```
In [5]:
        import matplotlib.pyplot as plt
        import matplotlib.dates as mdates
        import matplotlib.ticker as mticker
        from matplotlib.finance import candlestick_ohlc
        from matplotlib import style
        import numpy as np
        import urllib
        import datetime as dt
        %matplotlib inline
        style.use('fivethirtyeight')
        print(plt.style.available)
        print(plt. file )
        def bytespdate2num(fmt, encoding='utf-8'):
            strconverter = mdates.strpdate2num(fmt)
            def bytesconverter(b):
                s = b.decode(encoding)
                return strconverter(s)
            return bytesconverter
        #converting the datestamps from the Yahoo finance API to times that Matplotlib
         understands
        def bytespdate2num(fmt, encoding='utf-8'):
            strconverter = mdates.strpdate2num(fmt)
            def bytesconverter(b):
                s = b.decode(encoding)
                return strconverter(s)
            return bytesconverter
        def graph data():
            fig = plt.figure()
            ax1 = plt.subplot2grid((1,1), (0,0))
            # Unfortunately, Yahoo's API is no longer available
            # feel free to adapt the code to another source, or use this drop-in repla
        cement.
            stock_price_url = 'https://pythonprogramming.net/yahoo_finance_replacemen
        t'
            source_code = urllib.request.urlopen(stock_price_url).read().decode()
            stock_data = []
            split source = source code.split('\n')
            for line in split source[2:]:
                 split_line = line.split(',')
                 if len(split line) == 7:
                     if 'values' not in line and 'labels' not in line:
                         stock_data.append(line)
```

```
# pprint.pprint(stock data)
    date, openp, highp, lowp, closep, adj_closep, volume = np.loadtxt(stock_da
ta,
                                                                        delimite
r=',',
                                                                        unpack=T
rue,
                                                                        # %Y = f
ull year. 2015
                                                                        # %v = p
artial year 15
                                                                        \# \%m = n
umber month
                                                                        \# %d = n
umber day
                                                                        # %H = h
ours
                                                                        \# \%M = m
inutes
                                                                        # %S = S
econds
                                                                        # 12-06-
2014
                                                                        # %m-%d-
%Y
                                                                        converte
rs={0: bytespdate2num('%Y-%m-%d')})
    x = 0
    y = len(date)
    ohlc = []
    while x < y:
        append me = date[x], openp[x], highp[x], lowp[x], closep[x], volume[x]
        ohlc.append(append_me)
        x+=1
    candlestick ohlc(ax1, ohlc, width=0.4, colorup='#77d879', colordown='#db3f
3f')
    for label in ax1.xaxis.get_ticklabels():
        label.set_rotation(45)
    ax1.xaxis.set_major_formatter(mdates.DateFormatter('%Y-%m-%d'))
    ax1.xaxis.set major locator(mticker.MaxNLocator(10))
    ax1.grid(True)
    bbox_props = dict(boxstyle='round',fc='w', ec='k',lw=1)
    #annotation for last stock price, but here it is first price
    ax1.annotate(str(closep[-1]), (date[-1], closep[-1]),
                 xytext = (date[-1]+3, closep[-1]), bbox=bbox props)
      # Annotation example with arrow
##
##
      ax1.annotate('Bad News!',(date[11],highp[11]),
##
                   xytext=(0.8, 0.9), textcoords='axes fraction',
```

```
##
                   arrowprops = dict(facecolor='qrey',color='qrey'))
##
##
      # Font dict example
##
      font_dict = {'family':'serif',
##
                    'color':'darkred',
##
##
                    'size':15}
##
      # Hard coded text
      ax1.text(date[10], closep[1], 'Text Example', fontdict=font_dict)
##
    plt.xlabel('Date')
    plt.ylabel('Price')
    plt.title('Market stock')
    #plt.legend()
    plt.subplots_adjust(left=0.11, bottom=0.24, right=0.87, top=0.90,
wspace=0.2, hspace=0)
    plt.show()
graph_data()
```

['seaborn-muted', 'seaborn-whitegrid', 'grayscale', 'seaborn-dark', 'seaborn-talk', 'dark_background', 'fivethirtyeight', 'seaborn-notebook', 'seaborn-paper', 'seaborn-ticks', 'ggplot', 'seaborn-colorblind', 'classic', 'seaborn-white', 'seaborn-pastel', 'seaborn-darkgrid', 'seaborn-bright', 'bmh', 'seaborn-deep', 'seaborn-poster', 'seaborn-dark-palette']
C:\Users\SIDDHARTH\Anaconda3\lib\site-packages\matplotlib\pyplot.py

