

Llama Impact Hackathon - Rome 2024

Scope

Leverage AI to enhance citizens' well-being, focusing on health, social services, the environment, transportation, public safety, and public administration.

Prizes

Win up to \$5,000 and chance to expand social project through the 'Llama Impact Grant' program!

★ First 2 winning teams will join the Meta & lablab NEXT digital incubation program and visit Meta research centers and meet experts, for 2 days.

Stats

411Participants

72

Teams

39

Al Applications













Problem

Slow response times, inadequate first aid training, emergency room overcrowding, inefficient communication during emergencies, and limited healthcare access in remote areas all significantly contribute to increased mortality rates. For example, 60,000 people die annually in Italy from cardiac arrest due to delays in receiving timely medical assistance [1].

Idea

Create a simple web-based,
GenAl-powered assistant that provides real-time, step-by-step first aid guidance for medical emergencies, to deliver personalized, interactive instructions and support, with features like dual input (text/audio), educational videos, and location-based assistance.



Advantages

Real-Time Assistance

Assistance, whenever and wherever you need

Multi-Input Modality

Users can reduce time to explain the issue

Simple & Fast Instructions

Simple, concise, non expert responses, fast

References and Analytics

Get instructions from trusted entities, advanced analytics

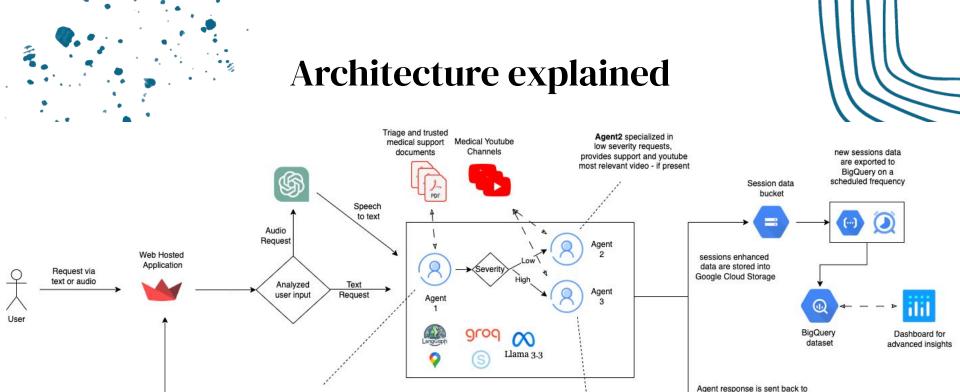
Criticality understanding

Understand criticality and handle it properly

Location Based Assistance

Find the nearest hospital and decide





Agent1 understands

request severity (leveraging

medical documents), by making

questions to user - if needed - to

assess better the contest and issue.

then it sends request to different

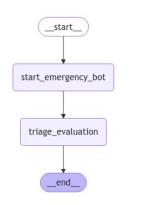
specialized agents

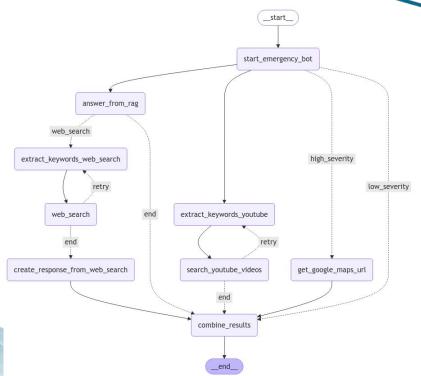
Agent3 specialized in high severity requests, provides support and is more concise, it provides youtube most relevant video - if present - and nearby hospital details application providing further details, youtube video (if makes sense) and nearest hospital detail

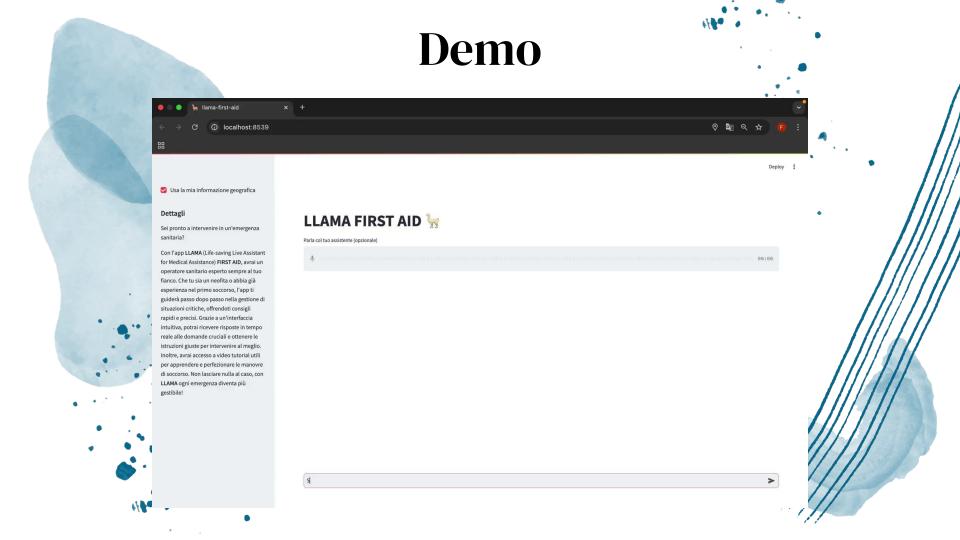
Architecture explained: Deep-dive Agents

