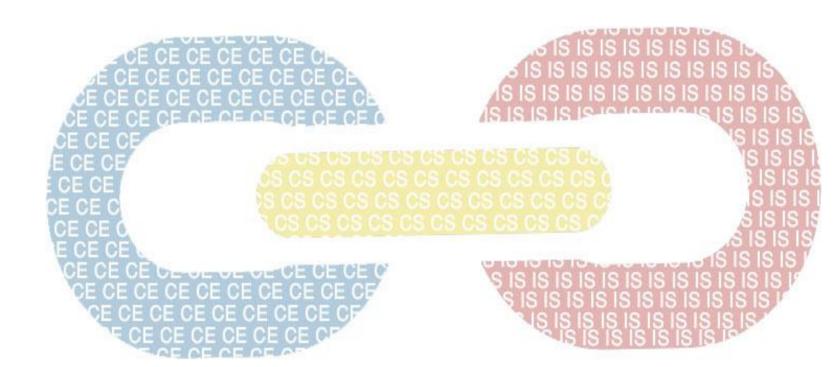


UNIVERSITY OF BAHRAIN COLLEGE OF INFORMATION TECHNOLOGY DEPARTMENT OF COMPUTER SCIENCE



THIQA: AI-POWERED RECEIPT AND WARRANTY MANAGEMENT SYSTEM

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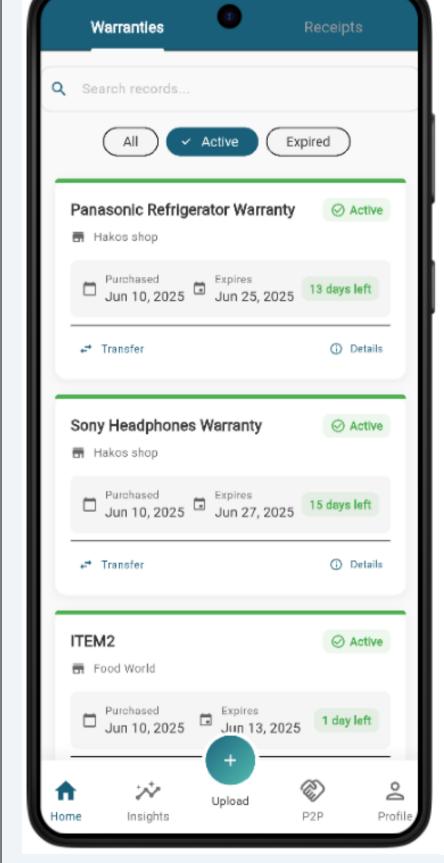
ABSTRACT

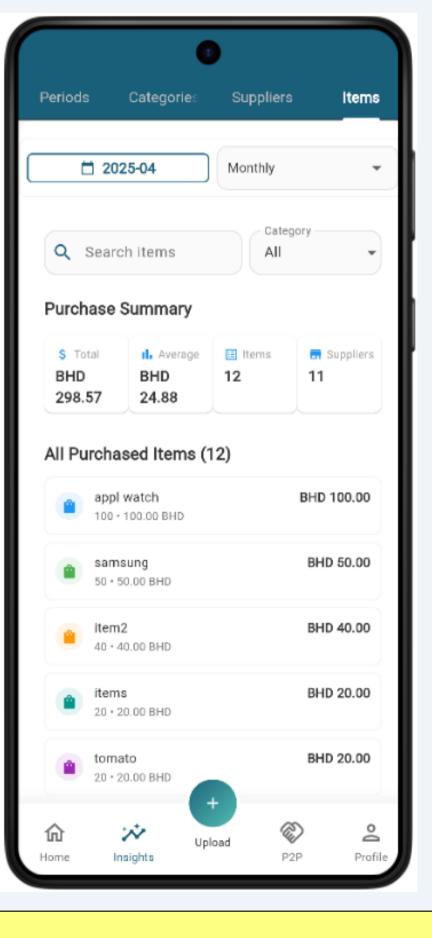
The management of physical & digital receipts, alongside product warranties, presents significant challenges for individuals & businesses, Manual tracking methods are often time-consuming, prone to errors, and lead to lost financial information or missed warranty claim opportunities. Receipts fade or get lost, resulting in forgotten records. Thiqa is an AI-powered mobile application designed to overcome these issues by providing a centralized, automated system. It utilizes AI for accurate data extraction from receipts, offers secure digital cloud storage, and aims to capture transaction records directly to prevent loss. Key functionalities include intelligent expense categorization, warranty tracking with expiration alerts, and establishing a trusted repository that serves as verified proof of transactions. Thiqa seeks to streamline financial management and warranty utilization for individuals and businesses.

