Design Thinking:
Redesign Public Bikes in Taipei City

"Lost and Found," a final group project for the class "Design and Society" at National Taiwan University, where we made improvement proposals to the city government about the public bike system in Taipei, Taiwan. Our team designed a new inductive bike basket with a plug-in lock in a hope to reduce the possibility of people leaving their belongings in the bike baskets.

As the team leader, I led my team to define the current problems of the bike system and brainstorming. I was mainly in charge of sketch design in 2D and proposal posters design. Our teammates from the department of industrial design were in charge of 3D modeling using AutoCAD and 3D printing.

Problems to be Solved

People often left their personal belongings in the public bike baskets and the current Lost and Found system are not convenient. We interviewed and did surveys on public bike riders and the result showed that forgetting and losing items would affect one's willingness of using public bikes.

We decided to redesign the bike basket with a detective device to remind the users if they left items in their baskets.

Brainstorm and Design

We designed a v-shape foldable basket with a looser nest at the sides so that the users can easily see their items in the baskets. There is a detective device connected to the back of the basket that when users return the bikes, it will beep if there are items left in the baskets.

Also, we redesigned the lock of the bike. The original locks take huge spaces inside the basket and often block the items the users put in the basket. The new l-shape lock is attached at the back of the basket and is easy to use.

Expectations and Results

- Less lost items / garbage and waste in the baskets.
- Improve the current Lost and Found system.
- Less cleaning costs and will improve the circulation rate of public bikes.