

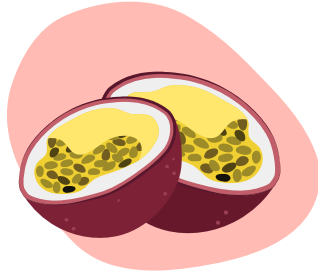
The background of the entire image is a light blue pattern featuring various tropical fruits and foliage. Visible elements include slices of watermelon, papaya, lime, and orange, as well as whole coconuts, green leaves, and small white flowers. The central text is contained within a white, cloud-like shape.

S.O.F.a

Smart Operational Fridge App

By

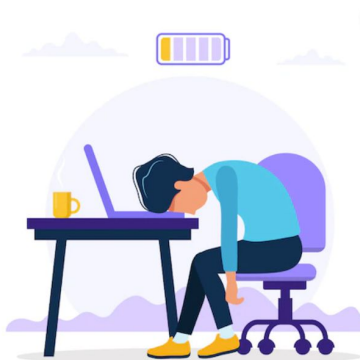
Baptiste Viera & Amna Snene



INTRODUCTION

PROBLEME

- Faire les courses alimentaires est une charge mentale !
- Surconsommation alimentaire !

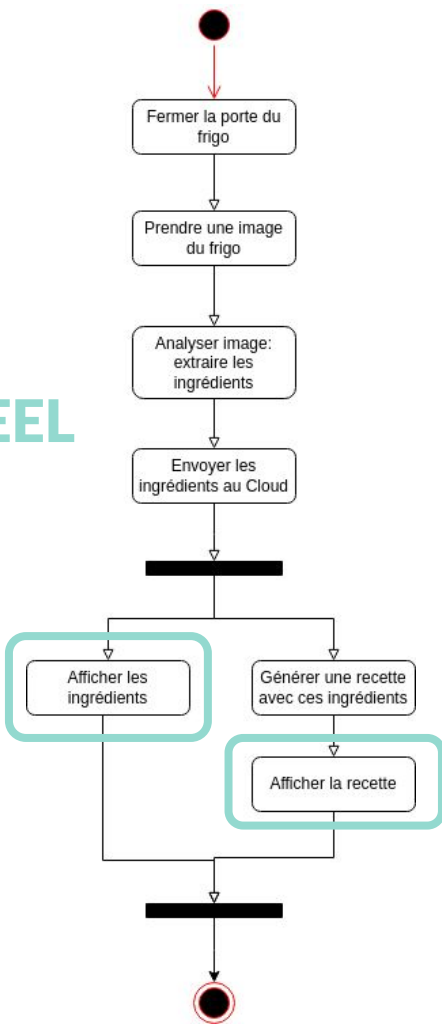


SOLUTION

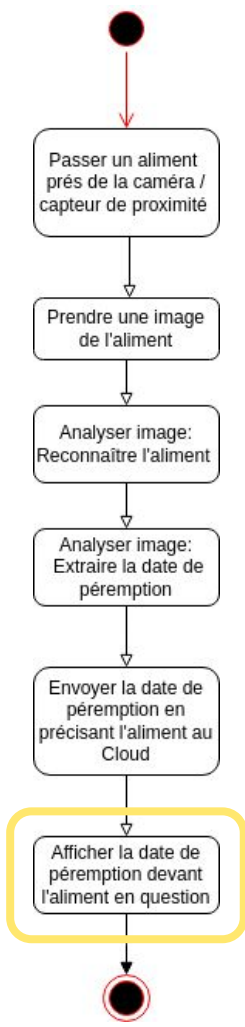
- Accéder au contenu de son frigo !
- Obtenir des recettes sans effort !
- Limiter le gaspillage !



