Design & Implementierung eines Echtzeit-Q&A-Systems als Erweiterung des IAmA-Subreddits

(Python) - Dokumentation von Crawler / Analyzer - Scripts

Benedikt Hierl Version 1.0 Sonntag, den 25.09.2016

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Namespace Documentation

a__everything_Big_CSV_analyzer Namespace Reference

Functions

- def relation question upvotes with amount of questions answered by iama host ()
- def average_means_of_values_f_threads ()
- def relation_thread_upvotes_with_amount_of_comments ()
- def relation thread upvotes with amount of questions ()
- def <u>relation_thread_downvotes_with_amount_of_comments</u> ()
- def relation thread downvotes with amount of questions ()
- def relation_thread_upvotes_and_iama_host_response_time_comments ()
- def <u>relation_thread_upvotes_and_iama_host_response_time_questions</u> ()
- def relation thread downvotes and iama host response time comments ()
- def relation_thread_downvotes_and_iama_host_response_time_questions ()
- def relation thread lifespan to last comment and amount of comments ()
- def relation_thread_lifespan_to_last_comment_and_amount_of_questions ()
- def relation thread lifespan to last question and amount of comments ()
- def relation thread lifespan to last question and amount of question ()
- def relation thread lifespan to last comment and iama host response time to comments ()
- def relation thread lifespan to last comment and iama host response time to questions ()
- def <u>relation_thread_lifespan_to_last_question_and_iama_host_response_time_to_comments</u> ()
- def relation thread lifespan to last question and iama host response time to questions ()
- def <u>relation_thread_reaction_time_comments_and_iama_host_response_time_to_comments</u> ()
- def relation thread reaction time comments and iama host response time to questions ()
- def relation_thread_reaction_time_questions_and_iama_host_response_time_to_comments ()
- def relation_thread_reaction_time_questions_and_iama_host_response_time_to_questions ()
- def relation thread reaction time comments and amount of comments the iama host answered to ()
- def <u>relation_thread_reaction_time_comments_and_amount_of_questions_the_iama_host_answered_to</u> ()
- def relation thread reaction time questions and amount of comments the iama host answered to ()
- def relation thread reaction time questions and amount of questions the iama host answered to ()
- def relation_thread_amount_of_questioners_total_and_num_questions_answered_by_iama_host ()
- def realation thread amount of commentators total and num comments answered by iama host ()
- def <u>relation_thread_amount_of_questions_and_amount_questions_answered_by_iama_host</u> ()
- def thread overall correlation ()
- def <u>question_overall_correlation</u> ()
- def average means of values f authors ()
- def median of values f authors randomized ()
- def median_of_values_f_authors ()
- def arr_of_values_f_authors ()
- def calculate t tests of author values ()

Variables

- author information iama
- author information iama sampleset randomized
- author information random
- author information random sampleset randomized
- thread information
- question information
- inplace
- <u>author amount creation iama threads</u> = <u>author information iama['amount_creation_iama_threads']</u>

