```
1 import sys
 2 import re
 3 from colorama import Fore, init
 5 from colorama import Fore, init
7 init()
8
9 # logger = logging.getLogger("canvasapi")
10 # handler = logging.StreamHandler(sys.stdout)
11 # formatter = logging.Formatter('%(asctime)s - %(name
   )s - %(levelname)s - %(message)s')
12 #
13 # handler.setLevel(logging.DEBUG)
14 # handler.setFormatter(formatter)
15 # logger.addHandler(handler)
16 # logger.setLevel(logging.DEBUG)
17
18 from canvasapi import Canvas
19 API_URL = "https://chartercollege.instructure.com"
20 API_KEY = "10319~
   ribyd9ZFYxHT3YMxJbVKyQw2Q00vIi3HQg8Wwf7U79k2bDw3xLxDs
  KL9sRwthd5F"
21 # initialize a new canvas object
22 canvas = Canvas(API_URL, API_KEY)
23
24 print(Fore.LIGHTBLUE_EX +
   ************************
25 print('*
            ver. 1.3
   *')
26 print('* This script will search a course\'s
  Assignments and Pages
             HTML for specific words and text. Please
27 print('*
                      *')
  be careful!
28 print('*
             There is no undo button. Pages can be
   reverted with version *')
29 print('*
             history in Canvas but assignments cannot.
  Avoid characters
                     *')
30 print('*
             such as paren (, etc they will crash the
  program
                      *')
31 print('*
             '+Fore.LIGHTYELLOW_EX+'ex: search for <b><</pre>
   u>Phrase</u></b>'+Fore.LIGHTBLUE EX+
```

```
31 '
32 print('*
             '+Fore.LIGHTYELLOW_EX+'
                                       replace with <b
  ><i>Phrase</i></b>'+Fore.LIGHTBLUE_EX+
33 print(
   34
35 Search = True
36 while Search == True:
37
      try:
          course_id = input("Please enter the course ID
38
   , for example (9524) or (q): ")
39
          if len(course_id) > 5:
              course_id = input("Please an ID with less
40
   than 5 digits: ")
41
          if course_id == 'q':
42
              sys.exit()
43
          course = canvas.get_course(course_id)
44
          course_pages = course.get_pages()
45
          course_assignments = course.get_assignments()
46
47
      except ValueError:
          print('We need a number like 9524')
48
          course_id = input("Please enter the course ID
49
    for example (9524) or (q): ")
          if course_id == 'q' or course_id == str:
50
51
              sys.exit()
      except NameError:
52
          print('That course does not exist')
53
          course_id = input("Please enter a number like
54
    (12345) or (q): ")
          if course_id == 'q' or course_id != type(int
55
  ):
56
              sys.exit()
      except TypeError:
57
          course_id = input("Please enter a number like
58
    (01234) or (q): ")
59
          if course_id == 'q' or course_id != type(int
  ):
60
              sys.exit()
61
      # except ResourceDoesNotExist("Not Found"):
            course_id = input("Please enter a number
62
  like (01234) or (q): ")
```

```
if course_id == 'q' or course_id != type(
63
  int):
64
      #
                sys.exit()
65
66
      Search1 = True
67
      while Search1 == True:
68
69
          70
          # Begin of Pages Search
71
          72
          Search_Tally_P = 0
73
          Replace_Tally_P = 0
74
          # Replace string needed variable in case
  results were equal to zero
75
          Replace_Str = 'null'
          Search_Str = input('Please enter a search
76
  string: ')
77
          # Searches pages for a phrase and reports
  the matches, asks for replacement string passes that
   to next search
          Replace_Str = input('What would you like to
78
  replace "' + Search_Str + '" with? ')
79
          for page in course_pages:
80
              # get the html
81
              url = page.url
82
              page_item = course.get_page(url)
83
              html = page_item.body
84
85
              # creates RegEx output for result.
  Creates a list.
