



**ENABLING PARENTS IN REMOTE AREAS WITH ACCESS
TO CHILDCARE, NUTRITION, AND EMOTIONAL
SUPPORT RESOURCES**

DEVELOPED COUNTRIES

60% of parents suffering with **mental health** issues.

The **cost of living crisis** across Europe and North America = meal skipping by parents and malnutrition

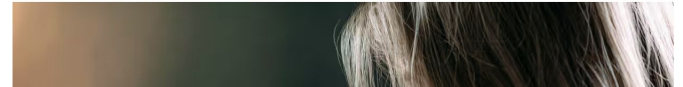
Childhood **obesity or overweight** and **malnutrition** are growing challenges in Norway affecting:

24% of boys

22% of girls in primary school

Millions of UK parents struggle with mental health, survey suggests

Unicef UK research says parents feel anxious, alone and unsupported, with poorest households hit hardest



Home / Irish News

Four in 10 Irish parents skip meals or reduce portions so their children have enough to eat, new study shows



UNDERDEVELOPED COUNTRIES

1 in **27** children died before their fifth birthday

1 in **58** newborns died

1 in **50** children between the ages of 1 month and 59 months died

(Source: Unicef)



THE SOLUTION

NUTRITION



EMOTIONAL
SUPPORT



PARENTING
ROUTINES



VACCINATION



COMMON
DISEASES



Using Llama we have the ability to run an on-prem agent to guide parents in remote areas in their NATIVE language and even with poor Internet connectivity

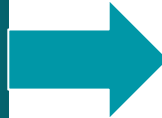
PROJECT ARCHITECTURE PIPELINE

1. Image-to-Text Model
(Llama 3.2-11B Vision-Instruct to be swapped with lightweight on-device CV)

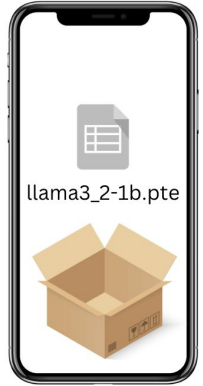


FEED THE OUTPUT

2. Grounded Llama-Healthcheck on LLAMA index RAG (Hand-Picked Health Sources preprocessed .MD)



Plan! All on-device
POC with model **PTE**
(**quantized**) file
ATTACHED TO GITHUB



RESOURCES

- Image-to-text llama-3.2-11B-Vision-Instruct for Picture Uploading
- On-device LLAMA resources: <https://www.datacamp.com/tutorial/llama-3-2-android> .
- Meta llama model we quantized and converted to .pte for POC:
<https://huggingface.co/meta-llama/Llama-3.2-1B-Instruct> Performance on-device: ok.
- Grounded Llama with llama index (llamaindex.ai), .md hand-picked health document collection. Vector embeddings: [BAAI/bge-small-en-v1.5](#) (so the opportunity to swap with the multilingual!).
- Text-to-speech and translation packages: gTTTs, Translator package
- Hand-picked child health documents collection: see on Github of the project

DEMO



**STEP2: GROUNDED
LLAMA USING LLAMA
INDEX ON .MD FILES**

FUTURE ENHANCEMENT PLANS

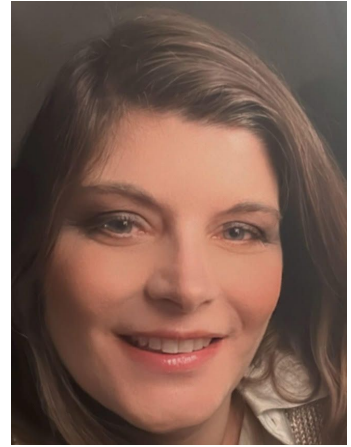
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