		Functional Test Case				
Feature	**Test Case**	**Steps to execute test case**	**Expected Output**	**Actual Output**	**Status**	**More Information**
Food Donation Submission	Valid Donation Submission	1. Open the donor dashboard. 2. Enter food name, type, condition, quantity, pickup address. 3. Leave expiry date empty (optional field). 4. Click "Submit Donation".	The system should display a success message with a unique donation ID.	The donation is created, and donation ID is shown on screen.	Pass	Validate that ID is unique. Confirm donation appears in driver and NGO views.
Food Condition Verification	Driver Verification of Food Condition	1. Driver views assigned pickup. 2. Visits location and checks food condition. 3. Updates condition from edible to inedible. 4. Confirms status.	The updated status is reflected to the NGO, and food is redirected to inedible flow.	Status change appears correctly and NGO receives alert of rejection.	Pass	Ensure logs track original and updated condition. Test impact on routing.
NGO Claim System	First NGO Claim	1. Login as an NGO. 2. View unclaimed donations. 3. Click "Claim" on a visible donation. 4. Check status.	Donation should change to "Claimed" and not be available to others.	Donation marked as claimed; no duplicate claims allowed.	Pass	Test with multiple NGOs trying to claim simultaneously.
NGO Claim System	Donation Not Claimed in Time	1. Post donation. 2. Wait beyond claim time window (e.g., 1 hour). 3. Check status and route.	Donation is auto-assigned to nearest biogas plant.	Food redirected to biogas collection.	Pass	Check system notification and updated status.
Biogas Assignment	Automatic Nearest Plant Assignment	1. Submit inedible donation. 2. Driver confirms inedible. 3. System calculates nearest plant via Google Maps API. 4. Assigns pickup.	Pickup assigned to closest biogas facility.	Correct plant selected; route generated.	Pass	Confirm route and plant details are accurate.
Dynamic Reassignment	NGO Rejects Food	1. NGO rejects food on delivery. 2. Driver updates system. 3. System reroutes to biogas plant.	Food is redirected to a suitable biogas plant. Status is updated.	Reassignment occurs and notifications sent.	Pass	Ensure log entries are created and stakeholders notified.