- author amount creation other threads = author information iama['amount_creation_other_threads']
- author amount of comments except iama = author information iama['amount of comments except iama']
- author_amount_of_comments_iama = author_information_iama['amount_of_comments_iama']
- <u>author author birth date</u> = <u>author information iama</u>['author_birth_date']
- author_author_comment_karma_amount = author_information_iama['author_comment_karma_amount']
- author author link karma amount = author information iama['author_link_karma_amount']
- <u>author_author_name</u> = <u>author_information_iama</u>['author_name']
- <u>author comment creation every x sec</u> = <u>author information iama</u>['comment_creation_every_x_sec']
- <u>author thread creation every x sec</u> = <u>author information iama</u>['thread_creation_every_x_sec']
- author_time_acc_birth_first_iama_thread = author_information_iama['time_acc_birth_first_iama_thread']
- <u>author time diff acc creation n first comment</u> = author_information_iama['time_diff_acc_creation_n_first_comment']
- <u>author time diff acc creation n first thread</u> =
 - author information iama['time_diff_acc_creation_n_first_thread']
- <u>author_amount_creation_iama_threads_randomized</u> =
 - $\underline{author_information_iama_sampleset_randomized}['amount_creation_iama_threads']$
- <u>author_amount_creation_other_threads_randomized</u> =
 - author_information_iama_sampleset_randomized['amount_creation_other_threads']
- <u>author amount of comments except iama randomized</u> =
 - <u>author_information_iama_sampleset_randomized['amount_of_comments_except_iama']</u>
- <u>author_amount_of_comments_iama_randomized</u> =
 - author_information_iama_sampleset_randomized['amount_of_comments_iama']
- <u>author_author_birth_date_randomized</u> = <u>author_information_iama_sampleset_randomized['author_birth_date']</u>
- <u>author author comment karma amount randomized</u> =
 - author_information_iama_sampleset_randomized['author_comment_karma_amount']
- author_author_link_karma_amount_randomized =
 - author information iama sampleset randomized['author_link_karma_amount']
- <u>author_author_name_randomized</u> = <u>author_information_iama_sampleset_randomized['author_name']</u>
- author comment creation every x sec randomized =
 - author information iama sampleset randomized['comment_creation_every_x_sec']
- author thread creation every x sec randomized =
 - author information iama sampleset randomized['thread creation every x sec']
- author_time_acc_birth_first_iama_thread_randomized =
 - author_information_iama_sampleset_randomized['time_acc_birth_first_iama_thread']
- author time diff acc creation n first comment randomized =
 - author information iama sampleset randomized['time diff acc creation n first comment']
- author time diff acc creation n first thread randomized =
 - author information iama sampleset randomized['time diff acc creation n first thread']
- random author amount creation iama threads = author information random['amount creation iama threads']
- random author amount creation other threads =
 - author_information_random['amount_creation_other_threads']
- random_author_amount_of_comments_except_iama =
 - author information random['amount_of_comments_except_iama']
- random_author_amount_of_comments_iama = author_information_random['amount_of_comments_iama']
- random author author birth date = author information random['author birth date']
- random_author_author_comment_karma_amount =
 - author_information_random['author_comment_karma_amount']
- random author author link karma amount = author information random['author_link_karma_amount']
- <u>random_author_name</u> = <u>author_information_random['author_name']</u>
- random author comment creation every x sec =
 - author_information_random['comment_creation_every_x_sec']
- <u>random_author_thread_creation_every_x_sec</u> = <u>author_information_random['thread_creation_every_x_sec']</u>
- random author time acc birth first iama thread =
 - author_information_random['time_acc_birth_first_iama_thread']
- random author time diff acc creation n first comment = \

- random author time diff acc creation n first thread
- <u>random_author_amount_creation_iama_threads_randomized</u> = author_information_random_sampleset_randomized['amount_creation_iama_threads']
- random author amount creation other threads randomized = author_information_random_sampleset_randomized['amount_creation_other_threads']
- random author amount of comments except iama randomized = author information random sampleset randomized['amount_of_comments_except_iama']
- <u>random_author_amount_of_comments_iama_randomized</u> = <u>author_information_random_sampleset_randomized['amount_of_comments_iama']</u>
- <u>random author author birth date randomized</u> =
 <u>author_information_random_sampleset_randomized['author_birth_date']</u>
- random author author comment karma amount randomized = author_information_random_sampleset_randomized['author_comment_karma_amount']
- random author author link karma amount randomized = author information random sampleset randomized['author_link_karma_amount']
- <u>random_author_author_name_randomized</u> = <u>author_information_random_sampleset_randomized['author_name']</u>
- <u>random_author_comment_creation_every_x_sec_randomized</u> =
 <u>author_information_random_sampleset_randomized['comment_creation_every_x_sec']</u>
- <u>random author thread creation every x sec randomized</u> = <u>author_information_random_sampleset_randomized</u>['thread_creation_every_x_sec']
- random_author_time_acc_birth_first_iama_thread_randomized = author_information_random_sampleset_randomized['time_acc_birth_first_iama_thread']
- <u>random_author_time_diff_acc_creation_n_first_comment_randomized</u> = \
- random author time diff acc creation n first thread randomized
- question_ups = question_information['Question ups']
- <u>question_answered_by_iAMA_host</u> = <u>question_information</u>['Question answered by iAMA host']
- thread year = thread information['Year']
- <u>thread_id</u> = <u>thread_information</u>['Thread id']
- <u>thread author</u> = <u>thread information</u>['Thread author']
- thread_ups = thread_information['Thread ups']
- thread_downs = thread_information['Thread downs']
- <u>thread_creation_time_stamp</u> = <u>thread_information</u>['Thread creation time stamp']
- thread_average_comment_vote_score_total
- thread average comment vote score tier 1
- <u>thread_average_comment_vote_score_tier_x</u>
- thread average question vote score total
- <u>thread_average_question_vote_score_tier_1</u>
- thread average question vote score tier x
- thread num comments total skewed
- thread_num_comments_total = thread_information['Thread num comments total']
- <u>thread num comments tier 1</u> = <u>thread information</u>['Thread num comments tier 1']
- <u>thread_num_comments_tier_x</u> = <u>thread_information</u>['Thread num comments tier x']
- <u>thread num questions total</u> = <u>thread information</u>['Thread num questions total']
- thread_num_questions_tier_1 = thread_information['Thread num questions tier 1']
- thread num questions tier x = thread information['Thread num questions tier x']
- thread num questions answered by iama host total
- thread_num_questions_answered_by_iama_host_tier_1
- thread num questions answered by iama host tier x
- thread_num_comments_answered_by_iama_host_total
- thread_num_comments_answered_by_iama_host_tier_1
- thread num comments answered by iama host tier x
- <u>thread_average_reaction_time_between_comments_total</u>
- thread average reaction time between comments tier 1
- thread_average_reaction_time_between_comments_tier_x

