Tibble time test

```r
#load the libraries
library(tidyverse)
```

```
## Loading tidyverse: ggplot2
## Loading tidyverse: tibble
## Loading tidyverse: tidyr
## Loading tidyverse: readr
## Loading tidyverse: purrr
## Loading tidyverse: dplyr

## Conflicts with tidy packages ----------------------------------------------

## filter(): dplyr, stats
## lag():    dplyr, stats
```

```r
library(lubridate)
```

```
##
## Attaching package: 'lubridate'

## The following object is masked from 'package:base':
##
##     date
```

```r
library(tibbletime)
```

```
##
## Attaching package: 'tibbletime'

## The following object is masked from 'package:stats':
##
##     filter
```

```r
#load the data

Test_data <- read_csv("/home/greig/R-projects/Tibbletime/Test_data.csv")
```

```
## Parsed with column specification:
## cols(
##   Date_no_time = col_date(format = ""),
##   Date_with_time = col_datetime(format = "")
## )
```

```r
glimpse(Test_data)
```

```
## Observations: 3,016
## Variables: 2
## $ Date_no_time   <date> 2017-07-02, 2017-07-02, 2017-07-02, 2017-07-02...
## $ Date_with_time <dttm> 2017-07-02 14:45:00, 2017-07-02 12:00:00, 2017...
```

```r
#Transform the data

Test_data <- Test_data %>%
  mutate(
    Date_year = year(Date_no_time),
    Date_week = week(Date_no_time)
```

```r
  )

glimpse(Test_data)
```

```
## Observations: 3,016
## Variables: 4
## $ Date_no_time   <date> 2017-07-02, 2017-07-02, 2017-07-02, 2017-07-02...
## $ Date_with_time <dttm> 2017-07-02 14:45:00, 2017-07-02 12:00:00, 2017...
## $ Date_year      <dbl> 2017, 2017, 2017, 2017, 2017, 2017, 2017, 2017,...
## $ Date_week      <dbl> 27, 27, 27, 27, 27, 27, 27, 27, 27, 27, 27, 27,...
```

```r
#Lubridate series

Result_lubridate <- Test_data %>%
  group_by(Date_year, Date_week) %>%
  summarise(Count = n())

glimpse(Result_lubridate)
```

```
## Observations: 4
## Variables: 3
## $ Date_year <dbl> 2017, 2017, 2017, 2017
## $ Date_week <dbl> 27, 28, 29, 30
## $ Count     <int> 767, 760, 771, 718
```

```r
#Tibble time series

Tibble_data <- as_tbl_time(Test_data, index = Date_no_time)

Result_tibble <- Tibble_data %>%
  time_summarise(
    period = "weekly",
    Count = n()
  )

glimpse(Result_tibble)
```

```
## Observations: 4
## Variables: 2
## $ Date_no_time <date> 2017-07-08, 2017-07-15, 2017-07-22, 2017-07-28
## $ Count        <int> 767, 760, 771, 718
```

```r
#Tibble time series with time

Tibble_data2 <- as_tbl_time(Test_data, index = Date_with_time)

Result_tibble2 <- Tibble_data2 %>%
  time_summarise(
    period = "weekly",
    Count = n()
  )

glimpse(Result_tibble2)
```

```
## Observations: 1
## Variables: 2
```

```
## $ Date_with_time <dttm> 2017-07-28 23:00:00
## $ Count        <int> 3016
```