



The Mercedes AI Palette:

Elevating the infotainment system with GenAI personas



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Mercedes AI Palette is a set of
conversational AI personas that a
driver can interact with.





An **experience**, not an **assistant**.

Entertainment, not information.







LORD OF THE RINGS



HARRY POTTER



GAME OF THRONES

A dark, atmospheric photograph of the interior of a modern car. The steering wheel features the Mercedes-Benz logo. The dashboard is illuminated with blue light, displaying the speedometer and other vehicle information. A large touchscreen infotainment system is mounted in the center console, showing a map and various vehicle settings. The interior is made of high-quality materials, with leather seats and a sleek design.

**76% of working Americans drive alone to work everyday
according to 2016 American Community Survey data.**

How are we unique?



Football Commentator
Champion, Motivated, Excited

Old Sport
Witty, Sarcastic, Elegant

Art & Nature
Meditative, Quiet, Peaceful

How are we unique?

Not Siri

- Our responses imitate **how** these people speak — their **style**.

Immersive

- Sound effects, music, and lighting for a 4D experience.

Demo



Personas

Select a persona



Football Commentator

Champion, Motivated, Excited

SELECT



Old Sport

Witty, Sarcastic, Elegant

SELECT



Art & Nature

Meditative, Quiet, Peaceful

SELECTED

DONE

Types of Triggers

Active

Conversational



“How’s the weather today?”

Active

Functional



“Navigate me to Mercedes Future Tech Lab.”

Passive



Car drives past Stuttgart Station



Beginning A Journey

Home



Persona



Navigation



Music

A wide-angle photograph of Stuttgart Central Station under a blue sky with scattered white clouds. The station's main building is made of light-colored stone and features a large arched entrance with a grid-patterned glass facade above it. A red "DB" logo is visible on the left side of the arch. To the right, a tall, square clock tower made of the same stone has a large Mercedes-Benz logo on its roof. A circular clock face is mounted on the tower's side. In front of the station, there are several people walking on the sidewalk, some yellow and white flags on poles, and a white van with "WÜRTH" written on it. A small green sign on a post in the foreground reads "FREIEN UHRWERK".

Passing by: Stuttgart Station



Definitions

400



Acceleration

Home



Persona



Navigation



Music

Passing by: Stuttgart Airport



Home



Persona



Navigation



Music



Conversation

Home



Persona



Navigation



Music

Seamless Interaction of Humans and Vehicles

Arrival

PIONEERING. by Daimler

Insight into
automation



Home



Persona



Navigation



Music

Parking



Home



Persona



Navigation



Music



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[Log Out](#)

Voice Adjustments



Proactive Mode



The image captures the interior of a high-end Mercedes-Benz vehicle, likely an S-Class. The focus is on the driver's side, featuring a large, illuminated digital instrument cluster behind the steering wheel and a wide infotainment screen displaying a map. The interior is elegantly appointed with light-colored leather seats featuring a diamond-quilted pattern. Blue ambient lighting highlights the door panels, center console, and floor mats. The overall aesthetic is one of luxury and advanced technology.