- thread average reaction time between questions total
- thread_average_reaction_time_between_questions_tier_1
- thread_average_reaction_time_between_questions_tier_x
- thread average response to comment time iama host total
- thread_average_response_to_comment_time_iama_host_tier_1
- thread average response to comment time iama host tier x
- <u>thread_average_response_to_question_time_iama_host_total</u>
- thread average response to question time iama host tier 1
- thread average response to question time iama host tier x
- thread amount of questioners total
- thread amount of questioners tier 1
- thread_amount_of_questioners_tier_x
- thread amount of commentators total
- thread_amount_of_commentators_tier_1
- thread_amount_of_commentators_tier_x
- thread life span until last comment
- thread life span until last question

Function Documentation

def a__everything_Big_CSV_analyzer.arr_of_values_f_authors ()

Definition at line 3671 of file a __everything_Big_CSV_analyzer.py.

def a_everything_Big_CSV_analyzer.average_means_of_values_f_authors ()

```
Calculation of the average means of different values for author data

Args:
-
Returns:
```

Definition at line 3252 of file a__everything_Big_CSV_analyzer.py.

def a everything Big CSV analyzer.average means of values f threads ()

```
Calculation of the average means of different values

Args:
-
Returns:
```

Definition at line 339 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.calculate_t_tests_of_author_values ()

Definition at line 3812 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.median_of_values_f_authors ()

Definition at line 3529 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.median_of_values_f_authors_randomized ()

Definition at line 3402 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.question_overall_correlation ()

```
Calculation of the correlation of every column with every column for the questions

Args:
-
Returns:
```

Definition at line 3240 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.realation_thread_amount_of_commentators_total_and_num_comments_answered_by_iama_host ()

```
Calculation of the correlation amount of commentators per thread <-> amount of questions answered by iama host

Args:
-
Returns:
```

Definition at line 3003 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_question_upvotes_with_amount_of_questions_answer ed_by_iama_host ()

```
Calculation of the correlation question upvotes <-> amount of questions answered by the iama host

Args:
-
Returns:
```

Definition at line 305 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_amount_of_questioners_total_and_num_questions_answered_by_iama_host ()

```
Calculation of the correlation amount of questioners per thread <-> amount of questions answered by iama host

Args:
```

```
-
Returns:
```

Definition at line 2875 of file a__everything_Big_CSV_analyzer.py.

def

a_everything_Big_CSV_analyzer.relation_thread_amount_of_questions_and_amount_questions_answered_by_iama_host ()

```
Calculation of the amount of questions ansked <-> amount of questions answered by iama host

Args:
-
Returns:
```

Definition at line 3131 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_downvotes_and_iama_host_response_time_comments ()

```
Calculation of the correlation thread downvotes <-> iama host repsonse time to comments

Args:
-
Returns:
```

