

Assignment 2 - KS489

Rough draft of categories

Pattern size

Empty	empty
Many characters	non-empty

Day of week

Empty	empty
Length = 3	non-empty
Length != 3	non-empty

Day of week spacing

Empty	day of week empty
Has comma and space,	day of week not empty

Day of month

Empty	empty
Length > 0 and length < 3	non-empty
Length > 2	non-empty

Day of month spacing

Empty	day of month empty
Has space	day of month not empty

Month of year

Empty	empty
Value > 0	non-empty
Value < 10000	non-empty

Category Table with Constraints

Category	Condition	Constraint
	Pattern size	
A	Empty	Pattern Empty
B	Many Characters	Pattern Non-empty
	Day of week	
C	Empty	Pattern Empty
D	Length == 3	Pattern Non-empty
E	Length != 3	Pattern Non-empty
	Day of week spacing	
F	Empty	Day of week empty or pattern empty
G	Has space and comma	Day of week non-empty and pattern non-empty
	Day of month	
H	Empty	Day of month Empty or pattern empty
I	Length > 0 and length < 3	Day of month Non-empty and Pattern non-empty
J	Length > 2	Non-empty
	Day of month spacing	
K	Empty	Day of month empty or pattern empty
L	Has space	Day of month not empty and pattern non-empty
	Year	
M	Empty	Month of year Empty or pattern empty
N	Value < 0 OR Value > 10000	Month of year Non-empty and pattern non-empty
O	Value >= 0000 AND Value < 10000	Month of year Non-empty and pattern non-empty

Category Documentation reference

Category	Documentation Reference Text
A	
B	
C	If the day-of-week is not available to format or parse then jump to day-of-mo
D	Three letter day-of-week in English
E	
F	
G	A comma, A space
H	
I	One or two digits for the day-of-month
J	
K	
L	A space
M	
N	
O	Four digits for the year. Only years in the range 0000 to 9999 are supported

Below is the referenced documentation for the categories

The RFC-1123 date-time formatter, such as 'Tue, 3 Jun 2008 11:05:30 GMT'.

This returns an immutable formatter capable of formatting and parsing most of the RFC-1123 format. RFC-1123 updates RFC-822 changing the year from two digits to four. This implementation requires a four digit year. This implementation also does not handle North American or military zone names, only 'GMT' and offset amounts.

The format consists of:

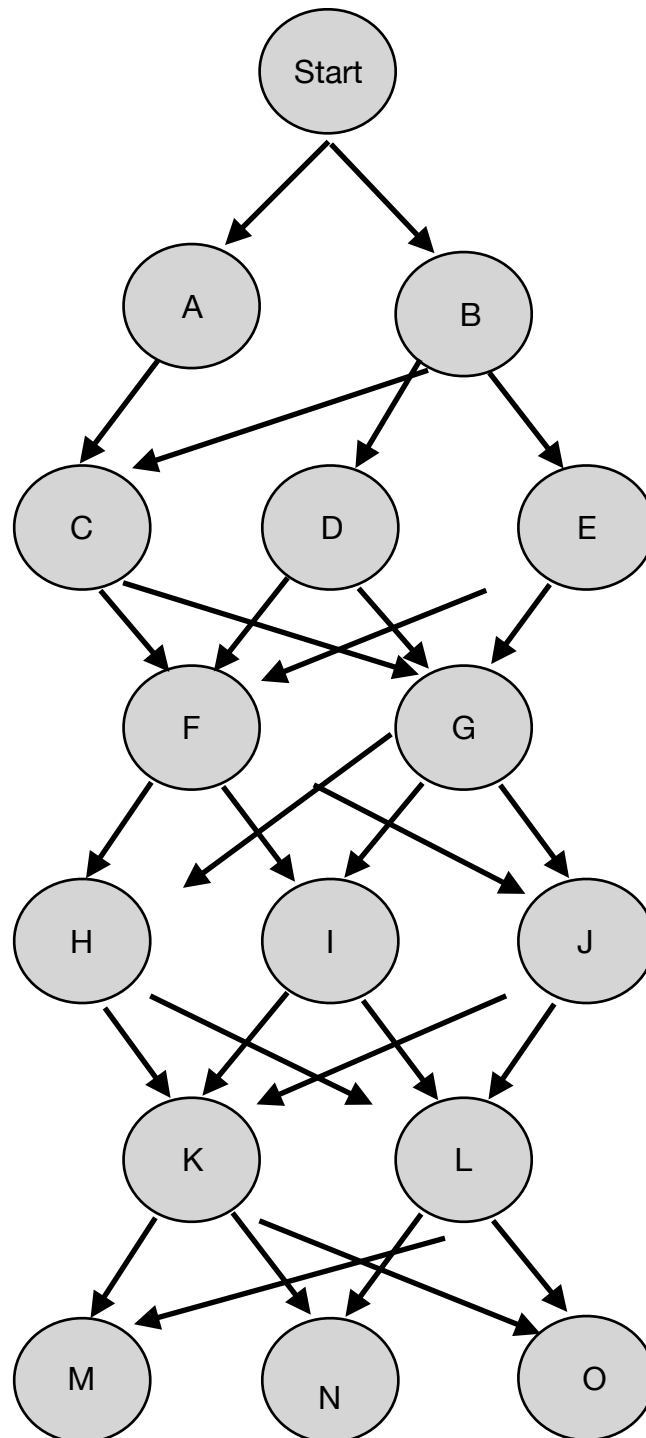
- If the day-of-week is not available to format or parse then jump to day-of-month.
- Three letter day-of-week in English.
- A comma
- A space
- One or two digits for the day-of-month.
- A space
- Three letter month-of-year in English.
- A space
- Four digits for the year. Only years in the range 0000 to 9999 are supported.
- A space
- Two digits for the hour-of-day. This is pre-padded by zero to ensure two digits.
- A colon
- Two digits for the minute-of-hour. This is pre-padded by zero to ensure two digits.
- If the second-of-minute is not available then jump to the next space.
- A colon
- Two digits for the second-of-minute. This is pre-padded by zero to ensure two digits.
- A space
- The offset ID without colons or seconds. An offset of zero uses "GMT". North American zone names and military zone names are not handled.

Parsing is case insensitive.

The returned formatter has a chronology of ISO set to ensure dates in other calendar systems are correctly converted. It has no override zone and uses the SMART resolver style.

Category Diagram

The arrows are a little untidy but this was due to “Pages” application removing the letters from the circle.



Test cases

Below is a table that shows the categories used for each test case along with a sample date string used to parse the date and weather we were expecting the function to pass or fail.

Test Case	First	Second	Third	Fourth	Fifth	Sixth	Date String	Pass / Fail
1	A	-	-	-	-	-	""	Fail
2	B	C	F	I	L	O	"3 Jun 2008 11:05:30 GMT"	Pass
3	B	D	G	I	L	O	"Tue, 3 Jun 2008 11:05:30 GMT"	Pass
4	B	D	G	I	L	N	"Tue, 3 Jun 11000 11:05:30 GMT"	Pass
5	B	D	G	I	L	M	"Tue, 3 Jun 11:05:30 GMT"	Fail
6	B	D	G	I	K	O	"Tue, 3Jun 2008 11:05:30 GMT"	Fail
7	B	E	G	I	L	O	"Tuesday, 3 Jun 2008 11:05:30 GMT"	Fail
8	B	C	G	I	L	O	", 3 Jun 2008 11:05:30 GMT"	Pass
9	B	D	F	I	L	O	"Tue3 Jun 2008 11:05:30 GMT"	Fail
10	B	D	G	H	L	O	"Tue, Jun 2008 11:05:30 GMT"	Fail