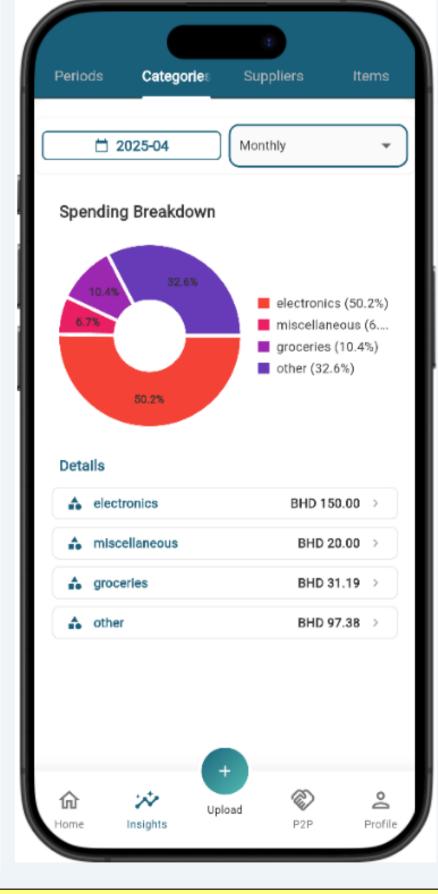
OBJECTIVES

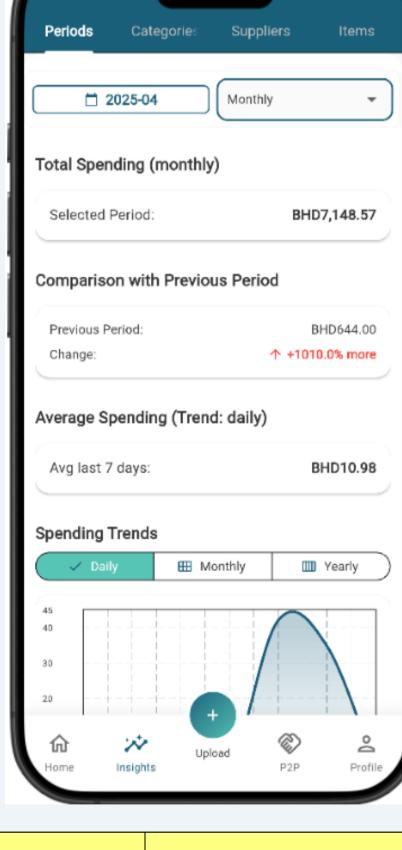
- **Digitalize & Secure Your Documents:** Create a single, secure platform to centralize and organize all your valuable receipts and warranties.
- **AI-Driven Data Extraction:** We aim to develop a high-accuracy AI-powered OCR system capable of extracting key information from receipts in any format, including Arabic, significantly reducing the need for manual data entry.
- Empower Peer-to-Peer Transactions: Enable users to easily issue & transfer authenticated warranties, with our platform serving as proof for each transaction.
- Go Green with Digital Receipts: Help eliminate paper clutter and reduce environmental impact by replacing traditional paper receipts with sustainable, digital alternatives stored securely in the cloud.
- Simplify Financial Tracking & Analysis: Leverage digital receipts to analyze & gain valuable financial insights, endowing smarter decision-making & expense management.