Definition at line 886 of file a__everything_Big_CSV_analyzer.py.

def

 ${\tt a_everything_Big_CSV_analyzer.relation_thread_downvotes_and_iama_host_response_time_questions ()}$

```
Calculation of the correlation thread downvotes <-> iama host repsonse time to questions

Args:
-
Returns:
```

Definition at line 972 of file a __everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.relation_thread_downvotes_with_amount_of_comments ()

```
Calculation of the correlation thread downvotes <-> amount of comments

Args:
-
Returns:
```

Definition at line 584 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.relation_thread_downvotes_with_amount_of_questions ()

```
Calculation of the correlation thread downvotes <-> amount of questions

Args:
-
Returns:
```

Definition at line 651 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_comment_and_amount_of_comments ()

```
Calculation of the correlation thread life span (until last comment) <-> amount of comments

Args:
-
Returns:
```

Definition at line 1060 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_comment_and_amount_of_que stions ()

```
Calculation of the correlation thread life span (until last comment) <-> amount of questions

Args:
-
Returns:
```

Definition at line 1127 of file a__everything_Big_CSV_analyzer.py.

def

$a__everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_comment_and_iama_host_response_time_to_comments ()$

```
Calculation of the correlation thread life span (until last comment) <-> iama host repsonse time
to comments

Args:
    -
Returns:
    -
```

Definition at line 1335 of file a_everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_comment_and_iama_host_res ponse_time_to_questions ()

```
Calculation of the correlation thread life span (until last comment) <-> iama host repsonse time to questions

Args:
-
Returns:
```

Definition at line 1463 of file a__everything_Big_CSV_analyzer.py.

def

a_everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_question_and_amount_of_comments ()

```
Calculation of the correlation thread life span (until last question) <-> amount of comments

Args:
-
Returns:
```

Definition at line 1194 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_question_and_amount_of_que stion ()

```
Calculation of the correlation thread life span (until last question) <-> amount of question

Args:
-
Returns:
```

Definition at line 1261 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_question_and_iama_host_resp onse_time_to_comments ()

```
Calculation of the correlation thread life span (until last question) <-> and iama host repsonse time to comments

Args:
-
Returns:
```

Definition at line 1591 of file a__everything_Big_CSV_analyzer.py.

def

a_everything_Big_CSV_analyzer.relation_thread_lifespan_to_last_question_and_iama_host_resp onse_time_to_questions ()

Calculation of the correlation thread life span (until last question) <-> iama host repsonse time to questions

```
Args:
-
Returns:
```

Definition at line 1719 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_reaction_time_comments_and_amount_of_comments_the_iama_host_answered_to ()

```
Calculation of the correlation thread reaction time between comments <-> amount of comments the
iama host
    reacted to

Args:
    -
Returns:
    -
```

Definition at line 2359 of file a__everything_Big_CSV_analyzer.py.

def

 $a_everything_Big_CSV_analyzer.relation_thread_reaction_time_comments_and_amount_of_questions_the_iama_host_answered_to~()$

```
Calculation of the correlation thread reaction time between comments <-> amount of questions the iama host reacted to

Args:
-
Returns:
```

Definition at line 2488 of file a_everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_reaction_time_comments_and_iama_host_resp onse_time_to_comments ()

```
Calculation of the correlation thread reaction time between comments <-> iama host repsonse time to comments

Args:
-
Returns:
-
```

Definition at line 1847 of file a_everything_Big_CSV_analyzer.py.

def

 $a_everything_Big_CSV_analyzer.relation_thread_reaction_time_comments_and_iama_host_response_time_to_questions~()$

Calculation of the correlation thread reaction time between comments <-> iama host repsonse time to questions

```
Args:
-
Returns:
```

Definition at line 1975 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_reaction_time_questions_and_amount_of_com ments_the_iama_host_answered_to ()

```
Calculation of the correlation thread reaction time between questions <-> amount of comments the
   iama host reacted to

Args:
   -
Returns:
   -
```

Definition at line 2617 of file a__everything_Big_CSV_analyzer.py.

def

a_everything_Big_CSV_analyzer.relation_thread_reaction_time_questions_and_amount_of_questions_the_iama_host_answered_to ()

```
Calculation of the correlation thread reaction time between questions <-> amount of questions the iama host reacted to

Args:
--
Returns:
```

