

Penguins

社區親子共乘



2016.09-2016.11

Property

Semester Individual Project

Tasks

User Research
Market Analysis
UX/UI Design

Delivery

Android Application

Dimension

1334 × 750 pixel

Traffic is the biggest factor affecting the quality of urban environment. In Taiwan, children transportation is time-sensitive and accounts for the largest proportion (48%) of all commuters by fuel vehicle.

Penguins is a carpooling platform which connects the parents in the same community and makes them help each other to take their children to school. Carpooling can reduce transportation costs for each family while the driver can earn extra money by completing the driving tasks. The passenger capacity per car increase as well as the total number of vehicles reduces during commute. In this way, we can improve the environmental quality of the city and slow down the speed of global warming.



Know Context & Design

Starting from reducing urban traffic pollution, I conducted a survey on the self-driving commute market and found that the parents who transfer children are almost the people who pay the most attention to environmental issues (married women aged 31-40 with children). After persona description and cognitive mapping, I found that the parents are more concerned about the safety of their children going to school than the convenience of picking them up in person. The parents in the same community being the drivers increases trust and safety of children transportation. They can also confirm their children's location and safety at any time by checking the situation updated on the app.

In addition to achieving eco-friendly carpooling, Penguins also makes the journey an opportunity to increase parent-child interaction through a reward system. By joining a ride, the families can obtain green coins to buy interesting stickers. On the way to school without parents, the children can still receive encouragement and reminders from their parents and avoid the conflicts caused by rushing or waking up on the wrong side of the bed.

Business Model



Penguins connects to smart driving systems, smartphones, and wearable devices as user devices. It uses the OBD2 system to track fuel consumption to calculate traffic fees. The parents can track their children's location and make video calls to confirm safety. When getting off the cars, the children can scan the QR code with the driver through wearable devices to pay the fees.

