Lumos App Coding Challenge

We would like to get a rough idea of your skillset and so have set up this App challenge to put your skills to the test. You should not spend more than **2** days on this challenge. As such, you're not expected to complete the whole challenge fully, but bonus points for if you can. For parts of the challenge that you're unable to complete, please take a few minutes to write out the process you would've taken to complete the task(s).

General Guidance

- Please complete all questions to the best of your ability and submit within 24 hours of receiving the challenge.
- Please use Flutter (where possible) to answer the questions. If you prefer to use another platform, then feel free to do so, but please explain why you've chosen that particular route.

Question 1

Build a simple to-do list application according to this Figma. Feel free to extend the app with any wild ideas you have, sky's the limit.

Key things we'll be looking for:

- A well structured codebase (Both file & code structure)
- Smart use of widgets/components throughout
- Algorithm of choice
- How well you design the user experience (any form of added features/animations/embellishments are welcomed)

Answer:

Question 2

Our app requires us to save a bunch of data such as user profile information, devices paired and device settings. Each user can pair zero or more devices and each device has its own device settings, these devices include Helmet, Pedals and Bikelights (Bikelights comes in **2** variants; Front Bikelight & Rear Bikelight). Feel free to think of any other settings on what these devices should have too.

Create a UML diagram on how you would store this info and define the type of relationship between datasets. For this question, we're only expecting a diagram with an explanation of how you would go about implementing it into the App. There's no need to code anything into the App itself. Feel free to add minor details into the classes if it helps you to explain more clearly.

Key things we'll be looking for:

- OOP Concepts
- UML skill

Answer: