

Test Report – Random Date Generator (In-Scope Only)

Project: Random Date Generator – CodeBeautify

Scope: Core functionality of the random date generator

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Environment: Chrome 139.0, Windows 10

1. Objective

Verify that the random date generator produces valid dates within the specified range, including edge cases such as leap years and equal start/end dates.

2. Test Approach

- **Functional testing:** Validate generated output is always a date.
- **Boundary testing:** Check extreme ranges and equal start/end.
- **Negative testing:** Enter invalid ranges (Start > End).
- **Exploratory testing:** Generate multiple dates to observe randomness.

3. Test Scenarios & Results

Test ID	Scenario	Steps	Expected Result	Actual Result	Status
TC-01	Default generation	Click "Generate Random Date" without entering range	Date is generated in default range	Works as expected	✓ Pass
TC-02	Valid custom range	Set From=01-Jan-2000, To=31-Dec-2005	Generated date within 2000-2005	All generated dates within range	✓ Pass
TC-03	Boundary test (equal dates)	From=01-Jan-2020, To=01-Jan-2020	Always returns 01-Jan-2020	Works correctly	✓ Pass
TC-04	Leap year check	From=01-Feb-2016, To=29-Feb-2016	Date includes 29-Feb-2016 when generated	Leap day appears correctly	✓ Pass
TC-	Invalid		Tool	Still	✗ Fail

05	range	From=01-Jan-2020	should reject invalid range	generates a date (unexpected)	
TC-06	Large range	From=01-Jan-0001, To=31-Dec-9999	Generates valid date within range	Works correctly	✓ Pass
TC-07	Randomness check	Generate 20 times	Dates should vary, no clustering	Appears random	✓ Pass
TC-08	Default output format	Generate date	Output in default format (e.g., MM-DD-YYYY)	Works correctly	✓ Pass
TC-09	Change output format (e.g., YYYY-MM-DD hh:mm:ss)	Select format, generate date	Date matches selected format	Works as expected	✓ Pass
TC-10	Custom	format	Date output matches custom	Works as expected	✓ Pass

	date format	Enter custom format (e.g., YYYY/MM/ DD, DD MMM YYYY)	format		
TC- 11	Invalid custom format	Enter invalid format string	Should show error or default to standard format	Defaults silently to standard format	⚠ Observati on
TC- 12	Edge case with format	Custom format with day/month names	Date correctly formatte d	Works	✓ Pass

4. Observations

- All format options are functional.
- Custom format works but invalid format strings are not validated — currently defaults silently, which could confuse users.

- Core generation logic and formatting otherwise reliable.

5. Conclusion

The random date generator is functional but fails to handle invalid ranges. This reduces trust in correctness and should be fixed with simple validation.