SCENARIO 1 REEL DE S.O.F.A



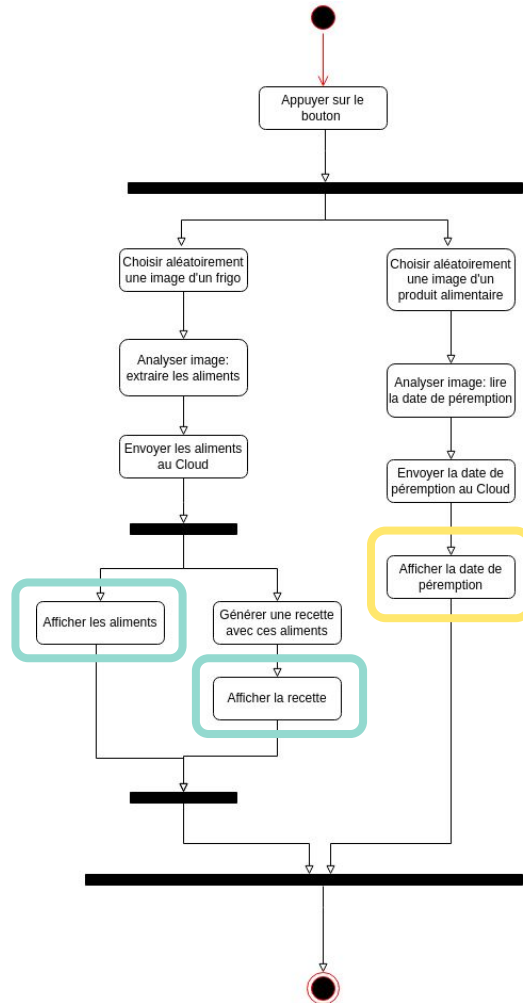
SCENARIO 2 REEL DE S.O.F.A





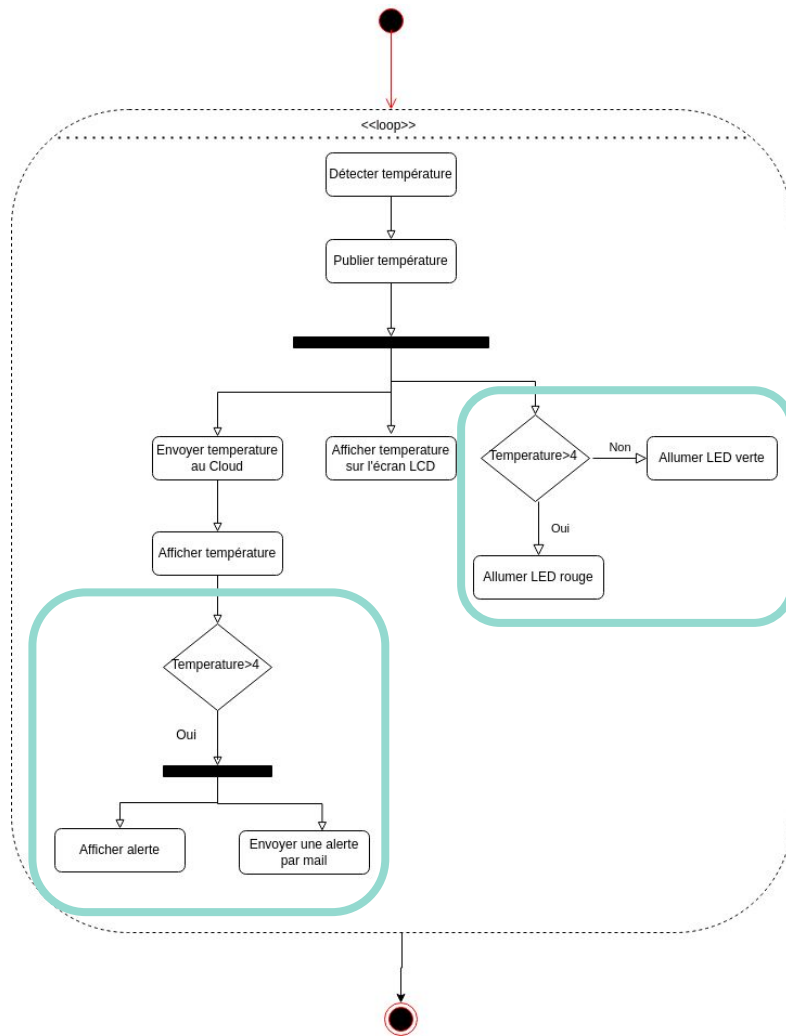
IMPLÉMENTATION DE S.O.F.A