Customization



Mercedes-Benz AI Palette

on Book



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Log Out

Voice Adjustments

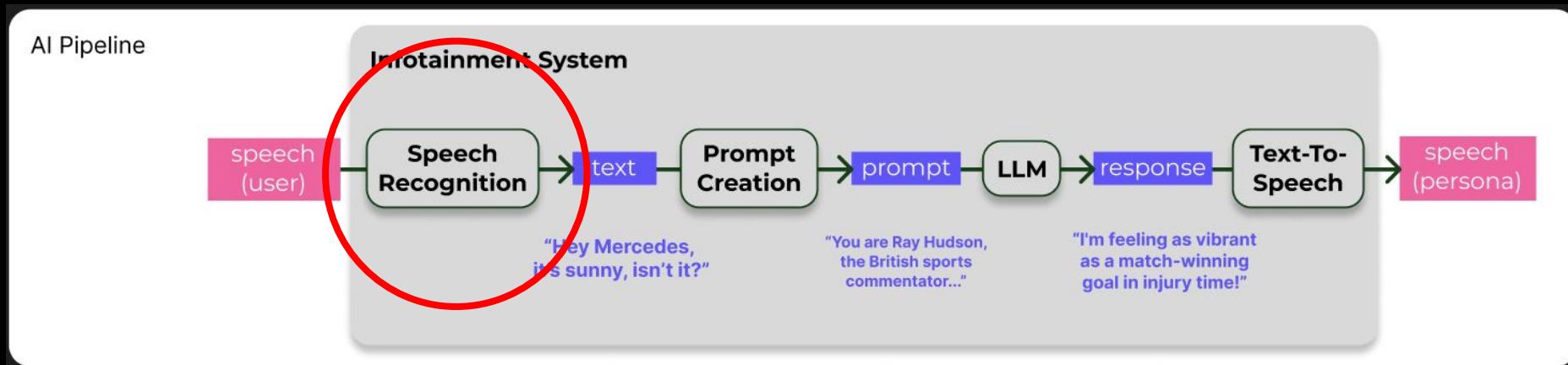


Proactive Mode



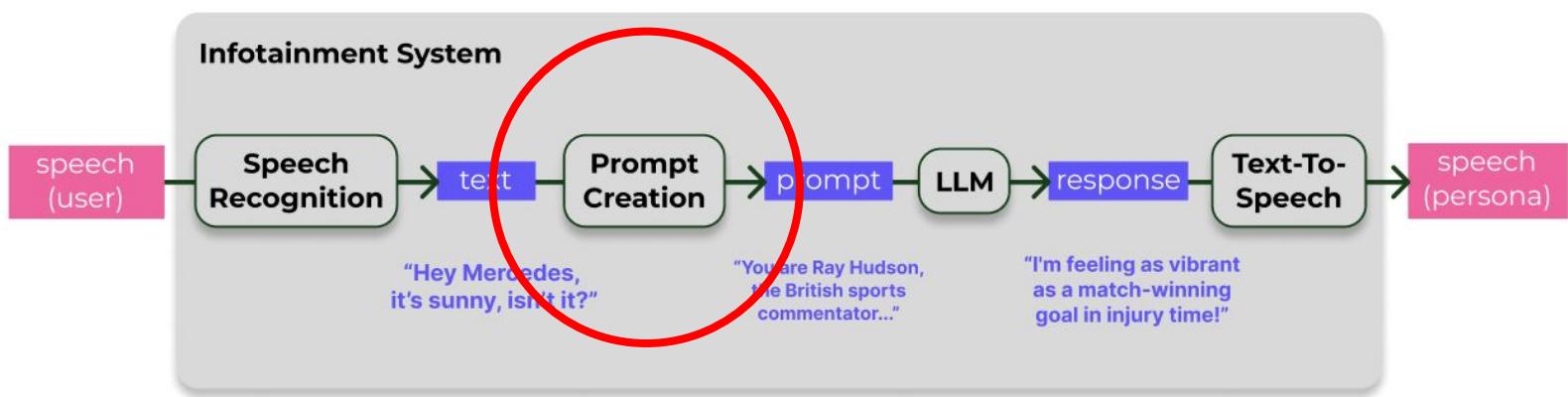
Backend

Generation Pipeline



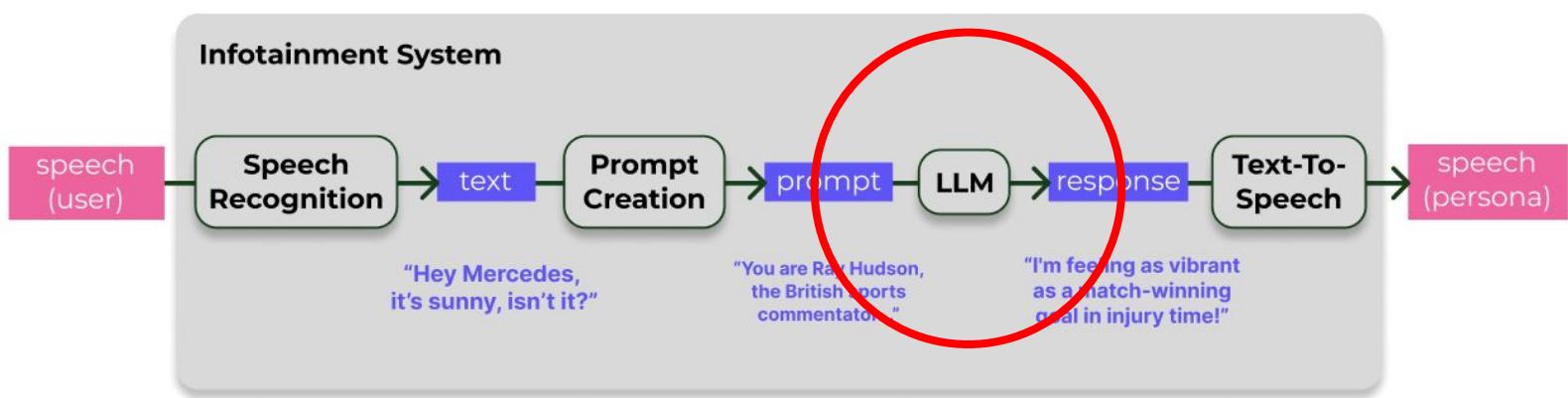
Generation Pipeline

AI Pipeline



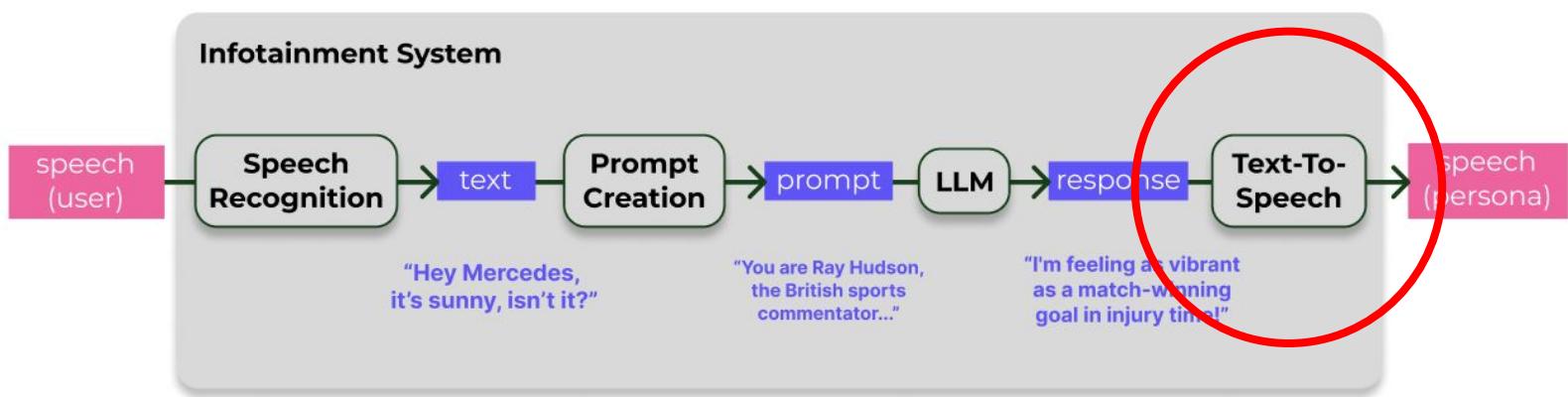
Generation Pipeline

AI Pipeline



Generation Pipeline

AI Pipeline



Generation Pipeline

1. Trigger
2. Prompt Creation
3. LLM
4. Text-To-Speech

Types of Triggers



Active

Conversational



“How’s the weather today?”

Active

Functional



“Navigate me to Mercedes Future Tech Lab.”

Passive



Car drives past Stuttgart Station

Generation Pipeline

1. Trigger

2. Prompt Creation

3. LLM

4. Text-To-Speech

*“You are **Peter Drury**, the British football commentator...”*

+

*“Give a short response to the following: **how's the weather today?**”*

Generation Pipeline

1. Trigger

2. Prompt Creation

3. LLM

4. Text-To-Speech



Generation Pipeline

1. Trigger
2. Prompt Creation
3. LLM
4. Text-To-Speech

The logo for Eleven Labs, featuring the company name in a bold, sans-serif font. The 'E' and 'L' are stylized with vertical bars extending from their top and bottom edges.

