Use Case 1: Redeem Gifts

Main Success Scenario:

An IcyWorld visitor arrives at the park’s Gift Shop with their NFC band. The visitor taps the NFC band at the kiosk to review Reward Points earned during the day. The visitor then browses all gift items and indicates the items to add to the shopping court. After adding the items, the user may enter a checkout page to confirm the items and quantities. On the checkout page, the user may revise the purchase by adding or decreasing quantity of items, removing items from the shopping court, or returning to the shopping page. The total points needed for redemption are shown. Finally, the user then clicks “Confirm Purchase”. The respective points will then be deducted from the visitor’s account, and the gifts chosen will be popped out.

Alternative Scenarios:

If the total points earned is less than the points required for redeeming the selected gifts, there will be a message indicating insufficient points, and the purchase cannot be completed.

If the selected gift is out of stock, the user will be unable to redeem. After the staff refills the stock, the user will be once again able to redeem the gifts.

Use Case 2: Recording Visits

Main Success Scenario:

When a user visits an attraction, they tap their NFC band on the terminal at the entrance of the attraction. The system records the user’s visit with a timestamp and adds the corresponding Reward Point to the user’s account. After getting the success message, the user enters the attraction.

Alternative Scenarios:

If a user taps a band at the same attraction for 2 or more times within 5 minutes, it will be assumed that the user accidentally tapped their band twice, and the points will not be counted.

Use Case 3: Visitor Data Analysis

Main Success Scenario:

The park staff will give an IcyBand, embedded with an NFC tag, to guests when they enter the park. Later the staff will be able to view the visitor statistics, including for each attraction site, the number of times the guests visit. After authenticating, the staff will be able to see a dashboard with the information mentioned above and visualization of the data in the form of charts.

Use Case 4: Edit Gift Catalog

Main Success Scenario:

The park management staff can add, remove, or edit a gift that can be redeemed on the kiosks. The park management staff will first authenticate themselves, and then make any change of gifts including the name, description, and picture (or add / remove gifts) in the backend. Then, they confirm the change and publish it. As a result, all kiosks will have their gift catalogs updated in real time.