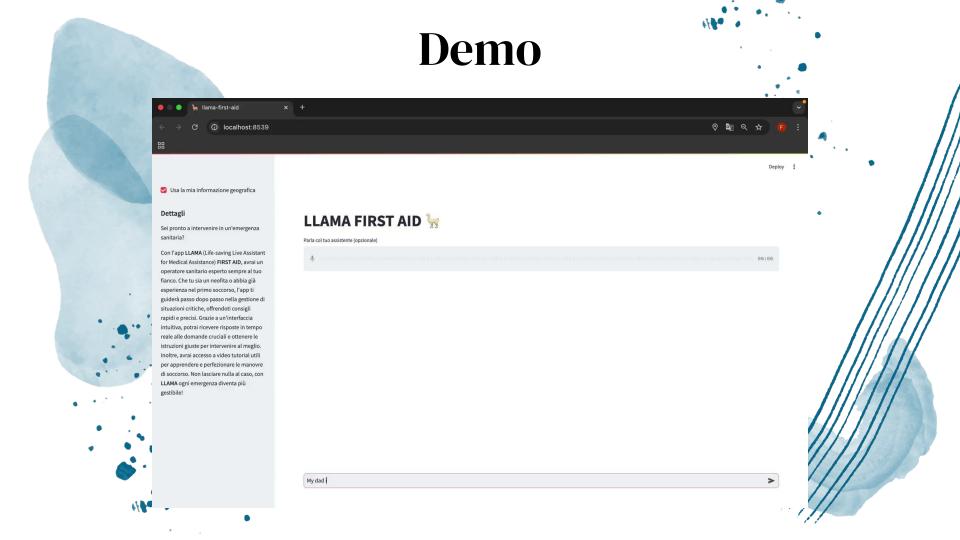
Specialized Agents Graph

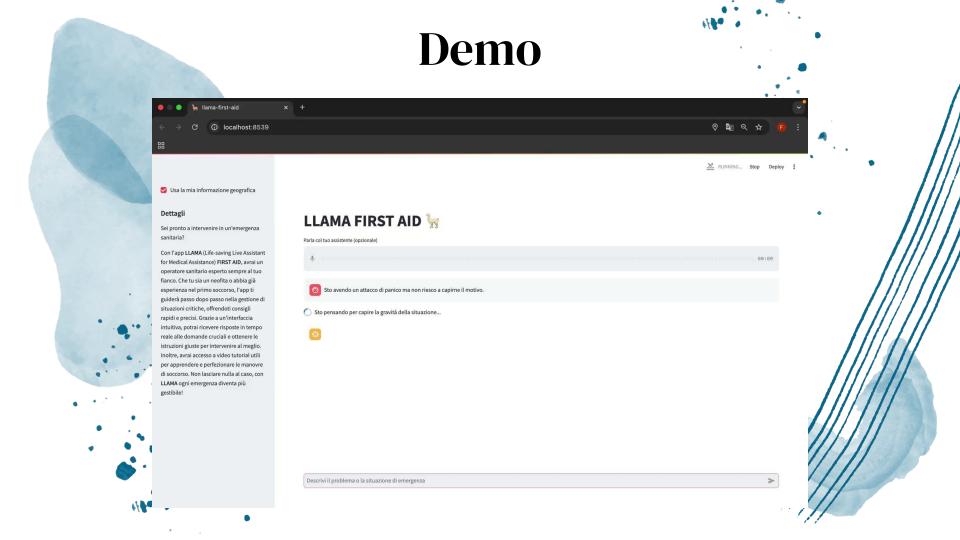
Triage Agent Graph













Future expansions



Improve situational analysis, letting the experience faster

Evaluation & Guardrails

Ensure and evaluate accuracy, safety, and relevance

Alerting

Generate alerts for hospitals in critical emergencies



CassiopelA Team Members



Davide Galassetti
Senior Data Scientist



Francesco Amato
Advanced Data Scientist

References



https://github.com/Amatofrancesco99/llama-first-aid



https://llama-first-aid.streamlit.app/









Thanks

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