

# Test Scenarios

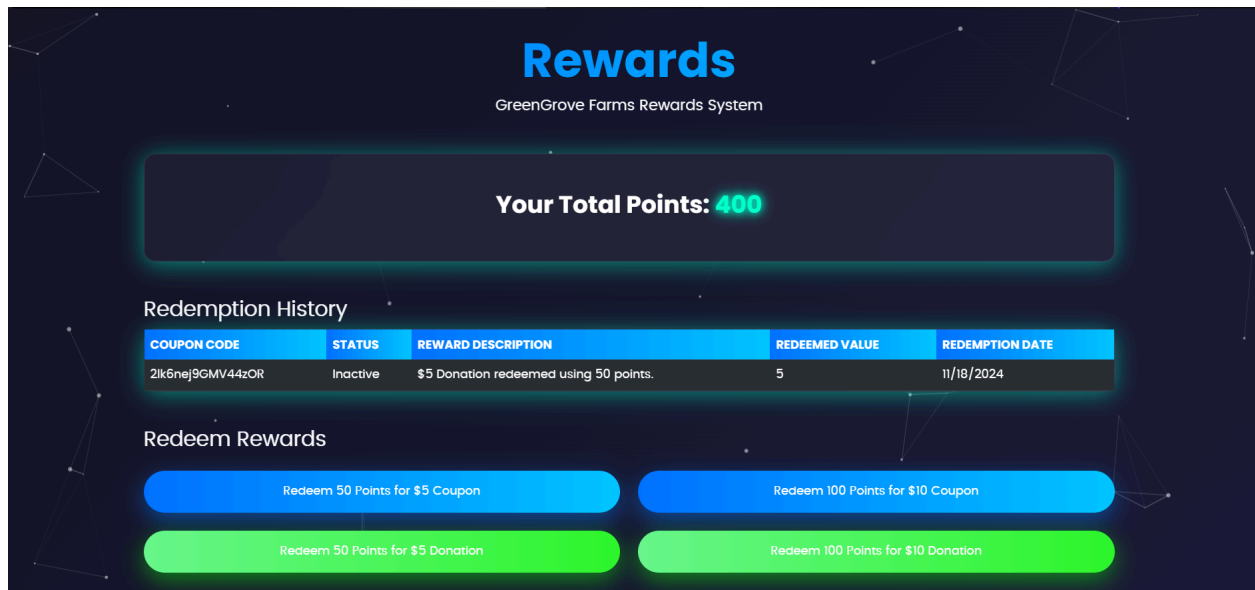
## Introduction

This document provides a detailed overview and explanation of test cases conducted for the GreenGrove Farms Rewards System. The tests validate various functionalities of the system, including points tracking, redemption processes, and user interactions. The goal of these test cases is to ensure that the rewards system works as expected, providing accurate point deductions, updates to the redemption history, and appropriate system feedback to the user.