Definition at line 2746 of file a_everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_reaction_time_questions_and_iama_host_response_time_to_comments ()

```
Calculation of the correlation thread reaction time between questions <-> iama host repsonse time to comments

Args:
-
Returns:
-
```

Definition at line 2103 of file a_everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_reaction_time_questions_and_iama_host_response_time_to_questions ()

Calculation of the correlation thread reaction time between questions <-> iama host repsonse time to questions

```
Args:
-
Returns:
```

Definition at line 2231 of file a__everything_Big_CSV_analyzer.py.

def

a__everything_Big_CSV_analyzer.relation_thread_upvotes_and_iama_host_response_time_comm ents ()

```
Calculation of the correlation thread upvotes <-> iama host repsonse time to comments

Args:
-
Returns:
-
```

Definition at line 718 of file a__everything_Big_CSV_analyzer.py.

def

a_everything_Big_CSV_analyzer.relation_thread_upvotes_and_iama_host_response_time_questions ()

```
Calculation of the correlation thread upvotes <-> iama host repsonse time to questions

Args:
-
Returns:
```

Definition at line 800 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.relation_thread_upvotes_with_amount_of_comments ()

```
Calculation of the correlation thread upvotes <-> amount of comments

Args:
-
Returns:
```

Definition at line 449 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.relation_thread_upvotes_with_amount_of_questions ()

```
Calculation of the correlation thread upvotes <-> amount of questions

Args:
-
Returns:
```

Definition at line 517 of file a__everything_Big_CSV_analyzer.py.

def a__everything_Big_CSV_analyzer.thread_overall_correlation ()

```
Calculation of the correlation of every column with every column for the threads

Args:
-
Returns:
```

Definition at line 3228 of file a__everything_Big_CSV_analyzer.py.

Variable Documentation

a__everything_Big_CSV_analyzer.author_amount_creation_iama_threads = author_information_iama['amount_creation_iama_threads']

Definition at line 134 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_amount_creation_iama_threads_randomized = author_information_iama_sampleset_randomized['amount_creation_iama_threads']

Definition at line 149 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_amount_creation_other_threads = author_information_iama['amount_creation_other_threads']

Definition at line 135 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.author_amount_creation_other_threads_randomized = author_information_iama_sampleset_randomized['amount_creation_other_threads']

Definition at line 150 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.author_amount_of_comments_except_iama = author_information_iama['amount_of_comments_except_iama']

Definition at line 136 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_amount_of_comments_except_iama_randomized = author_information_iama_sampleset_randomized['amount_of_comments_except_iama']

Definition at line 151 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_amount_of_comments_iama = author information iama['amount_of_comments_iama']

Definition at line 137 of file a__everything_Big_CSV_analyzer.py.

a everything Big CSV analyzer.author amount of comments iama randomized = author information iama sampleset randomized['amount of comments iama'] Definition at line 152 of file a __everything_Big_CSV_analyzer.py. a everything Big CSV analyzer.author author birth date = author_information_iama['author_birth_date'] Definition at line 138 of file a everything Big CSV analyzer.py. a_everything_Big_CSV_analyzer.author author birth date randomized = author_information_iama_sampleset_randomized['author_birth_date'] Definition at line 153 of file a __everything_Big_CSV_analyzer.py. a_everything_Big_CSV_analyzer.author_author_comment_karma_amount = author information iama['author comment karma amount'] Definition at line 139 of file a__everything_Big_CSV_analyzer.py. a everything Big CSV analyzer.author author comment karma amount randomized = author information iama sampleset randomized['author_comment_karma_amount'] Definition at line 154 of file a__everything_Big_CSV_analyzer.py. a_everything_Big_CSV_analyzer.author_author_link_karma_amount = author_information_iama['author_link_karma_amount'] Definition at line 140 of file a__everything_Big_CSV_analyzer.py. a everything Big CSV analyzer.author author link karma amount randomized = author information iama sampleset randomized['author link karma amount'] Definition at line 155 of file a __everything_Big_CSV_analyzer.py. a_everything_Big_CSV_analyzer.author_author_name = author_information_iama['author_name'] Definition at line 141 of file a __everything_Big_CSV_analyzer.py. a everything Big CSV analyzer.author author name randomized = author information iama sampleset randomized['author name'] Definition at line 156 of file a__everything_Big_CSV_analyzer.py.

a everything Big CSV analyzer.author comment creation every x sec =

author_information_iama['comment_creation_every_x_sec']

Definition at line 142 of file a __everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_comment_creation_every_x_sec_randomized = author_information_iama_sampleset_randomized['comment_creation_every_x_sec']

Definition at line 157 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_information_iama

Definition at line 78 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.author_information_iama_sampleset_randomized

Definition at line 84 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_information_random

Definition at line 90 of file a__everything_Big_CSV_analyzer.py.

