

# ***RANDOM DATA GENERATOR***

## **TEST REPORT**

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Version *<1.0>*

By Andy Zhu

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# 1 INTRODUCTION

## 1.1 PURPOSE

This Random Data Generator Test Report provides a summary of the results of test performed as outlined within this document.

## 2 TEST REPORT

The website tested was the Random Data Generator available at <https://codebeautify.org/generate-random-date>.

This tool is designed to generate random data for various purposes, including testing, simulations, and data analysis.

The goal of this report is to show the following:

- System Environment
- Test Types Performed and Status of test cases executed

### 2.1 SYSTEM ENVIRONMENT:

**System Name and Version:** *Windows 11, version 23H2*

**Hardware:** *Intel 13<sup>th</sup> gen i9-13900T, 64gb ram. 2TB ssd*

### 2.2 TEST TYPE: FUNCTIONAL TESTING

The main purpose is to test the functions of the object.

The object has 5 input fields that allow user to customize the output results.

For 5 input fields, Boundary Value Analysis (BVA) was performed to determine the function for each field with different value of inputs.

The object has 3 buttons that allow user to handle the results.

All buttons are tested to determine results of the intended functions.

**Test Owner:** *Andy Zhu*

**Test Date:** *2024-06-12*

**Test Results:** This is the status of all the test cases that are run

Test Case Status	Number of Test Cases
Total Number of TCs	25
Passed TCs	21
Failed TCs	4

### 2.3 TEST TYPE: PERFORMANCE TESTING – COMPATIBILITY TESTING

The main purpose is to test the compatibility of the object in different browsers.

Two mainstream browsers are tested: Google Chrome and Microsoft Edge.

**Test Owner:** *Andy Zhu*

**Test Date:** *2024-06-12*

**Test Environment:**

*Google Chrome(64-bit), Version 126.0.6478.57*

*Microsoft Edge(64-bit), Version 125.0.2535.92*

**Test Results:** *Tested the object in all of the test environments listed above and passed the compatibility test.*

Test Case Status	Number of Test Cases
Total Number of TCs	2
Passed TCs	2
Failed TCs	0

## 3 TEST ASSESSMENT

Three defects are found during the testing.

**Defect 1:** Numbers of dates generated bug

Description: When generating more than 999999 sets of random dates, the website experience freezing and might resulted in crash. The chances of the crash increases as the sets of random dates increases more than 999999.

**Defect 2:** Incorrect dates generated within certain date range

Description: When selected either option in 'Date Output Format', and in the 'Start date' filled in any start date earlier than '100-01-01 00:00:00' (e.g. '99-12-31 23:59:59'), and in the 'End date' filled in any date after '100-01-01 00:00:00' (e.g. '1000-12-31 23:59:59'), the year value of the results generated is incorrect.

**Defect 3:** Dates still generated when start date and end date are in reversed order

Description: When the input of start date is after (larger than) the input the end date, the results will be generated from the range of End date to Start date.

**Defect 4:** The function of 'Generate Random Date' button is not well defined

Description: When open the website or changed the value in any of the input fields, the results are generated immediately, which make the purpose of 'Generate Random Date' button unclear.

## 4 SUGGESTED ACTIONS

The following are suggested actions for all 3 defects:

**Defect 1:** Set a maximum value for how many sets of dates can be generated without impact of application performance.

**Defect 2:** Correctly handle the generated results for the start date earlier than '100-01-01 00:00:00' and the 'End date' after '100-01-01 00:00:00', the correct results should be generated within this date range.

### **Defect 3:**

Suggested solution 1: The start date should always be earlier than the end date, so if the input end date is earlier than the input start date, it should give an error message asking user to modify the input in the correct sequence.

Suggested solution 2: Change the input box names of 'Start date' and 'End date' to 'Date One' and 'Date Two'

### **Defect 4:**

Suggested solution 1: Change the button name of 'Generate Random Date' into 'Regenerate Random Date'

Suggested solution 2: Change the function of the website so when different variables are entered, the random dates do not generated automatically, and only generated when user click 'Generate Random Date' button.