SCENARIO 1 REALISABLE DE S.O.F.A

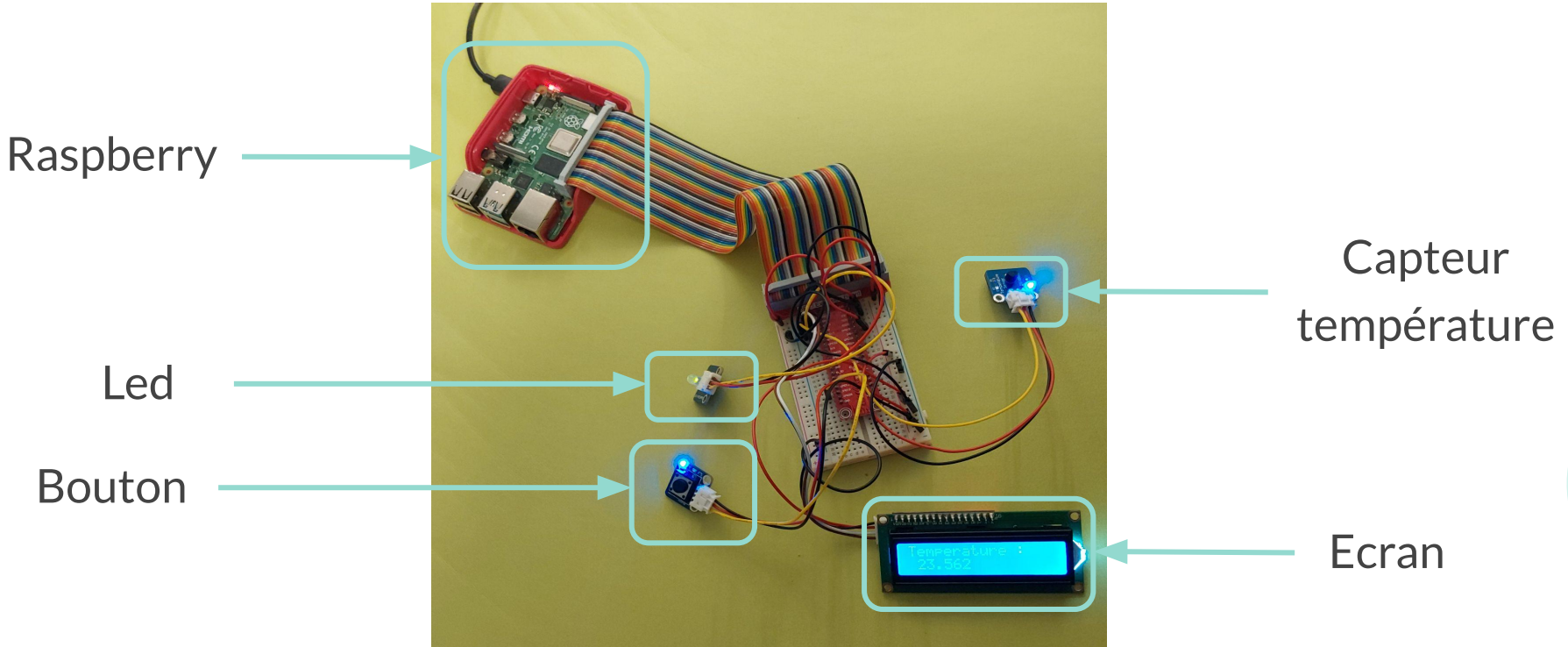


SCENARIO 2 REALISABLE DE S.O.F.A

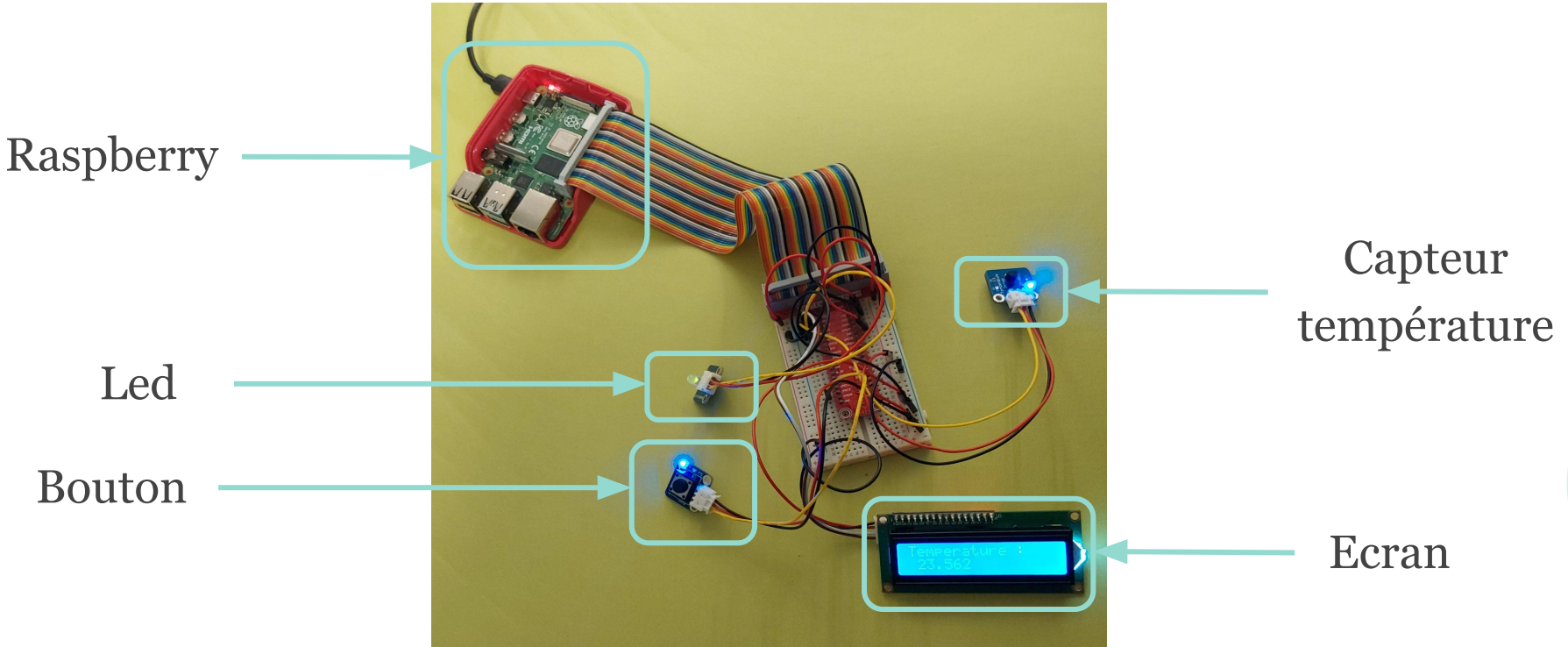
SCENARIO REEL ET REALISABLE DE S.O.F.A



COMPOSANTS DE S.O.F.A

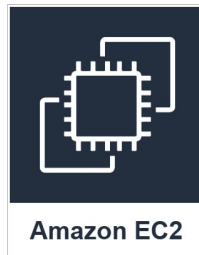
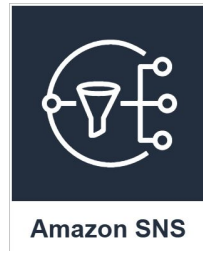
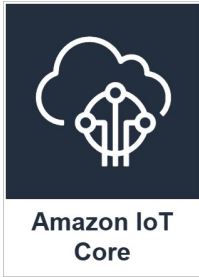