 $a__everything_Big_CSV_analyzer.author_information_random_sampleset_randomized$

```
Initial value: 1 = author_information_random.ix[np.random.choice
    2 (author_information_random.index.values, 10000)]
Definition at line 96 of file a everything Big CSV analyzer.py.
```

a_everything_Big_CSV_analyzer.author_thread_creation_every_x_sec = author_information_iama['thread_creation_every_x_sec']

Definition at line 143 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_thread_creation_every_x_sec_randomized = author_information_iama_sampleset_randomized['thread_creation_every_x_sec']

Definition at line 158 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.author_time_acc_birth_first_iama_thread = author_information_iama['time_acc_birth_first_iama_thread']

Definition at line 144 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.author_time_acc_birth_first_iama_thread_randomized = author_information_iama_sampleset_randomized['time_acc_birth_first_iama_thread']

Definition at line 159 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.author_time_diff_acc_creation_n_first_comment = author information iama['time diff acc creation n first comment']

Definition at line 145 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.author_time_diff_acc_creation_n_first_comment_randomized = author_information_iama_sampleset_randomized['time_diff_acc_creation_n_first_comment']

Definition at line 160 of file a everything Big CSV analyzer.py.

a__everything_Big_CSV_analyzer.author_time_diff_acc_creation_n_first_thread = author_information_iama['time_diff_acc_creation_n_first_thread']

Definition at line 146 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.author_time_diff_acc_creation_n_first_thread_randomized = author_information_iama_sampleset_randomized['time_diff_acc_creation_n_first_thread']

Definition at line 161 of file a __everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.inplace

Definition at line 117 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.question_answered_by_iAMA_host = question_information['Question answered by iAMA host']

Definition at line 199 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.question_information

Definition at line 110 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.question_ups = question_information['Question ups']

Definition at line 198 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_amount_creation_iama_threads = author_information_random['amount_creation_iama_threads']

Definition at line 164 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_amount_creation_iama_threads_randomized = author_information_random_sampleset_randomized['amount_creation_iama_threads']

Definition at line 182 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_amount_creation_other_threads = author_information_random['amount_creation_other_threads']

Definition at line 165 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_amount_creation_other_threads_randomized = author_information_random_sampleset_randomized['amount_creation_other_threads']

Definition at line 183 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_amount_of_comments_except_iama = author_information_random['amount_of_comments_except_iama']

Definition at line 166 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_amount_of_comments_except_iama_randomize d = author_information_random_sampleset_randomized['amount_of_comments_except_iama']

Definition at line 184 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_amount_of_comments_iama = author_information_random['amount_of_comments_iama']

Definition at line 167 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_amount_of_comments_iama_randomized = author_information_random_sampleset_randomized['amount_of_comments_iama']

Definition at line 185 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_author_birth_date = author_information_random['author_birth_date']

Definition at line 168 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_author_birth_date_randomized = author_information_random_sampleset_randomized['author_birth_date']

Definition at line 186 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_author_comment_karma_amount = author_information_random['author_comment_karma_amount']

Definition at line 169 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_author_comment_karma_amount_randomized = author information random sampleset randomized['author comment karma amount']

Definition at line 187 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_author_link_karma_amount = author_information_random['author_link_karma_amount']

Definition at line 170 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_author_link_karma_amount_randomized = author_information_random_sampleset_randomized['author_link_karma_amount']

Definition at line 188 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_author_name = author_information_random['author_name']

Definition at line 171 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_author_name_randomized = author_information_random_sampleset_randomized['author_name']

Definition at line 189 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_comment_creation_every_x_sec = author_information_random['comment_creation_every_x_sec']

