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

* Minimum 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
  + Add Event screen, which allows users to add a new fuelling event
  + Edit Event screen, which allows users to edit a fuelling event
* 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, ensuring data persistence
* Custom ContentProvider
  + Allow other apps to access the data from a fuelling event; currently a widget uses the ContentProvider, where clicking the widget opens the app and takes you to the timeline page.

## Possible extra functionality

* Capture touch gestures
  + Allow for editing, sharing, or deleting a fuelling event by holding a fuelling event card; deleting by pressing delete then confirming
* Android Sharesheet
  + Allow users to share an event to any other app which supports text input

## Screen mock-ups

A screenshot of a phone

Description automatically generatedA screenshot of a phone

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Calculator screen, accessible from navbar

Timeline screen, accessible from navbar

Add event screen, accessible by clicking plus icon on timeline screen

Edit event screen, accessible by tapping and holding on a fuel event, then clicking edit