## Test Scenarios

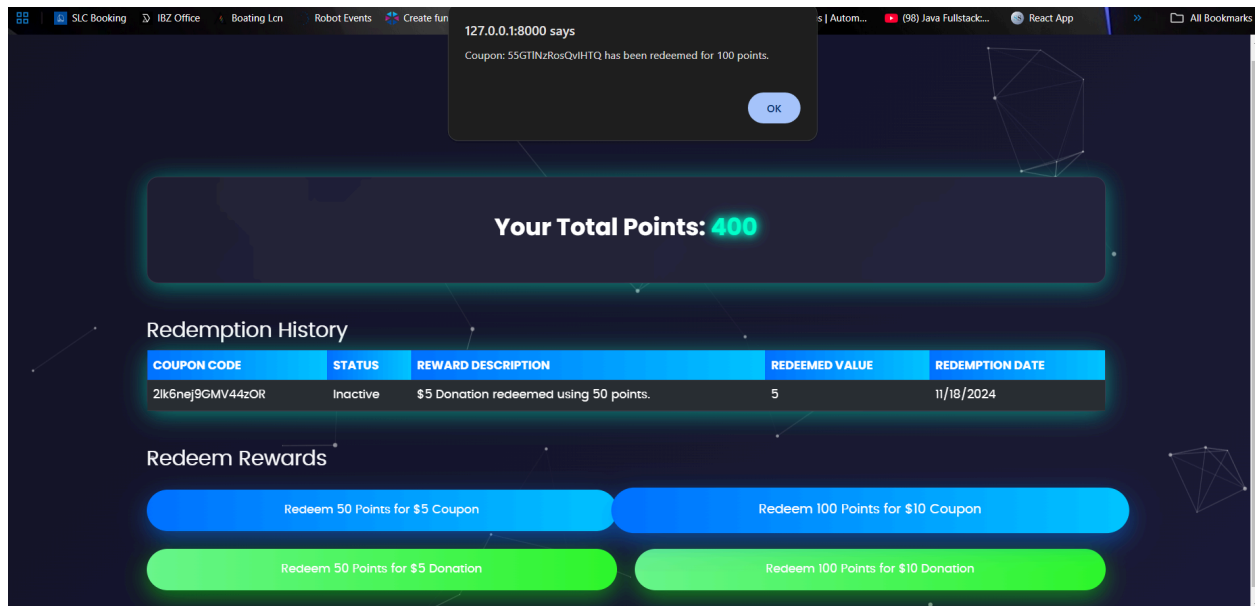
### Test Case 1: Initial Redemption

- Objective: Validate the redemption of points for a \$5 donation using 50 points.
- Steps:
  - User redeems 50 points for a \$5 donation.
  - The system deducts 50 points from the user's total points.
  - The redemption history is updated to show the donation as "Inactive."
- Expected Outcome:
  - Total points decrease by 50 (e.g., from 450 to 400).
  - Redemption history reflects the donation entry with the correct coupon code, status (Inactive), and details.



## Test Case 2: Coupon Redemption

- Objective: Test the redemption of 100 points for a \$10 coupon.
- Steps:
  - User redeems 100 points for a \$10 coupon.
  - The system deducts 100 points from the user's total points.
  - The coupon is marked as Active until it is used.
  - A confirmation message displays the redeemed coupon code.
- Expected Outcome:
  - Total points decrease by 100 (e.g., from 400 to 300).
  - Redemption history includes the \$10 coupon entry with status Active.



## Test Case 3: Multiple Redemptions

- Objective: Ensure the system handles consecutive redemptions without errors.
- Steps:
  - User redeems 50 points for a \$5 donation.
  - User redeems 100 points for a \$10 coupon.
  - The redemption history reflects both transactions accurately.
- Expected Outcome:
  - Points are reduced correctly (e.g., from 400 to 250 after both redemptions).
  - Redemption history includes both items with proper coupon codes, statuses, and descriptions.

The screenshot displays a web application interface for redeeming rewards. At the top, a notification box states: "127.0.0.1:8000 says Donation of \$10.0 has been redeemed for 100 points." Below this, a large green box shows "Your Total Points: 300". Underneath is a "Redemption History" section with a table containing two entries. The first entry is for a \$5 donation redeemed using 50 points, with a status of "Inactive" and a redemption date of 11/18/2024. The second entry is for a \$10 coupon redeemed using 100 points, with a status of "Active" and a redemption date of 11/21/2024. At the bottom, there is a "Redeem Rewards" section with four buttons: "Redeem 50 Points for \$5 Coupon", "Redeem 100 Points for \$10 Coupon", "Redeem 50 Points for \$5 Donation", and "Redeem 100 Points for \$10 Donation".

COUPON CODE	STATUS	REWARD DESCRIPTION	REDEEMED VALUE	REDEMPTION DATE
2lk6nej9GMV44zOR	Inactive	\$5 Donation redeemed using 50 points.	5	11/18/2024
55GT1NzRosQvIHTQ	Active	\$10 Coupon redeemed using 100 points.	10	11/21/2024

