Education, Education and training

Purpose or Learning Objective:

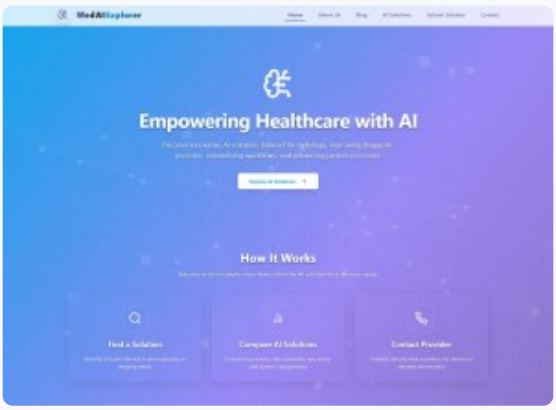


Fig 2: Empowering Healthcare with AI: Med AI Explorer Home

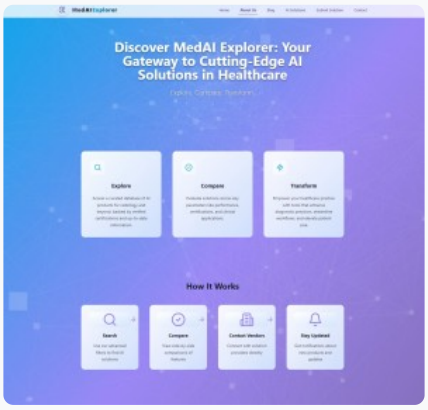


Fig 6: Simplifying AI Adoption: How Med AI Explorer Works

Med AI Explorer (https://www.medaiexplorer.com/) was conceived to address the growing demand for a **centralized, user-friendly resource** that helps radiologists and healthcare professionals identify, compare, and adopt AI tools in medical imaging. The project sought to:

- **Streamline AI Discovery**: Provide clear, evidence-based information on AI solutions, spanning mammography, CT, MR, and ultrasound applications.
- **Reduce Technical Barriers**: Demonstrate how Generative AI and no-code development can produce a functional platform with minimal coding expertise.
- **Foster Continuous Learning**: Integrate a dedicated blog section, “Healthcare AI Insights,” to keep users informed of emerging trends, case studies, and expert opinions.

By following a structured development approach, the platform evolved rapidly from a **conceptual idea** to a **functioning tool**, supporting a variety of clinical settings, including resource-constrained practices.

Methods or Background:

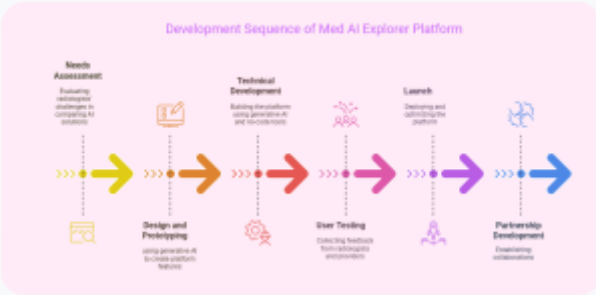


Fig 1: Development Sequence of Med AI Explorer: From Concept to Partnership

The development of Med AI Explorer adhered to a structured and methodical approach, comprising the following steps:
Needs Assessment : A detailed needs assessment was conducted to identify the challenges radiologists face in evaluating AI tools. These challenges included difficulty finding comprehensive data on sensitivity, specificity, and clinical indications, as well as the lack of centralized, evidence-based resources for comparing AI solutions. Radiologists highlighted the need for a **user-friendly** interface that could simplify decision-making.

Generative AI Implementation : Generative AI played a key role in automating content creation. Descriptions of AI tools—covering their clinical applications and performance metrics—were produced quickly and cost-effectively, ensuring accuracy and consistency. This phase emphasized **rapid iteration** to align generated content with radiologists’ expectations.

No-Code Development : AI-powered no-code tools, such as **Lovable** and **Supabase**, were employed to build and deploy the platform without requiring deep programming knowledge. This approach **reduced financial and technical barriers** and allowed for quick adaptations based on ongoing feedback.

Testing and Refinement : A group of radiologists conducted usability testing, evaluating platform navigation, search functionalities, and the overall user experience. Iterative improvements were implemented to enhance interface clarity and streamline access to key metrics.

Launch and Deployment : After thorough testing, **Med AI Explorer** was launched. The platform is continuously optimized to respond to user feedback and to remain **cost-efficient**, adaptable, and aligned with real-world radiology needs.

Partnership Development : Following the platform's launch, **collaborations** were formed with AI vendors, healthcare institutions, and research organizations. These partnerships keep Med AI Explorer's database current, strengthen clinical validation efforts, and foster further integration of emerging AI technologies into the radiology community.

Results or Findings:

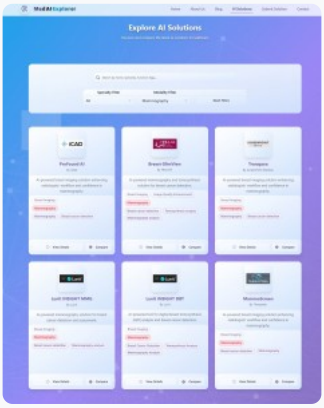


Fig 3: Example of AI Solutions: Tailored Tools for Mammography

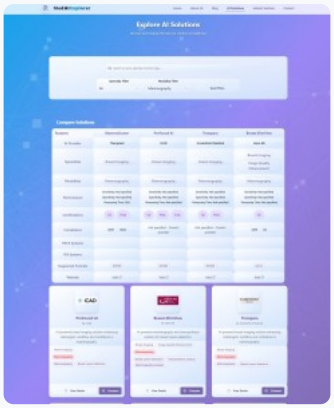


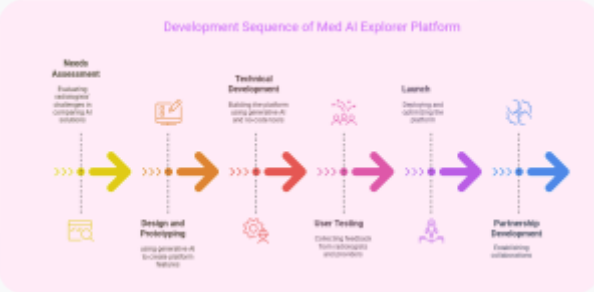
Fig 4: Example of Detailed Comparison: Mammography AI Solution

