Fuel Tracker – an app to keep track of fuel costs

Millions of people across the UK need to fuel up their vehicles every day, myself included. It can be difficult to keep track of how often you fuel up, how much you spend, how far you can go after fuelling up, etc. I wanted to make an application to make tracking these metrics easier. This will benefit not just ordinary drivers, but also people who use their vehicles for business, such as taxi drivers or delivery drivers.

## Functionality

* Two distinct screens
  + Calculator screen, which allows users to calculate the cost of a trip
  + Timeline screen, which allows users to see a log off all their fuel purchases
* Uses NavHost
  + Uses NavHost for simple navigation between Calculator and Timeline screens
* Intent to external application
  + Allows the user to locate the nearest fuel station to their current location
* Work properly with app lifecycle
  + App allows for rotating the screen or minimising then reopening the app, without losing its current state
* Permissions
  + Use “Location” permission to allow for finding nearby fuel stations
  + Use “Camera” and “Photos and Videos” permission to allow users to upload photos in a fuelling event
* Local storage
  + Use room database to store fuelling event data as well as user settings, such as car details, ensuring data persistence
* Custom ContentProvider
  + Allow user to share the data from a fuelling event to their contacts on other apps, such as WhatsApp or Messages.

## Possible extra functionality

* Implement Android service
  + To allow users to receive notifications on a periodic basis to remind them to fuel up
* Capture touch gestures
  + Allow for editing a fuelling event by swiping right, deleting by swiping left then confirming
* Use notifications
  + Remind users when to fuel up based on their preference, such as weekly, fortnightly, or monthly

## Screen mock-ups

A screenshot of a phone

Description automatically generatedA screenshot of a phone

Description automatically generated