

Selected files

1 printable files

MSDS600 Week7assignment.ipynb

MSDS600 Week7assignment.ipynb

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16     "This week we are collecting some data from Reddit and doing some basic EDA on it. You should:\n",
17     "\n",
18     "- create your Reddit account and API keys\n",
19     "- collect data from a subreddit of your choice\n",
20     "  - at a minimum, collect the posts from the subreddit; optionally collect comments on the posts\n",
21     "- save the data to a SQLite3 database\n",
22     "- perform some basic EDA on the data\n",
23     "  - create at least 2 plots\n",
24     "- write a short analysis at the end describing the process and results\n",
25     "- turn in the Jupyter Notebook and PDF printout or export to the week 7 dropbox\n",
26     "\n",
27     "***Optional* advanced section**\n",
28     "- Practice SQL queries and select a subsection of the posts you collected\n",
29     "- Modify your code to collect data beyond the 1000 item limit\n",
30     "- Collect comments from the posts for analysis next week and do some EDA on the comments (e.g. who is the top commenter, which commenters have controversial posts, etc)\n",
31     "- examine n-grams ([bigrams](https://stackoverflow.com/a/37651184/4549682), trigrams) or [collocations](https://www.geeksforgeeks.org/nlp-word-collocations)\n",
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33     "Note: There is no solution file for this week."
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67     "                      user_agent='MSDS600 Week 7 Assignment')"
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93                 "S22 or S22+ 3\n",
94                 "MIT Study--improving sleep and cognition with a Galaxy Watch app 72\n",
95                 "Samsung TV keeps resetting picture options 1\n",
96                 "New Phone S24 Ultra or S25 Ultra 2\n",
97                 "Thinking of switching to S25 coming from iphone 14 pro 16\n",
98                 "Anyone using Spigen's GlasTR EZ fit screen protector? 1\n",
99                 "Samsung One UI 7 Beta Rolls Out to More Galaxy Devices [Stable release in April] 24\n"
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101         }
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105         "    print(post.title, post.score)"
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260             "                'n_comments': [],\n",
261             "                'score': [],\n",
262             "                'text': []}\n",
263         "\n",
264         "\n",
265         "co_subreddit = reddit.subreddit('Samsung').hot(limit=None)\n",
266         "\n",
267         "for post in list(co_subreddit):\n",
268             reddit_data['title'].append(post.title)\n",
269             reddit_data['link'].append(post.permlink)\n",
270             if post.author is None:\n",
271                 reddit_data['author'].append('')\n",
272             else:\n",
273                 reddit_data['author'].append(post.author.name)\n",
274             "\n",
275             reddit_data['n_comments'].append(post.num_comments)\n",
276             reddit_data['score'].append(post.score)\n",
277             reddit_data['text'].append(post.selftext)"
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330       "      <td>AutoModerator</td>\n",
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333       "      <td>Welcome to the Daily Support thread for [r/Sam...</td>\n",
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348       "      <td>tractortyre</td>\n",
349       "      <td>21</td>\n",
350       "      <td>32</td>\n",
351       "      <td>It happens 4-5 times a day that I pull out my ...</td>\n",
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354       "      <th>3</th>\n",
355       "      <td>S22 or S22+</td>\n",
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366       "      <td>ohsnapitsnathan</td>\n",
367       "      <td>28</td>\n",
368       "      <td>71</td>\n",
369       "      <td>Hello! We're a[ research group at MIT](https://...</td>\n",
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381 "        <th>537</th>\n",
382 "        <td>Wireless charging and paper</td>\n",
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386 "        <td>2</td>\n",
387 "        <td>Hi, a little question i printed out one image ...</td>\n",
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390 "        <th>538</th>\n",
391 "        <td>Can I order an S25 512GB from the UK and use i...</td>\n",
392 "        <td>/r/samsung/comments/lisne8n/can_i_order_an_s25...</td>\n",
393 "        <td>singleinwestchester</td>\n",
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447 "2 /r/samsung/comments/1j424sy/why_is_the_pocket... tractortyre \n",
448 "3 /r/samsung/comments/1j48cby/s22_or_s22/ cornettowaltz \n",
449 "4 /r/samsung/comments/1j3i3gk/mit_studyimproving... ohsnapitsnathan \n",
450 ".. ... \n",
451 "537 /r/samsung/comments/1ishv05/wireless_charging... slipka162 \n",
452 "538 /r/samsung/comments/1isne8n/can_i_order_an_s25... singleinwestchester \n",
453 "539 /r/samsung/comments/1is15xw/so_glad_i_switched... TemptedMouse \n",
454 "540 /r/samsung/comments/1ismn6t/from_the_uk_bought... Ok_Squirrel_3741 \n",
455 "541 /r/samsung/comments/1isfs4w/my_samsung_phone_i... Guus196 \n",
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459 "1 13 2 Welcome to the Daily Support thread for [r/Sam... \n",
460 "2 21 32 It happens 4-5 times a day that I pull out my ... \n",
461 "3 3 3 Which is the better model? I know they have a ... \n",
462 "4 28 71 Hello! We're a[ research group at MIT](https:/... \n",
463 ".. ... \n",
464 "537 0 2 Hi, a little question i printed out one image ... \n",
465 "538 3 0 I don't want to order the S25+ or Ultra as I d... \n",
466 "539 22 32 How many here have made the switch either for ... \n",
467 "540 1 0 I bought a refurbished samsung phone from Ebay... \n",
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546 "            <td>AutoModerator</td>\n",
547 "            <td>4</td>\n",
548 "            <td>1</td>\n",
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556 "            <td>13</td>\n",
557 "            <td>2</td>\n",
558 "            <td>Welcome to the Daily Support thread for [r/Sam...</td>\n",
559 "        </tr>\n",
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561 "            <th>2</th>\n",
562 "            <td>Why is the pocket detection so pathetic?</td>\n",
563 "            <td>/r/samsung/comments/1j424sy/why_is_the_pocket_...</td>\n",
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566 "            <td>32</td>\n",
567 "            <td>It happens 4-5 times a day that I pull out my ...</td>\n",
568 "        </tr>\n",
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570 "            <th>3</th>\n",
571 "            <td>S22 or S22+</td>\n",
572 "            <td>/r/samsung/comments/1j48cby/s22_or_s22/</td>\n",
573 "            <td>cornettowaltz</td>\n",
574 "            <td>3</td>\n",
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576 "            <td>Which is the better model? I know they have a ...</td>\n",
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579 "            <th>4</th>\n",
580 "            <td>MIT Study--improving sleep and cognition with ...</td>\n",
581 "            <td>/r/samsung/comments/1j3i3gk/mit_studyimproving...</td>\n",
582 "            <td>ohsnapitsnathan</td>\n",
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585 "            <td>Hello! We're a[ research group at MIT](https://...</td>\n",
586 "        </tr>\n",
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598 "            <td>Wireless charging and paper</td>\n",

```



