Danish Module for datetime2 Package

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This module is currently unmaintained and may be subject to change. If you want to volunteer to take over maintanance, contact me at http://www.dickimaw-books.com/contact.html

Abstract

This is the Danish language module for the datetime2 package. If you want to use the settings in this module you must install it in addition to installing datetime2. If you use babel or polyglossia, you will need this module to prevent them from redefining \today. The datetime2 useregional setting must be set to text or numeric for the language styles to be set. Alternatively, you can set the style in the document using \DTMsetstyle, but this may be changed by \date⟨*language*⟩ depending on the value of the useregional setting.

I've copied the date style from babel-danish's \today.

I don't know if these settings are correct as I can't speak Danish. In particular, I don't know if the danish time style is correct. Currently this just uses the default time style. Please be aware that this may change. Whoever takes over maintanance of this module may can change it as appropriate.

The new maintainer should add the line:

```
 The Current Maintainer of this work is Name.
```

to the preamble part in datetime2-danish.ins where Name is the name of the maintainer(s) and replace the 'inactive' status to 'maintained'.

Currently there is only a regionless style.

1 The Code

1.1 UTF-8

This file contains the settings that use UTF-8 characters. This file is loaded if XeLaTeX or LuaLaTeX are used. Please make sure your text editor is set to UTF-8 if you want to view this code. Identify module

```
1 \ProvidesDateTimeModule{danish-utf8}[2018/03/19 v1.1]
```

`\DTMdanishordinal`

```
2 \newcommand*{\DTMdanishordinal}[1]{%
3   \number#1.%
4 }
```

`\DTMdanishmonthname`   Danish month names.

```
5 \newcommand*{\DTMdanishmonthname}[1]{%
6   \ifcase#1
7   \or
8   januar%
9   \or
10  februar%
11  \or
12  marts%
13  \or
14  april%
15  \or
16  maj%
17  \or
18  juni%
19  \or
20  juli%
21  \or
22  august%
23  \or
24  september%
25  \or
26  oktober%
27  \or
28  november%
29  \or
30  december%
31  \fi
32 }
```

`\DTMdanishMonthname`   As above but capitalize.

```
33 \newcommand*{\DTMdanishMonthname}[1]{%
34  \ifcase#1
35  \or
36  Januar%
37  \or
38  Februar%
39  \or
40  Marts%
41  \or
42  April%
43  \or
44  Maj%
45  \or
```

```
46  Juni%
47  \or
48  Juli%
49  \or
50  August%
51  \or
52  September%
53  \or
54  Oktober%
55  \or
56  November%
57  \or
58  December%
59  \fi
60 }
```

If abbreviated dates are supported, short month names should be likewise provided.

\DTMdanishweekdayname   Danish day of week names.

```
61 \newcommand*{\DTMdanishweekdayname}[1]{%
62   \ifcase#1
63   mandag%
64   \or
65   tirsdag%
66   \or
67   onsdag%
68   \or
69   torsdag%
70   \or
71   fredag%
72   \or
73   lørdag%
74   \or
75   søndag%
76   \fi
77 }
```

\DTMdanishWeekdayname   As above but start with a capital.

```
78 \newcommand*{\DTMdanishWeekdayname}[1]{%
79   \ifcase#1
80   Mandag%
81   \or
82   Tirsdag%
83   \or
84   Onsdag%
85   \or
86   Torsdag%
87   \or
88   Fredag%
89   \or
```

```
90    Lørdag%
91    \or
92    Søndag%
93    \fi
94 }
```

1.2   ASCII

This file contains the settings that use LATEX commands for non-ASCII characters. This should be input if neither XeLaTeX nor LuaLaTeX are used. Even if the user has loaded inputenc with `utf8`, this file should still be used not the `datetime2-danish-utf8.ldf` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```
95 \ProvidesDateTimeModule{danish-ascii}[2018/03/19 v1.1]
```

If abbreviated dates are supported, short month names should be likewise provided.

`\DTMdanishordinal`

```
96 \newcommand*{\DTMdanishordinal}[1]{%
97    \number#1.%
98 }
```

`\DTMdanishmonthname`   Danish month names.

