

Team members: Kai McDermott, Žymante Kesylyte,

Bjorn Hoxha

Client: Claudia van Riet, Ontwerpbureau FIX

Semester: Product Engineering

Contact: bjornhoxha6@gmail.com/+31643712346

k.n.mcdermott@student.hhs.nl/+31626855177 zymante.kesylyte@gmail.com/+37062108523

o use the product each user must have his or her phone and download the corresponding app. The next step is to connect the phone to the station via bluetooth connection. You put your phone on the steering wheel and then choose a sub game of your choice on the app. After choosing the game, you follow the instructions and pedal to achieve what the game requires.

The games are designed in a way so your pedalling movement is translated into certain amount of input inside the game. The kinetic energy of your body is transformed into electrical energy. This amount of energy is read and then outputed to the phone. The more you pedal the more you accelerate, move, charge etc. depending on the game theme. This creates an interactive environment where the user must work his body into pedalling while moving the phone on the wheel.

Every sub game would include educative infotainment about the energy usage and production in relation to their pedalling. In this way we achieve a system that is interactive, which makes it entertaining, but also educative by providing experience-based learning in terms of energy consumption, production and maybe sustainability.

INTERACTIVE MOBILE STATION

Surpass yourself

Assignment:

Design studio "Fix" is a company designing, producing and manufacturing innovative products for public spaces. Our task was to redesign an entertaining educational static playground toy: "Energy bike", so it would be suitable for a broader target group, 12-14 year old teenagers, by implementing new functions and aesthetic details to the existing model.

Description:

The main introduction done to the product apart from the aesthetics of it, is the principle of creating an interface between a mobile device and the station. After looking into the target group's preferences and trends, we took the decision of creating a playing station where each user implements his own mobile device and plays in a combination of pedalling and steering.

Through an app they can dowload on their phone they will be provided with various games to play that would require them to pedal in order to perform certain actions on these games. This solution results in creating an entertaining interactive experience through the implementation of a known environment to the target group, but it also makes the users perform physical activity, something the generation is lacking.

The bike can connect to the phone via bluetooth connection, through which it also sends the phone the input on the pedalling movement and speed. Various infotainmet would be included in each game in order to provide the user with information on their energy usage and production.

By creating a network of users that play the game but also keeping records of stats, we also introduce competition to the user, an aspect that teenagers like when partaking activities with their friends.

SETUP:



DOWNLOAD THE APP ON YOUR MOBILE DEVICE



CONNECT YOUR MOBILE DEVICE TO THE STATION VIA BLUETOOTH CONNECTION



PHONE ON THE STEERING WHEEL



SUB GAMES INCLUDED IN THE APP



PLAY AND ENJOY!