Med AI Explorer successfully delivers a range of features designed to simplify the adoption of AI tools in radiology:

- **Centralized Comparison Platform** Consolidates AI solutions in one database, classifying them by clinical application, performance data, and supporting studies. Radiologists can quickly identify options that best align with their needs.
- **Streamlined Workflow** Offers a user-friendly interface that reduces the time and effort required to evaluate multiple AI tools. Radiologists benefit from a **faster, more informed decision-making** process.
- **Scalable Framework** Provides a structure for continuously testing and refining new ideas. Its design easily accommodates **additional AI tools** and updates, ensuring enduring relevance.
- **Independent Development** Conceived and built predominantly by a single radiologist—showcasing how Generative AI, coupled with no-code development, can enable healthcare professionals to design practical solutions on a **limited**

budget and without extensive technical resources.

Conclusion:



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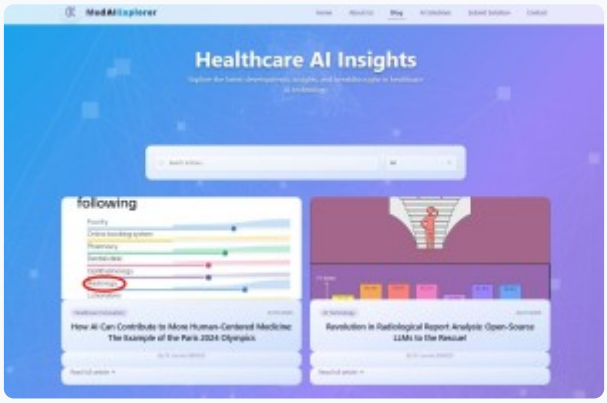
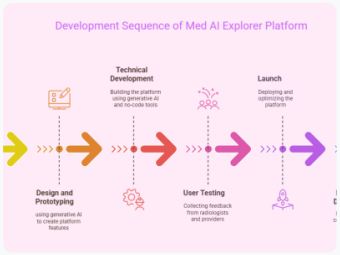


Fig 5: Healthcare AI Insights: Blog Section of Med AI Explorer

Med AI Explorer demonstrates how **Generative AI** and **AI-powered no-code platforms** can **streamline** the creation of a **practical, clinically relevant** tool for radiologists. Each stage of the process—from **needs assessment** to **partnership building**—benefited from **fast, low-cost development** cycles enabled by automated content generation and minimal coding requirements. By **centralizing solution data**, **simplifying tool comparisons**, and **offering educational resources** through its integrated blog, Med AI Explorer empowers radiologists—especially those in smaller or resource-limited settings—to integrate cutting-edge AI **swiftly and cost-effectively** into their everyday practice.

References:

1. Med AI Explorer: www.medaiexplorer.com
2. Lovable: www.lovable.dev
3. Supabase: www.supabase.com



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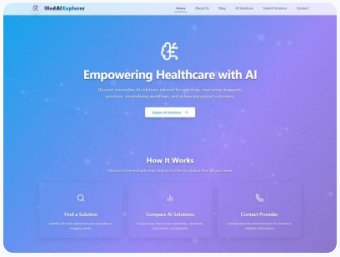

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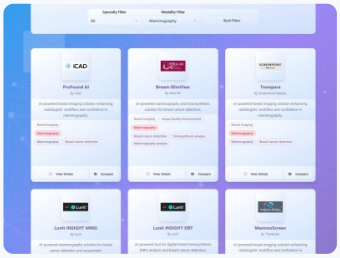

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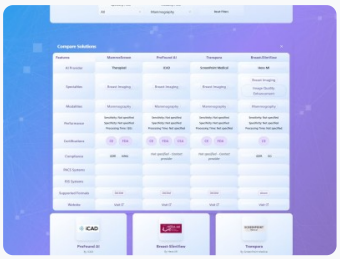

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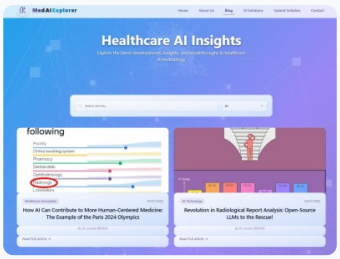
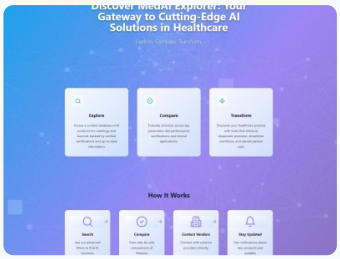


Fig 5: Healthcare AI Insights: Blog Section of Med AI Explorer



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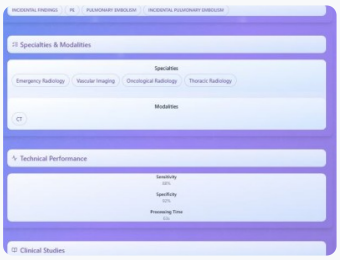

Fig 7: Example of a Detailed Solution Profile: CINA-IPE for Pulmonary Embolism Detection