              regex1 = '.+'+Search_Str+'.+'
86
87
              p = re.compile(regex1)
              Search_Str_output = p.findall(html)
88
89
90
              # count returns how many times str
  occurs in a string
              strCount = html.count(Search_Str)
91
92
              Search Tally P = Search Tally P +
  strCount
93
              if strCount >= 1:
                  print('the Page '+Fore.LIGHTBLUE_EX+
94
   str(page_item.title)+Fore.RESET + ' contains the
   phrase '+Fore.GREEN+str(Search_Str)+Fore.RESET+', '+
  Fore.RED+str(strCount)+Fore.RESET + ' times')
```

```
print(Fore.LIGHTBLACK_EX+'Link to
95
   Page: ' + page_item.html_url)
96
                 print('Found here: '+
   Search_Str_output[0]+Fore.RESET)
97
             #else:
98
              # continue
99
100
          if Search_Tally_P == 0:
              print(Fore.LIGHTMAGENTA EX +
101
   102
              print('* No matches in Pages. Doing
             *')
   Nothing.
              print(
103
   '********** + Fore
   .RESET)
104
105
          elif Search_Tally_P >= 1:
106
              print(Fore.LIGHTBLUE_EX+
   print('* We found some matches in Pages
107
                 '+Fore.RESET)
108
              print(Fore.LIGHTBLUE_EX+'*'+Fore.RESET+
   ' The total matches of the phrase: "'+Fore.GREEN+str
   (Search_Str)+Fore.RESET+'" is: '+Fore.
   LIGHTMAGENTA_EX+str(Search_Tally_P)+Fore.
   LIGHTBLUE EX+' ')
             print(Fore.LIGHTBLUE_EX+
109
   Fore.RESET)
110
              # Replace_Str = input('What would you
   like to replace "'+Fore.GREEN+Search_Str+Fore.RESET
   +'" with? ')
111
              Exit = input('Replace these items? Do
   you wish to continue? (y/n/q): ')
112
              if Exit == 'y':
                 print(Fore.LIGHTYELLOW_EX +
113
   '*************************')
114
                 print(' Ok, Here we go!')
115
                 print(Fore.LIGHTYELLOW_EX +
   '************************
             elif Exit == 'n':
116
117
                 print('0k')
                 break
118
119
             elif Exit == 'a':
```

```
120
                 sys.exit()
121
          # Begin of Pages Replacement
122
          123
124
          for page in course_pages:
125
             # get the html
126
             url = page.url
             page_item = course.get_page(url)
127
128
             html = page_item.body
129
             # replace items with variables
130
             htmlMod = html.replace(Search_Str,
   Replace_Str)
131
             # count returns how many times str
   occurs in a string
132
             strCount = html.count(Search_Str)
133
             # replaces the content
134
             page_item.edit(wiki_page={'body':
   htmlMod})
135
             Replace_Tally_P = Replace_Tally_P +
   strCount
136
             # print('Replacing '+Fore.GREEN+str(
   Search_Str)+Fore.RESET+' with '+Fore.GREEN+str(
   Replace_Str)+Fore.RESET+' on Page: '+Fore.
   LIGHTBLUE_EX+str(page_item.title)+Fore.RESET+', '+
   Fore.RED+str(strCount)+Fore.RESET+ ' times')
137
          print(Fore.GREEN+
   print(Fore.GREEN+'* '+Fore.RESET+' The
138
   phrase "'+Fore.GREEN+Search Str+Fore.RESET+'" has
   been replaced: ' + Fore.LIGHTMAGENTA_EX+str(
   Replace_Tally_P)+Fore.RESET + ' times in Pages'+Fore
   .GREEN+'
              '+Fore.RESET)
139
          print(Fore.GREEN+
   140
          Choice1 = input('Continue to Assignments? (y
   /n/q): ')
141
          if Choice1 == 'y':
142
             print('Continuing to Assignments...')
