

Next Date Example

Reference: "How We Test Software at Microsoft" (Microsoft Press)

"Next Date" program.

Three Input Fields: Month, Day, Year

Two Buttons: "Next Date", "Close"

Works only on dates after the Gregorian calendar was adopted on 10/15/1582

Leap Year Refresher

Year X is a leap year if either:

- 1) $(X \% 4 == 0) \ \&\& \ (X \% 100 != 0)$
- 2) $X \% 400 == 0$

Equivalence Classes

Month

- V1 30 day months
- V2 31 day months
- V3 February

- I1 ≥ 13
- I2 ≤ 0
- I3 Any non-integer
- I4 Empty
- I5 ≥ 3 integers

Day

- V4 1 – 28 (all months have these days)
- V5 29 (some months have this day, some don't)
- V6 30 (ditto)
- V7 31 (ditto)

- I6 ≥ 32
- I7 ≤ 0
- I8 Any non-integer
- I9 Empty
- I10 ≥ 3 integers

Year

- V8 Non-leap year
 - V9 Leap year
 - V10 Century non-leap year
 - V11 Century leap year
- I11 ≤ 1581
 - I12 ≥ 3001 (or some other integer you can determine is larger than the max year)
 - I13 Any non-integer
 - I14 Empty
 - I15 ≥ 5 integers