組別 Team ID: 202401

專題屬性 Category: 行動商務 (Mobile Commerce) 專題名稱 Project: 說給斑馬聽 (Talk To Zebra)

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# 三、系統環境 System Environment:

- (一) 軟體 Software: 作業系統 Windows10(含)以上; 開發工具 Android Studio (ver. 2022.2.1 以上); 資料庫軟體 Firebase; 開發語言 Java、Python; 介面設計 Figma
- (二) 硬體 Hardware:手機作業系統: Android 手機(ver. 7.0 以上)
- (三) 通訊設備/協定 Communication & protocol: 符合 TCP/IP 之網路通訊協定;網路頻段:6G、5G、4G LTE;通訊 Wi-Fi

#### 四、簡介

## (一) 系統簡述

現代的手機APP實在太多,不僅年長者連一般年輕人外出購物時,往往要花時間查找商家或找到APP,相當耗時。本專題設計一個可以用語音功能,找到四大超商及各地常見商家的APP,讓長者不需要大海撈針,用講的嘛飞通--直接開啟APP。本專題之APP專門針對常用的各家APP,提供語音/手動輸入與問答與網路地點查找,同時亦提供了備忘清單和記帳本功能,讓使用者不需切換到其它應用程式,在同一個APP即可完成:語音找商家、展開商家地圖、建立備忘清單和記帳本等功能。

### (二) 特色

#### ● 語音功能--用講的嘛乀通

提供使用者互動頁面,透過語音或文字執行指定任務。用語音搜尋想要開啟的 APP 和想去的商家,以對話框互動,系統回報訊息及搜尋後的結果。

## ● 地圖搜尋很簡便

篩選出想找的各區商家,並開啟地圖讓使用者清楚知 道附近有哪些商家,點擊標記查看商家詳細資訊。

# ● 備忘清單好容易

提供使用者隨時隨地記錄提醒事項,在出門前後都 能快速記錄時間、商家地點,還有代辦清單在採買 時更為便利。

#### • 方便記帳

提供使用者記錄消費金額,並提供簡單易懂的類別供 使用者選擇,同時也提供年月份篩選,方便使用者回 顧過去的消費。

### ● 月總結分析

提供使用者消費分析和總覽,以圓餅圖和長條圖形式 顯示用戶消費的趨勢,讓使用者更容易識別可能的花 費情形,有助於使用者更輕鬆掌握自己的財務狀況。

▼下圖為本 APP 語音對話頁面



## (三) 系統架構圖(Architecture):本專題的 APP 功能架構圖如下所示。



#### 五、 Introduction

#### (1) Introduction:

Modern mobile apps have become overwhelmingly numerous, making it time-consuming for not only older adults but also younger people to search for stores or locate the right app while shopping. This project aims to design an app with a voice-activated function that can quickly locate apps for the four major convenience stores and other common businesses, allowing users, especially seniors, to simply speak to open the desired app without needing to search through a sea of options. This app focuses on commonly used apps, offering voice/manual input, Q&A assistance, and location search. Additionally, it provides a built-in memo pad and expense tracker, enabling users to complete tasks such as locating stores, viewing maps, creating reminders, and recording expenses without needing to switch to other apps. All these features are integrated into a single app for a

seamless experience.

#### (2) Features:

## Activating Apps by Voice

Users can activate specific merchant Apps just by voice.

### • Searching for stores on the map is easy

Based on the region selected, our App can help you find the store location on the map and you can click the store for detailed information and save to your preferred list.

### • Shopping list made easy

Record your to-do-list at anytime, anywhere and enable quick finding the store location for more convenient shopping before and after going out.

### • Purchasing-diary made easy

Enable users to record expenses with easy-tounderstand categories for selection. Additionally, offer a year and month filter to facilitate reviewing past expenditures.

#### Monthly summary analysis

Display users' spending statistics in pie chart and bar charts, making it easier for user to identify potential spending patterns.