```
99 \newcommand*{\DTMdanishmonthname}[1]{%
100   \ifcase#1
101   \or
102   januar%
103   \or
104   februar%
105   \or
106   marts%
107   \or
108   april%
109   \or
110   maj%
111   \or
112   juni%
113   \or
114   juli%
115   \or
116   august%
117   \or
118   september%
119   \or
120   oktober%
121   \or
122   november%
123   \or
124   december%
```

```
125   \fi
126 }
```

\DTMdanishMonthname   As above but capitalize.

```
127 \newcommand*{\DTMdanishMonthname}[1]{%
128   \ifcase#1
129   \or
130   Januar%
131   \or
132   Februar%
133   \or
134   Marts%
135   \or
136   April%
137   \or
138   Maj%
139   \or
140   Juni%
141   \or
142   Juli%
143   \or
144   August%
145   \or
146   September%
147   \or
148   Oktober%
149   \or
150   November%
151   \or
152   December%
153   \fi
154 }
```

\DTMdanishweekdayname   Danish day of week names.

```
155 \newcommand*{\DTMdanishweekdayname}[1]{%
156   \ifcase#1
157   mandag%
158   \or
159   tirsdag%
160   \or
161   onsdag%
162   \or
163   torsdag%
164   \or
165   fredag%
166   \or
167   l\protect\o rdag%
168   \or
169   s\protect\o ndag%
170   \fi
```

```
171 }
```

As above but start with a capital.

```
172 \newcommand*{\DTMdanishWeekdayname}[1]{%
173   \ifcase#1
174   Mandag%
175   \or
176   Tirsdag%
177   \or
178   Onsdag%
179   \or
180   Torsdag%
181   \or
182   Fredag%
183   \or
184   L\protect\o rdag%
185   \or
186   S\protect\o ndag%
187   \fi
188 }
```

1.3 Main Danish Module (`datetime2-danish.ldf`)

Identify Module

```
189 \ProvidesDateTimeModule{danish}[2018/03/19 v1.1]
```

Need to find out if XeTeX or LuaTeX are being used.

```
190 \RequirePackage{ifxetex,ifluatex}
```

XeTeX and LuaTeX natively support UTF-8, so load `danish-utf8` if either of those engines are used otherwise load `danish-ascii`.

```
191 \ifxetex
192  \RequireDateTimeModule{danish-utf8}
193 \else
194  \ifluatex
195    \RequireDateTimeModule{danish-utf8}
196  \else
197    \RequireDateTimeModule{danish-ascii}
198  \fi
199 \fi
```

Define the `danish` style. The time style is the same as the `default` style provided by datetime2. This may need correcting. For example, if a 12 hour style similar to the `englishampm` (from the `english-base` module) is required.

Allow the user a way of configuring the `danish` and `danish-numeric` styles. This doesn't use the package wide separators such as `\dtm@datetimesep` in case other date formats are also required.

\DTMdanishdaymonthsep The separator between the day and month for the text format.

