

# Galen

## AI Medical assistant

Mixtral 8x7B: 24 Hours Challenge

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# THE PROBLEM

- **Increasing number** of new cancers: 150,000 new cases of melanoma of skin in 2020. (1)
- When **detected early**, the 5-year survival rate for melanoma is 99 percent. (2)
- **Disparities** in the detection (2)

## References:

1 - (<https://www.wcrf.org/cancer-trends/skin-cancer-statistics/>)

2 - (<https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>)

# OUR SOLUTION

- **What?**
  - AI Medical assistant tool to help patients immediately having more information on a possible skin lesion
- **Why?**
  - Early detection reduces the risk and increase the survival rate
- **For who?**
  - Everybody who suspects a abnormal spot and can upload a photo of it
- **How?**
  - Upload a picture, answer few questions



# THE REVENUE MODEL

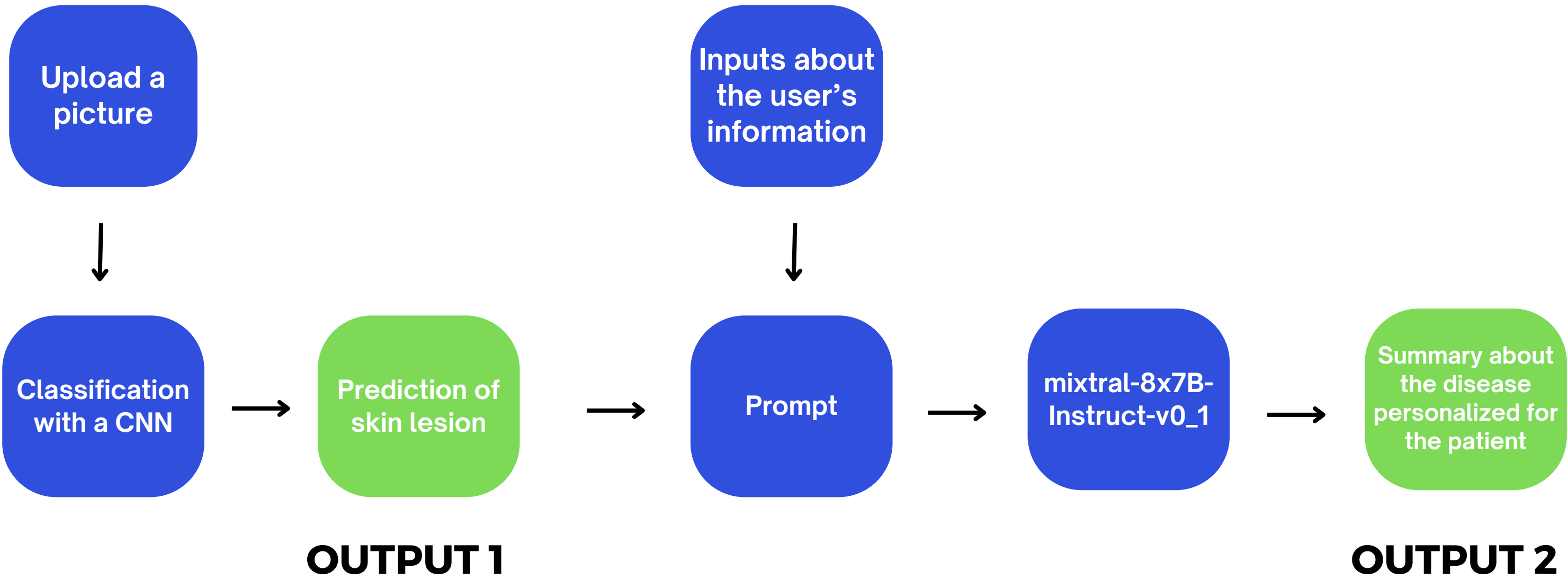
- Annual treatment costs ranged from to \$900M per year in the US.

Reference:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4495902/>

**Partnership with health institutions and authorities** to increase early detection of skin cancer and the risk of developing skin cancer

# THE WORKFLOW





# DEMO TIME

**Streamlit App:** <https://galen-mixtral-hackathon.streamlit.app/>

**GitHub Repository:** <https://github.com/guy-977/galen-mixtral-hackathon>

# CONCLUSION

- The PoC for Galen, an AI medical assistant, is currently focused around skin lesions.
- The upcoming stages involve enhancing the model's capabilities and extending its scope to encompass various diseases.
- This expansion aims to assist patients in detecting potential skin lesions at the earliest possible stage and reducing the risk of potential disease.



# OUR TEAM

Ahmed is a medical student and software developer, and has background in web development and machine learning.

Alexis is a French data scientist in pharma industry for 3+ years currently living in Toronto, Canada.



**Ahmed Alrefai**

Software Developer



**Alexis Rotureau**

Software Developer



**THANK YOU**

**FOR WATCHING**