COMPOSANTS DE S.O.F.A



OUTILS UTILISES

Services Amazon AWS



Framework



roboflow

BULMA.io

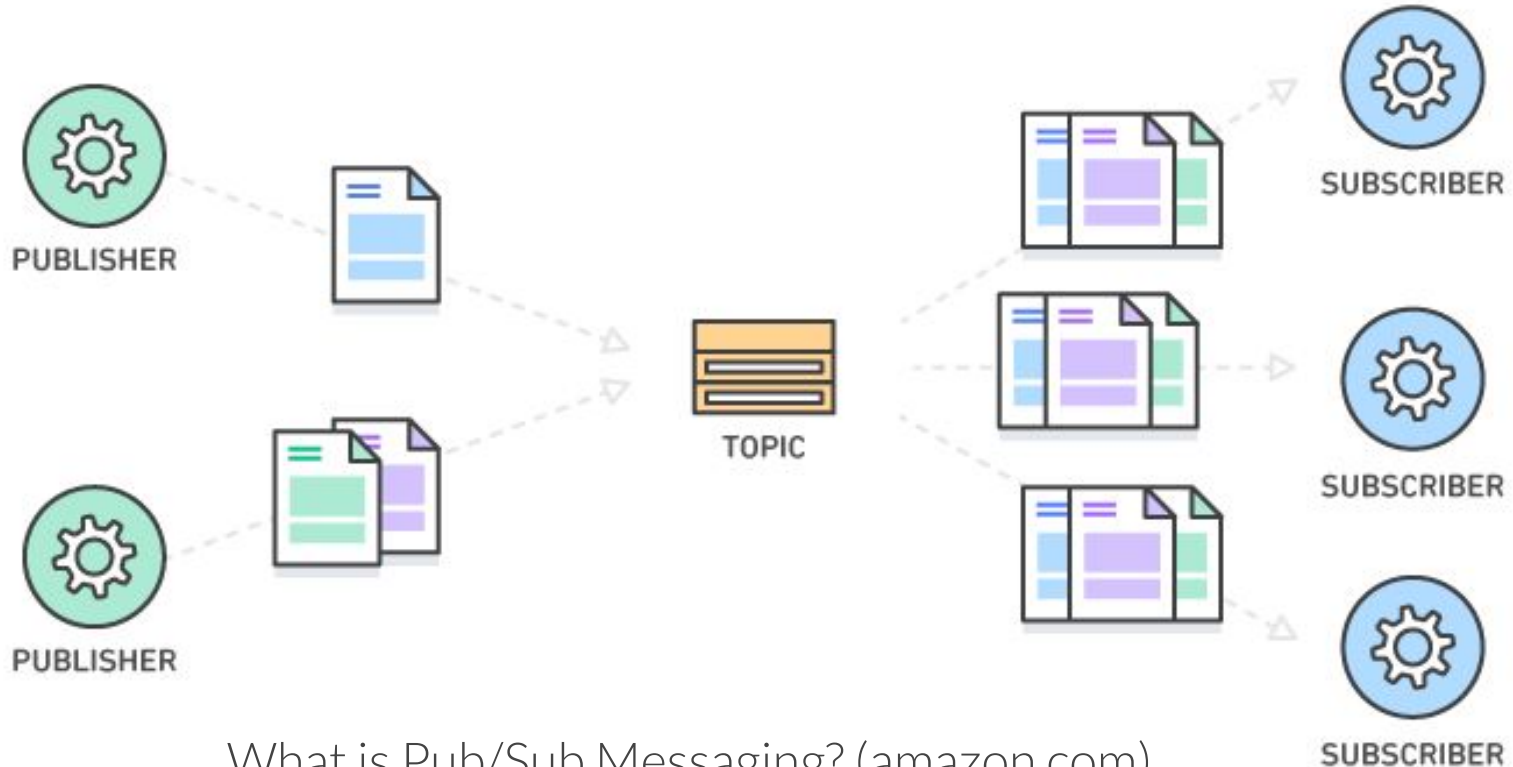
NGINX