Definition at line 172 of file a __everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_comment_creation_every_x_sec_randomized = author_information_random_sampleset_randomized['comment_creation_every_x_sec']

Definition at line 190 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.random_author_thread_creation_every_x_sec = author_information_random['thread_creation_every_x_sec']

Definition at line 173 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_thread_creation_every_x_sec_randomized = author_information_random_sampleset_randomized['thread_creation_every_x_sec']

Definition at line 191 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_time_acc_birth_first_iama_thread = author information random['time acc birth first iama thread']

Definition at line 174 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_time_acc_birth_first_iama_thread_randomized = <u>author_information_random_sampleset_randomized</u>['time_acc_birth_first_iama_thread']

Definition at line 192 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.random_author_time_diff_acc_creation_n_first_comment = \

Definition at line 175 of file a everything Big CSV analyzer.py.

a__everything_Big_CSV_analyzer.random_author_time_diff_acc_creation_n_first_comment_rando mized = \

Definition at line 193 of file a_everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_time_diff_acc_creation_n_first_thread

Definition at line 177 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.random_author_time_diff_acc_creation_n_first_thread_randomized

Definition at line 195 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_amount_of_commentators_tier_1

Definition at line 286 of file a__everything_Big_CSV_analyzer.py.

a __everything_Big_CSV_analyzer.thread_amount_of_commentators_tier_x

Definition at line 288 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_amount_of_commentators_total

Definition at line 284 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_amount_of_questioners_tier_1

Definition at line 279 of file a __everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_amount_of_questioners_tier_x

Definition at line 281 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_amount_of_questioners_total

Definition at line 277 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_author = thread_information['Thread author']

Definition at line 205 of file a__everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.thread_average_comment_vote_score_tier_1

Definition at line 213 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_comment_vote_score_tier_x

${\tt a__everything_Big_CSV_analyzer.thread_average_comment_vote_score_total}$

Definition at line 210 of file a __everything_Big_CSV_analyzer.py.

a__everything_Big_CSV_analyzer.thread_average_question_vote_score_tier_1

Definition at line 220 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_question_vote_score_tier_x

Definition at line 222 of file a everything Big CSV analyzer.py.

a everything Big CSV analyzer.thread average question vote score total

Definition at line 218 of file a __everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_reaction_time_between comments tier 1

```
Initial value: 1 = thread_information[
    2   'Thread average reaction time between comments tier 1']
```

Definition at line 251 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_reaction_time_between comments tier x

Definition at line 253 of file a __everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_reaction_time_between_comments_total

Definition at line 249 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_reaction_time_between_questions_tier_1

Definition at line 258 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_reaction_time_between_questions_tier_x

Definition at line 260 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_reaction_time_between_questions_total

Definition at line 256 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_average_response_to_comment_time_iama_host_tier_1

a__everything_Big_CSV_analyzer.thread_average_response_to_comment_time_iama_host_tier_x

```
Initial value: 1 = thread_information[
    2  'Thread average response to comment time iama host tier x']
Definition at line 267 of file a everything Big CSV analyzer.py.
```

a_everything_Big_CSV_analyzer.thread_average_response to comment time iama host total

a everything Big_CSV_analyzer.thread_average_response_to_question_time_iama_host_tier_1

a_everything_Big_CSV_analyzer.thread_average_response_to_question_time_iama_host_tier_x

a_everything_Big_CSV_analyzer.thread_average_response_to_question_time_iama_host_total

a_everything_Big_CSV_analyzer.thread_creation_time_stamp = thread_information['Thread creation time stamp']

Definition at line 208 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_downs = thread_information['Thread downs']

Definition at line 207 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_id = thread_id information['Thread id']

Definition at line 204 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.thread_information

Definition at line 104 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_life_span_until_last_comment

Definition at line 292 of file a __everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_life_span_until_last_question

Definition at line 294 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_num_comments_answered_by_iama_host_tier_1

Definition at line 244 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.thread_num_comments_answered_by_iama_host_tier_x

a_everything_Big_CSV_analyzer.thread_num_comments_answered_by_iama_host_total

a_everything_Big_CSV_analyzer.thread_num_comments_tier_1 = thread_information['Thread num comments tier 1']

Definition at line 228 of file a everything Big CSV analyzer.py.

a__everything_Big_CSV_analyzer.thread_num_comments_tier_x = <u>thread_information</u>['Thread num comments tier x']

Definition at line 229 of file a everything Big CSV analyzer.py.

a__everything_Big_CSV_analyzer.thread_num_comments_total = <u>thread_information['Thread num comments total']</u>

Definition at line 227 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_num_comments_total_skewed

Definition at time 225 of the a_everything_big_es v_anaryzer.py.