Eleven
Labs

Design Choices

AND

Next Steps



*“How big are
these models?”*



“2B params per model”

“NO API calls”



*“How big are
these models?”*

“2B params per model”

“NO API calls”





*“Can such a small model
sustain good conversation?”*

*“Yes, by restricting the
domain with fine-tuning!*





*“Can such a small model
sustain good conversation?”*

*“Yes, by restricting the
domain with fine-tuning!*



“Dataset is (prompt, response) pairs”



"I'm hungry."

*“Go to 'La Bella Bistro' and
experience a symphony of flavors”*

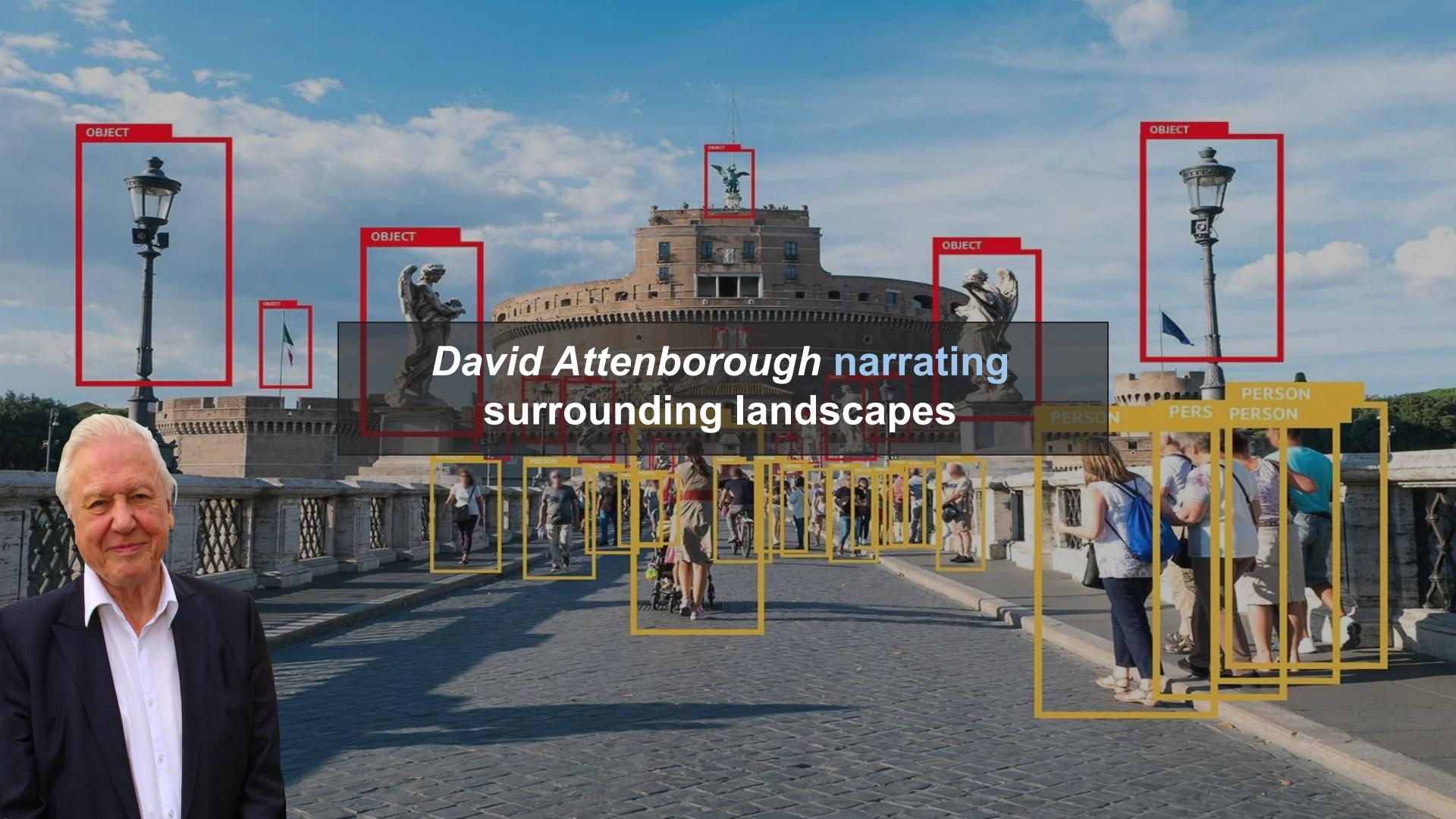


*“Can such a small model
sustain good conversation?”*

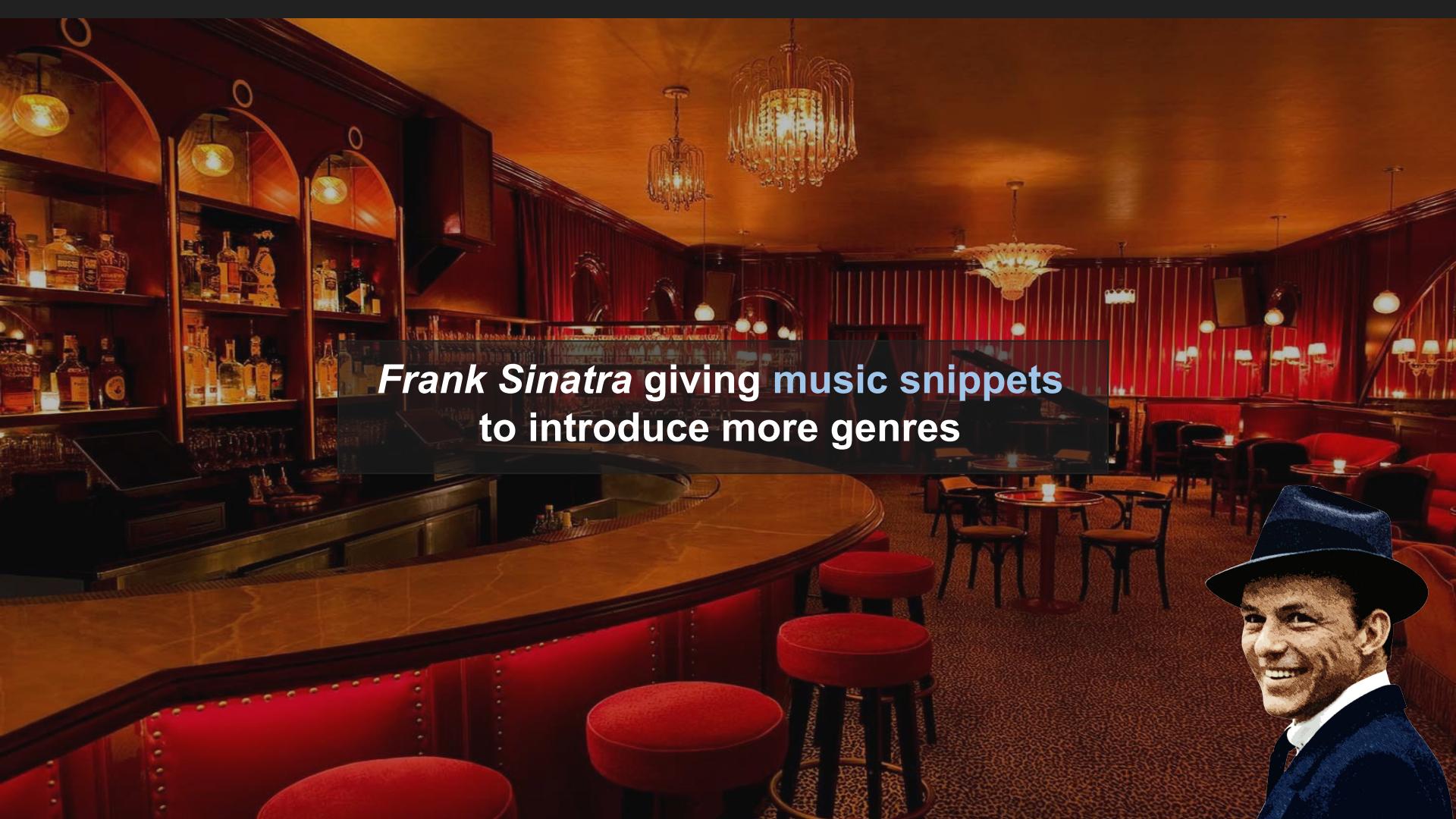
“LangChain and RAG also helps!”



*“What are some more
persona specific features?”*



*David Attenborough narrating
surrounding landscapes*



*Frank Sinatra giving music snippets
to introduce more genres*





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