Langage

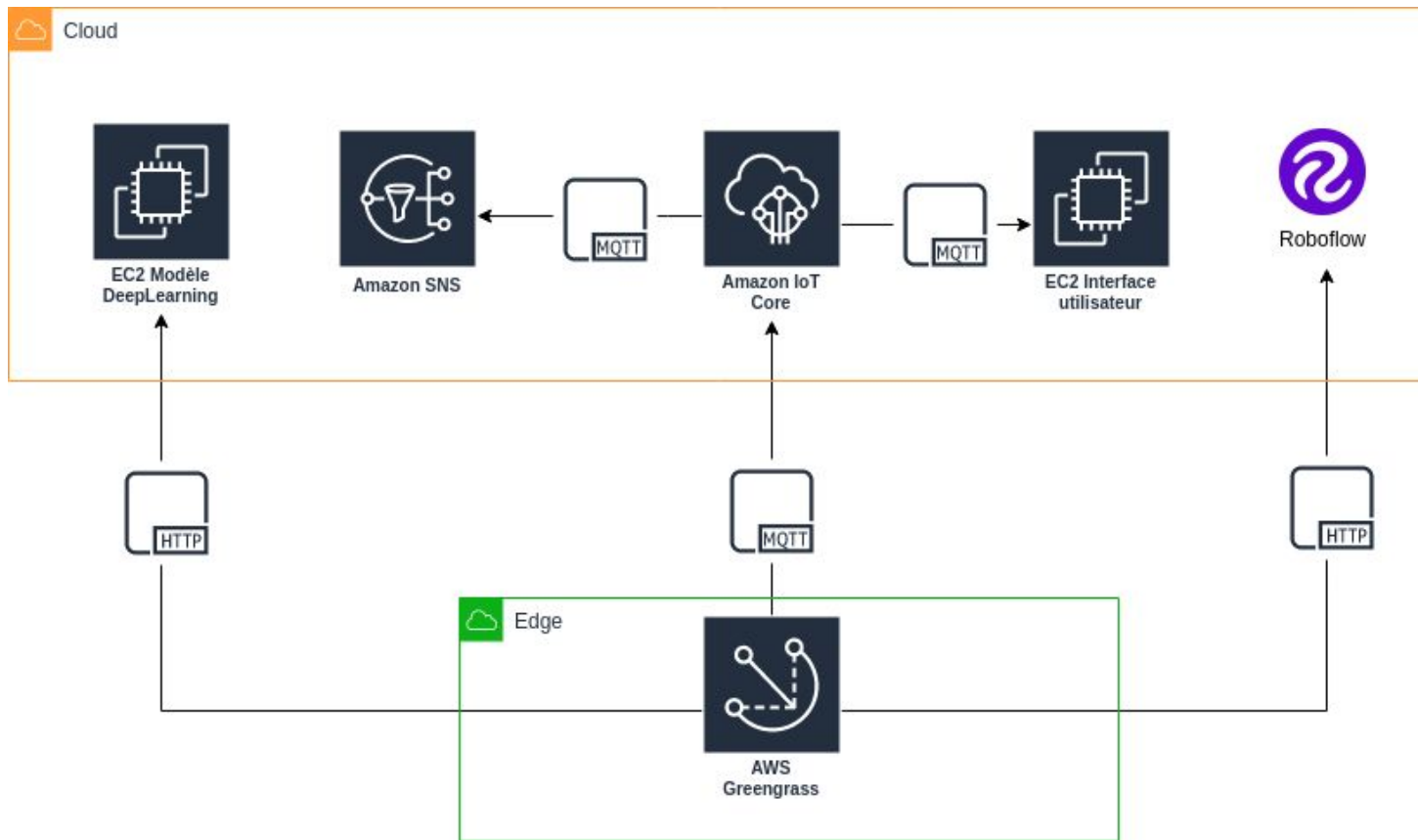


PARADIGME PUB/SUB

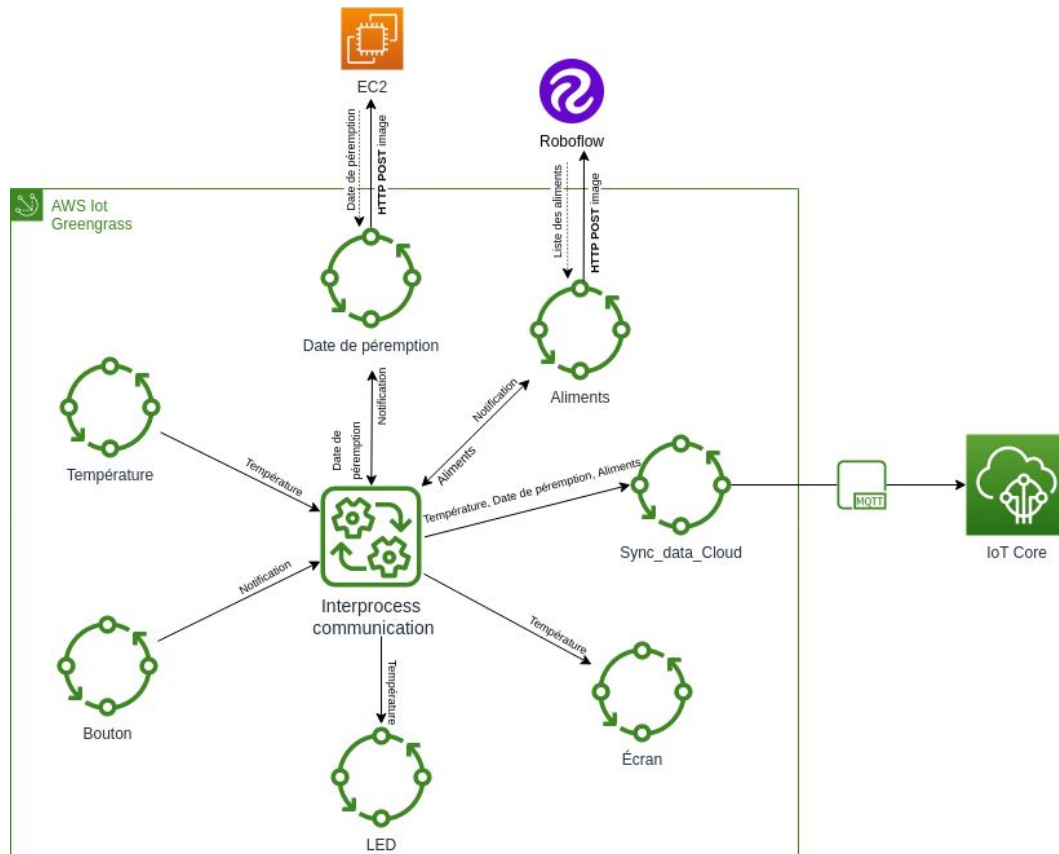


What is Pub/Sub Messaging? (amazon.com)