```

599     <td>/r/samsung/comments/lishv05/wireless_charging_...</td>\n",
600     <td>slipka162</td>\n",
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602     <td>2</td>\n",
603     <td>Hi, a little question i printed out one image ...</td>\n",
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606     <th>538</th>\n",
607     <td>Can I order an S25 512GB from the UK and use i...</td>\n",
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1568         " The collected data is stored in a SQLite3 database.\n",
1569         "\n",
1570         " Basic EDA includes creating at least two visualizations.\n",
1571         "\n",
1572         " A short analysis is required at the end to summarize findings.\n",
1573         "\n",
1574         "# Key Tasks\n",
1575         "\n",
1576         "1.Reddit API Setup\n",
1577         "\n",
1578         " Requires creating a Reddit account and API keys.\n",
1579         "\n",
1580         " Uses the praw library for data extraction.\n",
1581         "\n",
1582         " The notebook imports necessary libraries like pandas, matplotlib, wordcloud, and textblob.\n",
1583         "\n",
1584         "2.Data Collection\n",
1585         "\n",
1586         " The subreddit \"Samsung\" is used as an example.\n",
1587         "\n",
1588         " Extracts hot posts from the subreddit, with a limit of 10.\n",
1589         "\n",
1590         " Prints post titles and scores.\n",
1591         "\n",
1592         "3.Data Processing and Storage\n",
1593         "\n",
1594         " Saves the extracted posts in a structured format.\n",
1595         "\n",
1596         " Uses SQLite3 for database storage.\n",
1597         "\n",
1598         "4.Exploratory Data Analysis (EDA)\n",
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1600         " Expected to include two plots (not extracted in this summary but likely visualizations of post engagement).\n",
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