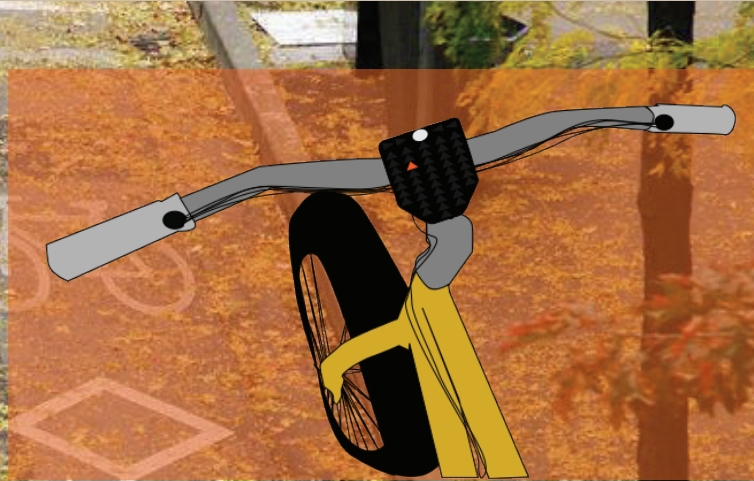


CYCLIKA

Paving a sustainable path towards empowered biking.

PROBLEM

Americans who do not have access to protected bike lanes and similar forms of infrastructure have safety concerns about spatial awareness, accidents and surrounding motorists.



SOLUTION

Cyclika transforms biking to be more viable and environmentally sustainable by empowering users to take safety into their own hands.

Handlebars

A small visual interface is mounted between the handlebars to convey the presence and proximity of a vehicle approaching the bike. The display contains 7 LED strips.



Radar & Rear LED

A radar sensor detects vehicles approaching from behind and to the side of the user. A grid of LED lights mounts to the back of the bike, supporting the user in notifying motorists of the user's intended turns.

DESIGN PROCESS

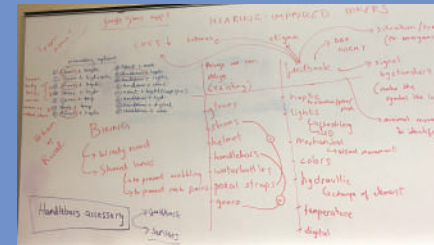
Interviews & Findings

From talking to users and reviewing existing products we found 3 aspects integral to our project.

1. Detecting the object - users need to know that when an object is approaching them.
2. Proximity - users need to know how close the approaching object is to them.
3. Feedback - users are able to inform motorists that they are turning or changing lanes with the display mounted on the back of the bike.

Prototyping

We designed several iterations of lo fi prototypes based on user response and competitive analysis of related products.



Usability testing

Users had a good understanding of the color changing feedback, and were more perceptive to the top row of arrows compared to the outer rows of arrows.