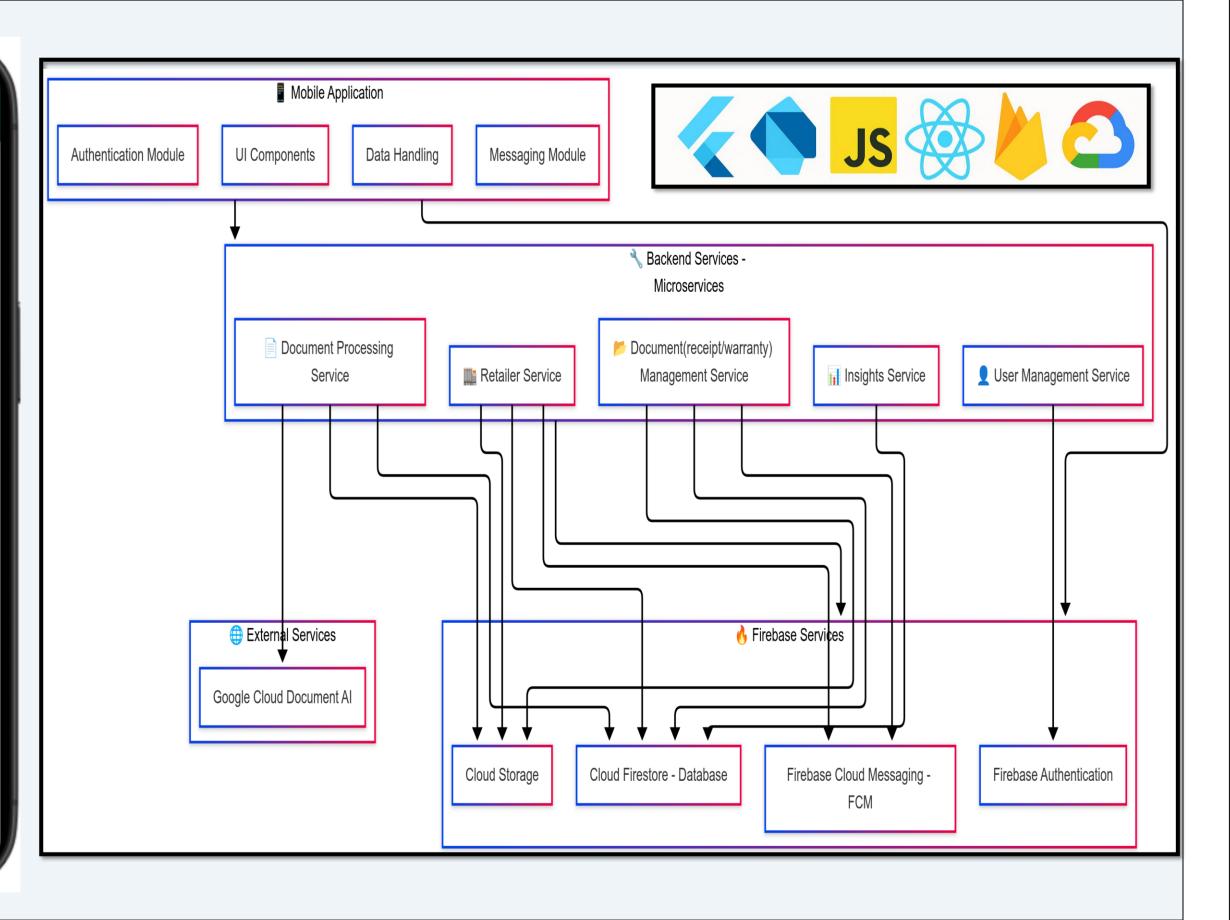
METHODS/DIAGRAMS/FIGURES











RESULTS

Our project addresses the common problem of lost receipts and warranties by digitalizing them. User surveys confirmed this problem, with a significant number of potential users expressing strong interest in a mobile app like Thiqa. This validated need drove the development of our system. Built on a scalable microservices architecture using Firebase, the prototype demonstrates core features like AI-powered capture and quick search, proving our system can end the hassle of misplaced documents and digitalize them.

Cross platform mobile app

Hi, Hussain

monthly pending

S4 BD

Warrantjes

Receipts

Receipts

Panasonic Refrigerator Warranty

Hakos shop

Leptres on

Jun 25, 2025

Jun 25, 2025

Product Details

Product Name:

Panasonic Refrigerator

Warranty Holder:

Hussain Noch

13 days left

Product Name:

Panasonic Refrigerator

Warranty

Panasonic Refrigerator

Warranty

Warranty

Product Name:

Panasonic Refrigerator

Warranty

Warranty

Panasonic Refrigerator

Warranty

Warranty

Panasonic Refrigerator

Warranty

Warranty

Panasonic Refrigerator

Warranty

Active Period:

13 days left

Product Details

Product Name:

Panasonic Refrigerator

Warranty

Active Period:

Active Period:

13 days left

Panasonic Refrigerator

Warranty

Actions

Panasonic Refrigerator

Warranty

Actions

Active Periodic

Additional Information

Additional Information

Additional Information

Profile

CONCLUSION & FUTURE WORK

We developed a functional system that features a centralized wallet, which safely manages receipts and warranties while incorporating automatic intelligent data extraction to demonstrate the solution's value and technological feasibility.

Thiqa's vision includes being a completely verified platform by regulatory authorities for businesses and consumers, making the post-purchase process significantly easier, and entering the digital era.