Naïve User Walk-Through (Hypothetical Scenario)



Jane is a 16-year-old girl who lives in a multi-family home in Medford, MA. Jane lives in an apartment with her mother. For the past two years, she has been responsible for doing her own recycling in the home (recycling her own plastic water bottles, boxes, etc.). For the past year, she has been responsible for bringing out the recycling to the apartment's outdoor bin and taking the bin out to the curb on Thursday afternoon for recycling pickup on Friday morning. She brings in the recycling Friday afternoon after school.



Jane owns a smartphone, which has had the EcoSort app downloaded onto it. This is her first time using the EcoSort system.

It is Thursday afternoon and Jane needs to recycle a plastic water bottle and a 2ft x 2ft x 2ft box before taking the recycling to the outdoor bin and bringing the bin to the curb.

First, Jane finishes using the plastic water bottle and the box. Then, she decides that she needs to dispose of them in her home.





She pulls out her smartphone and opens the EcoSort app. Since this is her first time opening the app, a message comes up across the screen directing her to click the camera icon if she would like to find out how to recycle an object. She clicks the icon and, following the first-time-user prompts on the screen, takes an image of the water bottle using her smartphone. (The first-time-user prompts specify that only one item should be photographed at a time).



The EcoSort app tells Jane that she does not need to clean her water bottle, and that it is small enough to put into the EcoSort recycling bin. She places it in the compartment on top of the bin and the lid closes.

Across the screen on the EcoSort device, it states:

Item: Plastic Water Bottle

Recycling Number: 1

For Recycling Form Information, Press Here

Note: for Jane, there is also more information about recycling information and the recycling form on the app, under the FAQs section. There are also videos in the app showing what the EcoSort does within its container to put items into their proper recycling form. While the EcoSort is presenting this info, it is also putting everything into the proper form described.

When the EcoSort is done putting the recycling into its proper form and has lowered it into the recycling storage portion of the bin, a message comes across the screen saying "Success: Plastic Water Bottle Recycled" (see UX/UI). The app also returns to its initial state, with the camera button visible.



Next, Jane needs to recycle her cardboard box. (Note that the box is in the form shown above: open, but not yet broken down).

Since she still has the app open, Jane clicks the camera icon again and takes a picture of the box. Her phone tells her that the box is both recyclable and does not need to be rinsed.

However, a notice comes across the system screen, saying: "Cardboard Box is too large for EcoSort Storage Bin" (see UX/UI). The screen would provide further information regarding proper recycling form and how to properly store the disposable in the event that is too large, with reference images (see below).



Once Jane breaks down the box she taps the icon on the screen. She leaves the room to go do something else.

At 4:15pm, Jane gets a notification through the app on her phone, saying, "Collection day is tomorrow morning! Be sure to take out your trash and recycling and bring your bins to the street." (Though this is Jane's first time using the app, this case assumes that her mother has already input her recycling company information into the account so that the EcoSort app already knows when the recycling dates/locations are).

Based on the prompting, Jane decides to take out the recyclable materials currently in the EcoSort Storage Bin out. She has not gotten a notification to do so, since the bin is not full. However, the EcoSort Storage Bin is able to be emptied at any time.

She brings the box and the contents of the EcoSort Storage bin to the outdoor recycling bins. After putting the products inside the large bins, she places the smaller EcoSort storage bin down while she rolls the large bin to the curb.



Once Jane has put the large bins on the curb, she goes back and grabs the EcoSort Storage Bin and brings it back inside with her. She puts it back in the EcoSort system.

She goes back into the app and confirms that she brought out the recyclables.

The next day, while Jane is on the school bus, she gets a notification on her phone. It says, "Your recycling bin has been emptied. Don't forget to bring it back in!"

When Jane gets home, she brings the bin in from the curb. She goes into her phone and logs that she brought back in the bin.

Fortunately, with this system, even if there is an error it is not a large issue. If, for some reason Jane took a photo of an object and it wasn't recyclable, the EcoSort would not open and let her put it into the bin. If she forgets to take out the recycling, she can simply do that the next week. Since this product's goal is to improve recycling, even if there are minor mistakes in the process, it is still a drastic improvement on current recycling practices in the home.