```
200 \newcommand*{\DTMdanishdaymonthsep}{\DTMtexorpdfstring{\protect~}{\space}}
```

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\DTMdanishmonthyearsep	The separator between the month and year for the text format.

201 `\newcommand*{\DTMdanishmonthyearsep}{\space}`

\DTMdanishdatetimesep	The separator between the date and time blocks in the full format (either text or numeric).

202 `\newcommand*{\DTMdanishdatetimesep}{\space}`

\DTMdanishtimezonesep	The separator between the time and zone blocks in the full format (either text or numeric).

203 `\newcommand*{\DTMdanishtimezonesep}{\space}`

\DTMdanishdatesep	The separator for the numeric date format.

204 `\newcommand*{\DTMdanishdatesep}{-}`

\DTMdanishtimesep	The separator for the numeric time format.

205 `\newcommand*{\DTMdanishtimesep}{:}`

Provide keys that can be used in \DTMlangsetup to set these separators.

206 `\DTMdefkey{danish}{daymonthsep}{\renewcommand*{\DTMdanishdaymonthsep}{#1}}`
207 `\DTMdefkey{danish}{monthyearsep}{\renewcommand*{\DTMdanishmonthyearsep}{#1}}`
208 `\DTMdefkey{danish}{datetimesep}{\renewcommand*{\DTMdanishdatetimesep}{#1}}`
209 `\DTMdefkey{danish}{timezonesep}{\renewcommand*{\DTMdanishtimezonesep}{#1}}`
210 `\DTMdefkey{danish}{datesep}{\renewcommand*{\DTMdanishdatesep}{#1}}`
211 `\DTMdefkey{danish}{timesep}{\renewcommand*{\DTMdanishtimesep}{#1}}`

TODO: provide a boolean key to switch between full and abbreviated formats if appropriate. (I don't know how the date should be abbreviated.)

Define a boolean key that determines if the time zone mappings should be used.

212 `\DTMdefboolkey{danish}{mapzone}[true]{}`

The default is to use mappings.

213 `\DTMsetbool{danish}{mapzone}{true}`

Define a boolean key that determines if the day of month should be displayed.

214 `\DTMdefboolkey{danish}{showdayofmonth}[true]{}`

The default is to show the day of month.

215 `\DTMsetbool{danish}{showdayofmonth}{true}`

Define a boolean key that determines if the year should be displayed.

216 `\DTMdefboolkey{danish}{showyear}[true]{}`

The default is to show the year.

217 `\DTMsetbool{danish}{showyear}{true}`

Define the danish style. (TODO: implement day of week?)

218 `\DTMnewstyle`
219 `{danish}% label`
220 `{% date style`
221 `  \renewcommand*\DTMdisplaydate[4]{%`
222 `    \DTMifbool{danish}{showdayofmonth}`
223 `    {\DTMdanishordinal{##3}\DTMdanishdaymonthsep}%`
224 `    {}%`

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```
225    \DTMdanishmonthname{##2}%
226    \DTMifbool{danish}{showyear}%
227    {%
228      \DTMdanishmonthyearsep
229      \number##1
230    }%
231    {}%
232    }%
233    \renewcommand*\DTMDisplaydate[4]{%
234      \DTMifbool{danish}{showdayofmonth}
235    {%
236      \DTMdanishordinal{##3}\DTMdanishdaymonthsep
237      \DTMdanishmonthname{##2}%
238    }%
239    {%
240      \DTMdanishMonthname{##2}%
241    }%
242    \DTMifbool{danish}{showyear}%
243    {%
244      \DTMdanishmonthyearsep
245      \number##1
246    }%
247    {}%
248    }%
249    }%
250    {% time style (use default)
251      \DTMsettimestyle{default}%
252    }%
253    {% zone style
254      \DTMresetzones
255      \DTMdanishzonemaps
256      \renewcommand*{\DTMdisplayzone}[2]{%
257      \DTMifbool{danish}{mapzone}%
258      {\DTMusezonemapordefault{##1}{##2}}%
259      {%
260        \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
261        \ifDTMshowzoneminutes\DTMdanishtimesep\DTMtwodigits{##2}\fi
262      }%
263    }%
264    }%
265    {% full style
266      \renewcommand*{\DTMdisplay}[9]{%
267      \ifDTMshowdate
268      \DTMdisplaydate{##1}{##2}{##3}{##4}%
269      \DTMdanishdatetimesep
270      \fi
271      \DTMdisplaytime{##5}{##6}{##7}%
272      \ifDTMshowzone
273      \DTMdanishtimezonesep
274      \DTMdisplayzone{##8}{##9}%
```

