# Gemini Lens App for Visual Accessibility

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Flutter app powered by Gemini-Pro-Vision





# Revolutionizing Visual Accessibility



#### Problem

285 million people are visually impaired; navigating the physical world is challenging.



#### Market Gap

High costs and complexity of existing assistive tech.











## Solution

Utilizing Gemini AI to empower the visually impaired by means of Mobile App Accessibility, with continuous LLM evaluation by Trulens. This app directly aligns with UN SDG: Goal 3 - "Good Health and Well-being," and Goal 10 - "Reduced Inequalities."



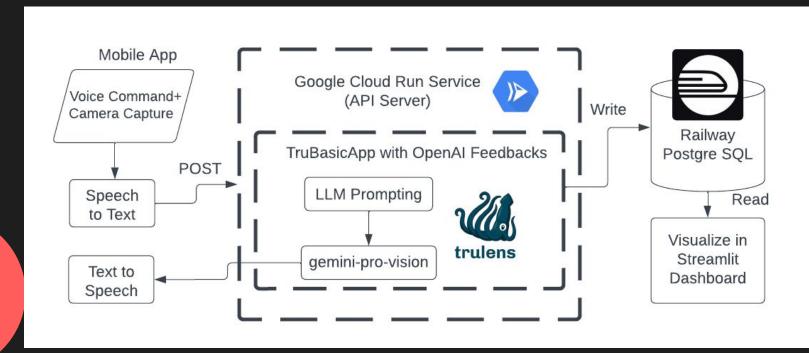
### Healthcare





**App Demonstration** 

#### **Gemini Lens Pipeline**

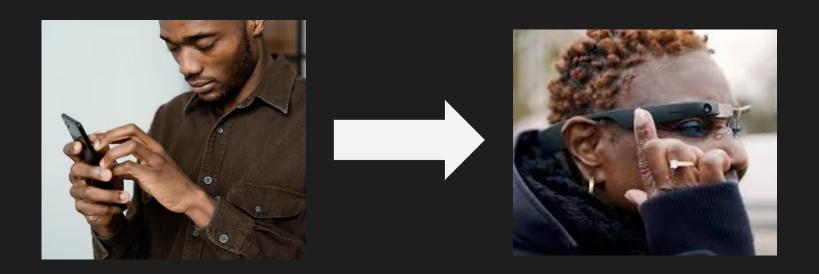


Records	Average Latency (Seconds)	Total Cost (USD)	Total Tokens	conciseness	relevance
13	7.62	\$0	0	0.88	0.88
				✓ high	✓ high

#### **Trulens Evaluation**

User Input	Response	tags	Time Stamp ↓	relevance	conciseness
"what brand and color is my	" The brand is Asus and the c	8	2023-12-19T12:03:29.013629	1	1
"what color is my work laptop"	" The laptop is teal."	-	2023-12-19T12:02:29.355937	1	1
"do you recognize the brand	" The brand of the watch is A	5	2023-12-19T11:56:14.665193	1	1
"what's the value of this ban	" The value of the banknote i		2023-12-19T11:55:23.748458	1	1
"here is the X-ray test result t	" **The X-ray image shows si	5	2023-12-19T11:49:25.540964	1	1
"I have gastric acid pain will	" The active ingredient in thi		2023-12-19T11:46:00.274899	0.7	0.8
"I got this new book from m	" The book is a Cambridge In	5	2023-12-19T11:43:19.731068	1	0.8
"what is this teacher's notes	" It is about a tree planting p	-	2023-12-19T11:42:01.881733	0.4	0.9
"describe the view of my ap	" The view from the balcony	5	2023-12-19T11:37:48.634341	0.7	0.8
"what plant am I looking at"	" The image shows a bambo	-	2023-12-19T11:36:32.092775	0.8	0.5
"what instant noodles is it"	" The image shows a packet	5	2023-12-19T11:33:46.041658	1	1
"I have this kitchen ingredie	" You can cook a variety of di	-	2023-12-19T11:31:32.603907	0.8	0.8
"I have this ingredients on m	" You can cook a variety of di	5	2023-12-19T11:28:23.457379	1	0.8

#### **Future Development of Gemini Lens**



**Mobile App → Smart Glasses** 

#### **Future Prospects**



#### **Gemini Nano**

Utilize this model to run offline and allow access in remote areas.



**Live Feedback** 

Continuous camera monitoring to alert users of danger ahead



**Integrations** 

Google Workspace, Facial Recognition, Navigation



# Thank You!

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