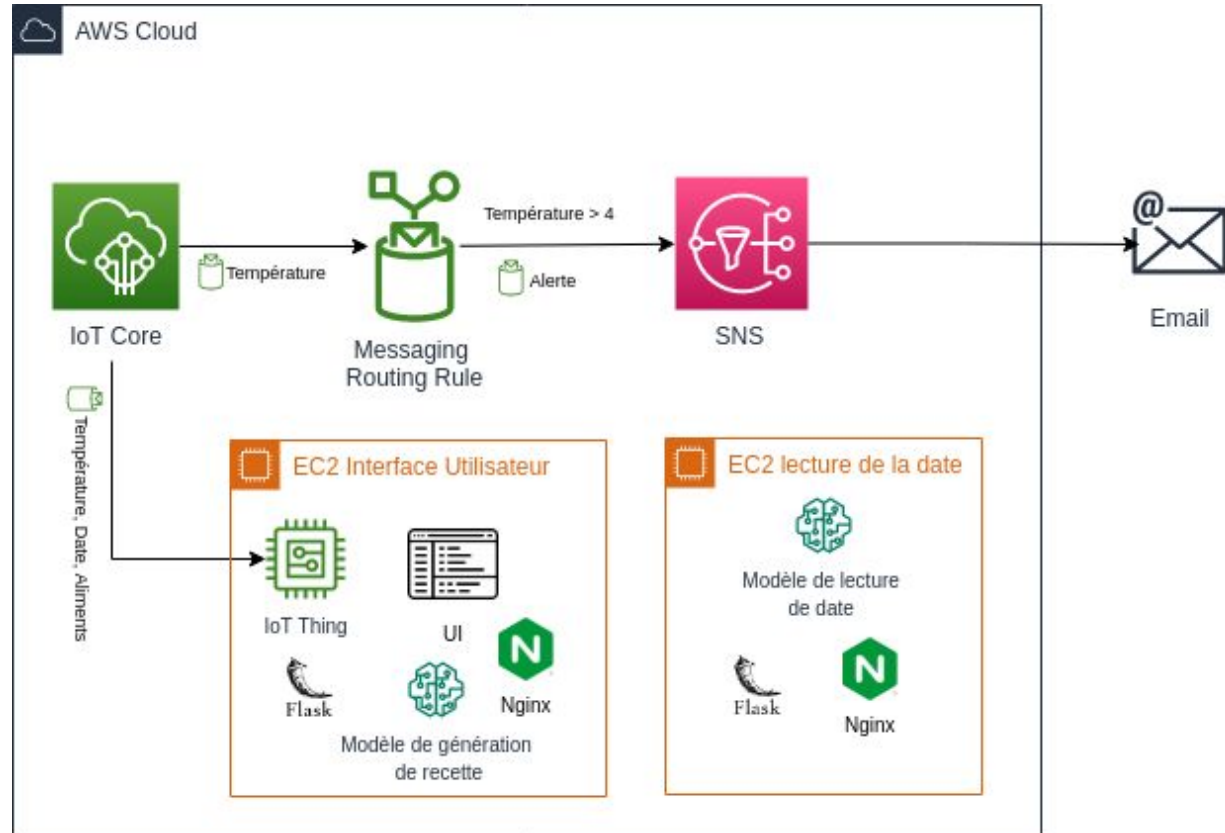
ARCHITECTURE EDGE-CLOUD



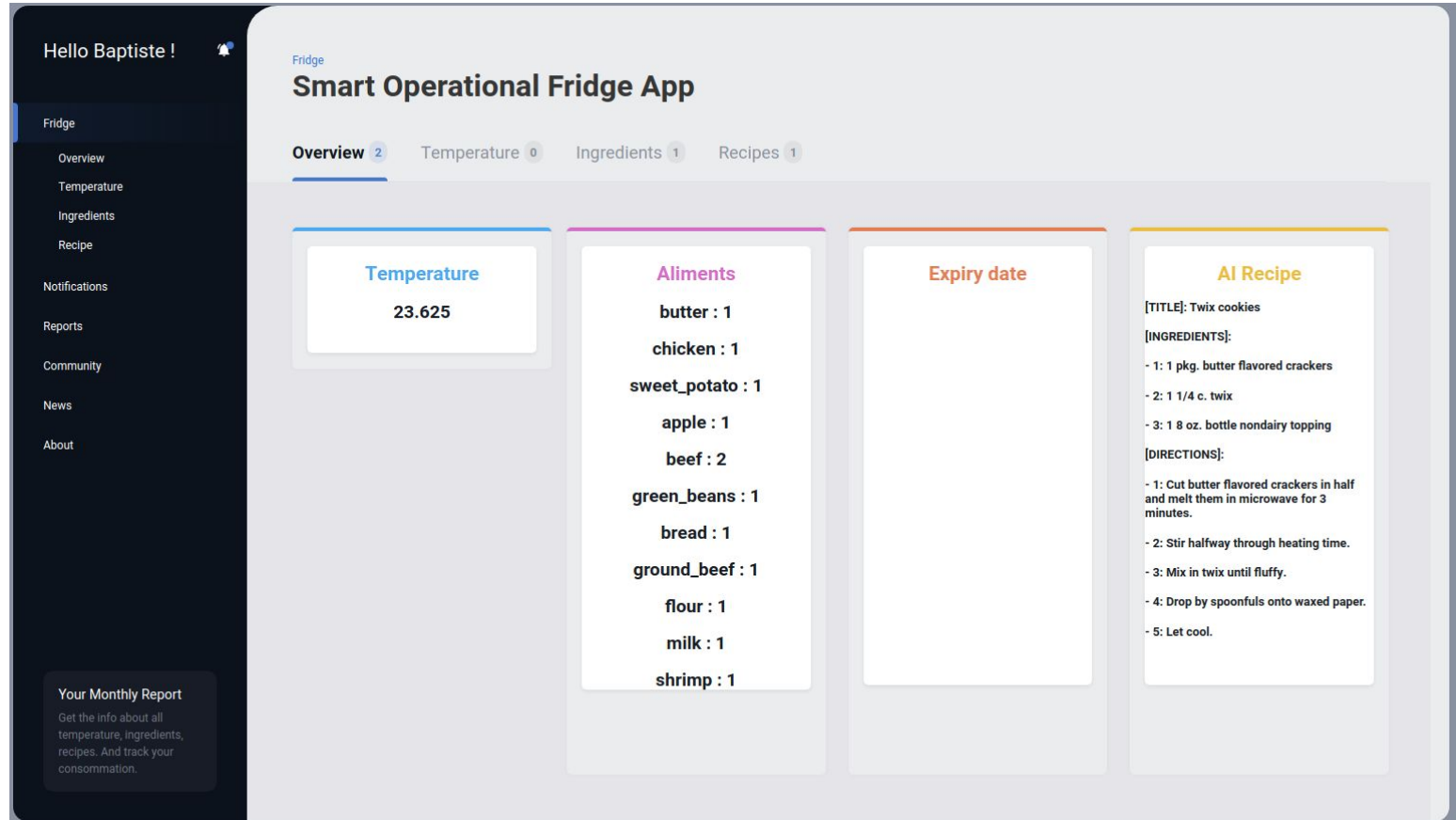
ARCHITECTURE EDGE



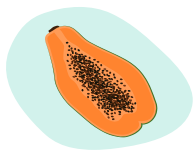
ARCHITECTURE CLOUD



INTERFACE GRAPHIQUE



CONCLUSION



REALISATION

- Développement d'une application de bout en bout
- Récupération de divers types de données (numérique, textuelle, visuelle)
- Utilisation de services d'AWS, d'outils de machine learning, et de développement web



LIMITES

- Non utilisation de caméra
- Capteurs sur la même carte connecté sur le edge
- Non utilisation de base de données
- Non utilisation de la connection websocket (UI)



PERSPECTIVES

- Développement d'une application mobile
- Ajout d'un certificat de sécurité SSL
- Ajout de modèles de deep learning
- Commercialisation

BIBLIOGRAPHIE

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- <https://aws.amazon.com/fr/greengrass/>
- <https://roboflow.com/>
- <https://github.com/JaidedAI/EasyOCR>
- <https://bulma.io/>
- <https://www.nginx.com/>
- <https://flask.palletsprojects.com/en/2.2.x/>
- <https://opencv.org/>
- <https://slidesgo.com/>



The background is a light blue surface covered with a repeating pattern of various tropical fruits and foliage. The elements include slices of watermelon with red flesh and green rinds, halves of papaya showing orange flesh and black seeds, purple rambutan-like fruits with white flesh and red skin, green lime slices, yellow lemon wedges, whole oranges, and white five-petaled flowers with green leaves. A large, white, cloud-like shape is centered on the page, serving as a backdrop for the text.

DEMO TIME !