Mathem

Android Assignment

First of all, thank you for using your valuable time to complete this assignment. We know these tests feel like a bit of a chore, but we really believe it helps us to get a better picture of your software development skills. At most, we would expect candidates to use ≈2 hours on this test, but feel free to use less or more as long as you feel it gives a good representation of how you like to write quality software.

We wish you good luck and don't hesitate to contact the recruiter if anything is unclear with the test assignment!

Problem

As a Mathem user I want to be able to reserve a delivery time in order to guarantee that I can get delivery when it is convenient for me before I start shopping..

Requirements

Create an Android app showing selectable delivery times based on data from the provided endpoints. The app should contain the following functionality:

- Users should first be able to select a delivery date and then select a delivery time for the selected date
- Users should be able to tick/untick a checkbox for in-home delivery
- Users should be able to proceed to a confirmation/summary view showing the selected information
- Users should be able to go back and edit their choice from the confirmation/summary view

Logic

The app should make requests to the following endpoints and then display a view with the fetched dates and times.

- Dates: https://api.mathem.io/mh-test-assignment/delivery/dates
- Times: https://api.mathem.io/mh-test-assignment/delivery/times/{dateString}
  Example: https://api.mathem.io/mh-test-assignment/delivery/times/2023-03-10

The date and times need to be sorted in ascending order based on date and start time respectively.

Once a delivery time has been selected the proceed button should be enabled and while no delivery time is selected it should be disabled. When a user has ticked the in-home delivery option the delivery times where it's false should not be listed.

Additionally, the state of the application, such as selected date, in-home delivery on/off, and so on, should persist when going back and forth between the selection view and the confirmation/summary view.

Limitations and guidelines

- Preferably written in Kotlin but Java is okay
- Presentable on a device or emulator
- No storage is needed - it's fine to keep the data in memory
- It should be possible to execute the code in some way
- How you choose to present the information to a user is up to you
- When demonstrating your solution, be prepared to navigate through the code and execute it.

Best,
Mobile Team @Mathem