*Use case:* Product refund

*Actor:* Customer

*Main Success Scenario:*

1. Customer recognizes problem
2. Customer contacts customer support to report problem
3. Company reviews problem
4. Customer ships defect product for further examination
5. Company detects an error
6. Company offers replacement product
7. Customer accepts offer
8. Customer receives replacement product
9. Received product functions as expected

*Extensions:*

3a. Product problem needs further examination by company

1: Return to step 4

3b. Product problem is clear to company without thorough examination (well-known manufacturing problem in multiple devices)

1: Return to step 5

5a. Company detects problem caused by user

1: Customer is informed

2: End of use case

5b. Company detects problem caused by company (manufacturing or shipping problem)

1: Return to MSS step 5

6a. Customer refuses replacement product and wants a refund instead

1: Refund is declined

2: Return to MSS step 5 or end of use case

9a. Received product doesn’t function as expected

1: Refund the cost of the product

2: Company reviews the broken received product

3: End of use case

*Use case*: Alarm notification

*Actor:* Customer

*Pre-condition:* sensor readings too high

*Main Success Scenario:*

1. System detects extremely high value
2. System notifies user
3. System tries to handle the situation by itself
4. Problem solved and value is back to normal
5. Alarm stops

*Extensions:*

3a. System can’t handle situation

1: notify emergency services

2: End of use case