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```
275    \fi
276    }%
277    \renewcommand*{\DTMDisplay}[9]{%
278    \ifDTMshowdate
279     \DTMDisplaydate{##1}{##2}{##3}{##4}%
280     \DTMdanishdatetimesep
281    \fi
282    \DTMdisplaytime{##5}{##6}{##7}%
283    \ifDTMshowzone
284     \DTMdanishtimezonesep
285     \DTMdisplayzone{##8}{##9}%
286    \fi
287    }%
288  }%
```

Define numeric style.

```
289 \DTMnewstyle
290 {danish-numeric}% label
291 {% date style
292    \renewcommand*\DTMdisplaydate[4]{%
293      \DTMifbool{danish}{showdayofmonth}%
294      {%
295        \number##3 % space intended
296        \DTMdanishdatesep
297      }%
298      {}%
299      \number##2 % space intended
300      \DTMifbool{danish}{showyear}%
301      {%
302        \DTMdanishdatesep
303        \number##1 % space intended
304      }%
305      {}%
306    }%
307    \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
308 }%
309 {% time style
310    \renewcommand*\DTMdisplaytime[3]{%
311      \number##1
312      \DTMdanishtimesep\DTMtwodigits{##2}%
313      \ifDTMshowseconds\DTMdanishtimesep\DTMtwodigits{##3}\fi
314    }%
315 }%
316 {% zone style
317    \DTMresetzones
318    \DTMdanishzonemaps
319    \renewcommand*{\DTMdisplayzone}[2]{%
320      \DTMifbool{danish}{mapzone}%
321      {\DTMusezonemapordefault{##1}{##2}}%
322      {%
```

```
323        \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
324        \ifDTMshowzoneminutes\DTMdanishtimesep\DTMtwodigits{##2}\fi
325      }%
326    }%
327 }%
328 {% full style
329   \renewcommand*{\DTMdisplay}[9]{%
330     \ifDTMshowdate
331      \DTMdisplaydate{##1}{##2}{##3}{##4}%
332      \DTMdanishdatetimesep
333     \fi
334     \DTMdisplaytime{##5}{##6}{##7}%
335     \ifDTMshowzone
336      \DTMdanishtimezonesep
337      \DTMdisplayzone{##8}{##9}%
338     \fi
339    }%
340    \renewcommand*{\DTMDisplay}{\DTMdisplay}%
341 }
```

\DTMdanishzonemaps   The time zone mappings are set through this command, which can be redefined if extra
                     mappings are required or mappings need to be removed.

```
342 \newcommand*{\DTMdanishzonemaps}{%
343   \DTMdefzonemap{01}{00}{CET}%
344   \DTMdefzonemap{02}{00}{CEST}%
345 }
```

     Switch style according to the useregional setting.

```
346 \DTMifcaseregional
347 {}% do nothing
348 {\DTMsetstyle{danish}}
349 {\DTMsetstyle{danish-numeric}}
```

     Redefine \datedanish (or \date⟨*dialect*⟩) to prevent babel from resetting \today.
(For this to work, babel must already have been loaded if it's required.)

```
350 \ifcsundef{date\CurrentTrackedDialect}
351 {%
352   \ifundef\datedanish
353   {% do nothing
354   }%
355   {%
356     \def\datedanish{%
357       \DTMifcaseregional
358       {}% do nothing
359       {\DTMsetstyle{danish}}%
360       {\DTMsetstyle{danish-numeric}}%
361     }%
362   }%
363 }%
364 {%
```

```
365    \csdef{date\CurrentTrackedDialect}{%
366      \DTMifcaseregional
367      {}% do nothing
368      {\DTMsetstyle{danish}}%
369      {\DTMsetstyle{danish-numeric}}%
370    }%
371 }%
```

Change History

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