143
          if Choice1 == 'n':
144
             break
          if Choice1 == 'q':
145
146
             sys.exit()
```

```
147
148
       149
       # Begin of Assignment Search
       150
151
           Search_Tally_A = 0
152
           Replace_Tally_A = 0
           for assign in course_assignments:
153
154
               # get the html
155
               # some assignments are external links
   with no html so we force a string here
               html = str(assign.description)
156
               # creates RegEx output for result.
157
   Creates a list.
158
               regex2 = '.+'+Search_Str+'.+'
159
               p = re.compile(regex2)
               Search_Str_output = p.findall(html)
160
               # count returns how many times str
161
   occurs in a string
162
               strCount = html.count(Search_Str)
163
               Search_Tally_A = Search_Tally_A +
   strCount
164
               if strCount >= 1:
                  print('the Assignment '+Fore.
165
   LIGHTBLUE_EX+str(assign.name)+Fore.RESET + '
   contains the phrase '+Fore.GREEN+str(Search_Str)+
   Fore.RESET+', '+Fore.LIGHTMAGENTA_EX+str(strCount)+
   Fore.RESET + ' times')
                  print(Fore.LIGHTBLACK_EX+'link to
166
   Assignment: ' + assign.html_url)
                  print('Found here: ' +
167
   Search_Str_output[0]+ Fore.RESET)
168
               else:
169
                  continue
                  # wait = "*"
170
171
                  # print(wait)
172
                  # wait.replace('*','')
                  # wait.replace('\n','')
173
                  # print(wait)
174
175
176
           if Search_Tally_A == 0:
               print(Fore.LIGHTMAGENTA_EX +
177
    178
               print('*
                        No matches in Assignments.
   Doing Nothing.
                  *')
```

```
179
             print(
   Fore.RESET)
180
             break
          elif Search_Tally_A >= 1:
181
182
             print(Fore.GREEN+
   183
             print(Fore.GREEN+'We found some matches
   in Assignments!'+Fore.RESET)
184
          # #
185
          print('The total matches of "'+Fore.GREEN+
   Search_Str+Fore.RESET+'" is: '+Fore.LIGHTMAGENTA_EX+
   str(Search_Tally_A)+Fore.RESET)
186
          print(Fore.GREEN+
   RESET)
187
          Exit = input('Replacing "'+Search_Str+'"
188
   with "'+Replace_Str+'", in Assignments. This is
   undoable, continue? (y/n) :')
189
          if Exit == 'v':
190
             print(Fore.LIGHTYELLOW_EX +
   191
             print('*
                      Ok, Here we go!
192
             print(Fore.LIGHTYELLOW EX +
   '************************
193
          else:
194
             print('Ok Goodbye!')
195
             break
196
          197
          #Begin of Assignment Replacement
198
          199
          for assign in course_assignments:
200
             # get the html
201
             html = str(assign.description)
             # replace items with variables
202
203
             htmlMod = html.replace(Search_Str,
   Replace_Str)
204
             # count returns how many times str
   occurs in a string
205
             strCount = html.count(Search_Str)
206
             # replaces the content
             assignModHTML = (assign)
207
             assignModHTML.edit(assignment={'
208
```

```
208 description': htmlMod})
209
            Replace_Tally_A = Replace_Tally_A +
   strCount
            #print('Replacing '+Fore.GREEN+str(
210
   Search_Str)+Fore.RESET+' with '+Fore.GREEN+str(
   Replace_Str)+Fore.RESET+' in Assignment: '+Fore.
   LIGHTBLUE_EX+str(assign.name)+Fore.RESET+', '+Fore.
   RED+str(strCount)+Fore.RESET+ ' times')
211
         print(Fore.GREEN+
   print('* The phrase "'+Fore.GREEN+Search_Str
212
   +Fore.RESET+'" has been replaced: '+Fore.
   LIGHTMAGENTA_EX+str(Replace_Tally_A)+Fore.RESET+'
   times in Assignments *')
213
         print(Fore.GREEN+
   214
         break
215
```