## Test Case 4: Redeeming Beyond Available Points

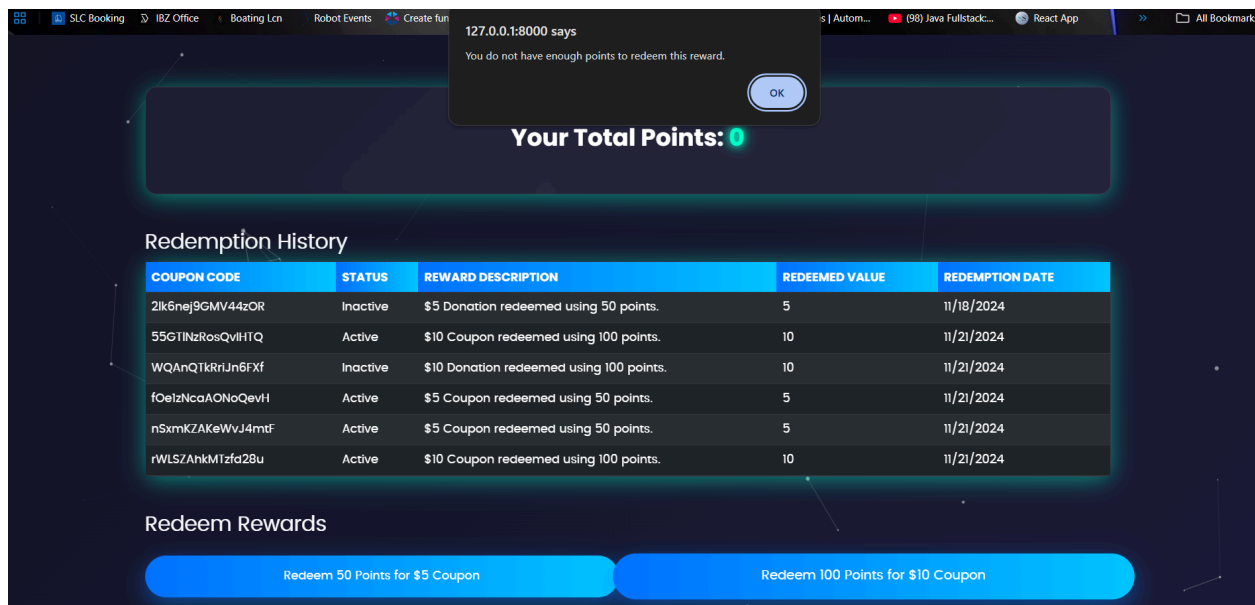
- Objective: Test the system's behavior when the user attempts to redeem more points than they have available.
- Steps:
  - User redeems multiple rewards until their points are depleted.
  - User attempts to redeem another reward.
  - The system blocks the redemption and displays an appropriate error message.
- Expected Outcome:
  - Points do not go negative.
  - An error message appears: "You do not have enough points to redeem this reward."
  - Redemption history remains unchanged after the failed attempt.

The screenshot shows a web application interface for redeeming points. At the top, a dark notification box displays the message: "127.0.0.1:8000 says Coupon: f0e1zNcaADNoQevH has been redeemed for 50 points." with an "OK" button. Below this, a large dark box shows "Your Total Points: 200" in green. Underneath is a "Redemption History" section with a table containing three rows of redemption records. At the bottom, a "Redeem Rewards" section features four buttons: "Redeem 50 Points for \$5 Coupon", "Redeem 100 Points for \$10 Coupon", "Redeem 50 Points for \$5 Donation", and "Redeem 100 Points for \$10 Donation".

COUPON CODE	STATUS	REWARD DESCRIPTION	REDEEMED VALUE	REDEMPTION DATE
2lk6nej9GMV44zOR	Inactive	\$5 Donation redeemed using 50 points.	5	11/18/2024
55GTINzRosQvIH1Q	Active	\$10 Coupon redeemed using 100 points.	10	11/21/2024
WQAnQTrRrJn6FXf	Inactive	\$10 Donation redeemed using 100 points.	10	11/21/2024

## Test Case 5: Final Points Validation After Exhausting Rewards

- Objective: Validate the system's functionality and redemption history after the user has utilized all points.
- Steps:
  - User redeems points for multiple rewards, exhausting all points.
  - The redemption history reflects all transactions, and total points are zero.
  - User attempts to perform any other action involving points.
- Expected Outcome:
  - Total points are zero.
  - Redemption history lists all rewards redeemed, with accurate statuses and descriptions.
  - Any further actions requiring points are disallowed, with appropriate feedback to the user.



## Conclusion

These test cases confirm that the GreenGrove Farms Rewards System processes redemptions accurately, prevents over-redemptions, and provides a reliable user experience. The redemption history ensures transparency, and all test results align with expected outcomes, demonstrating the robustness of the system.