$a_everything_Big_CSV_analyzer.thread_num_questions_answered_by_iama_host_tier_1$

Definition at line 237 of file a__everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_num_questions_answered_by_iama_host_tier_x

a_everything_Big_CSV_analyzer.thread_num_questions_answered_by_iama_host_total

```
Initial value: 1 = thread_information[
    2   'Thread num questions answered by iama host total']
Definition at line 235 of file a__everything_Big_CSV_analyzer.py.
```

a_everything_Big_CSV_analyzer.thread_num_questions_tier_1 = thread information['Thread num questions tier 1']

Definition at line 232 of file a_everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_num_questions_tier_x = thread_information['Thread num questions tier x']

Definition at line 233 of file a __everything_Big_CSV_analyzer.py.

a_everything_Big_CSV_analyzer.thread_num_questions_total = <u>thread_information['Thread num questions total']</u>

Definition at line 231 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.thread_ups = thread_information['Thread ups']

Definition at line 206 of file a everything Big CSV analyzer.py.

a_everything_Big_CSV_analyzer.thread_year = thread_information['Year']

Definition at line 203 of file a__everything_Big_CSV_analyzer.py.

a_author_Information Namespace Reference

Functions

- def check script arguments ()
- def initialize_mongo_db_parameters ()
- def write csv data ()

Variables

- mongo_db_client_instance = None
- mongo db author instance = None
- mongo_db_author_collection = None
- int mongo db author collection original = 0
- string <u>argument_db_to_choose</u> = ""

Function Documentation

def a_author_Information.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

-
Returns:
```

Definition at line 14 of file a_author_Information.py.

def a_author_Information.initialize_mongo_db_parameters ()

```
Instantiates all necessary variables for the correct usage of the mongoDB client

Args:
-
Returns:
```

Definition at line 48 of file a_author_Information.py.

def a_author_Information.write_csv_data ()

```
Gets all information from every collection within 'iAMA Reddit Authors*' database and writes it into a csv file

Args:
--
Returns:
```

Definition at line 76 of file a_author_Information.py.

Variable Documentation

string a_author_Information.argument_db_to_choose = ""

Definition at line 177 of file a_author_Information.py.

a_author_Information.mongo_db_author_collection = None

Definition at line 169 of file a_author_Information.py.

int a_author_Information.mongo_db_author_collection_original = 0

Definition at line 173 of file a_author_Information.py.

a_author_Information.mongo_db_author_instance = None

Definition at line 166 of file a_author_Information.py.

a_author_Information.mongo_db_client_instance = None

Definition at line 163 of file a_author_Information.py.

a_iAMA_Commenttime_arr Namespace Reference

Functions

- def check script arguments ()
- def initialize_mongo_db_parameters (actually_processed_year)
- def start data generation for analysis ()
- def prepare_data_for_graph()
- def <u>add_thread_list_to_global_list</u> (list_to_append)
- def generate data to be analyzed ()
- def <u>calculate ar mean answer time for questions</u> (id_of_thread, author_of_thread)
- def check if comment is a question (given_string)
- def <u>check_if_comment_is_on_tier_1</u> (comment_parent_id)
- def <u>check if comment is not from thread author</u> (author_of_thread, comment_author)
- def <u>check if comment is answer from thread author</u> (author_of_thread, comment_actual_id, comments cursor)
- def <u>calculate time difference</u> (comment_time_stamp, answer_time_stamp_iama_host)
- def <u>write_csv_data</u> (list_with_information)
- def plot generated data ()

Variables

- int argument year beginning = 0
- int year actually in progress = 0
- int argument_year_ending = 0
- string <u>argument tier in scope</u> = ""
- string <u>argument plot time unit</u> = ""
- mongo DB Client Instance = None
- <u>mongo DB Threads Instance</u> = None
- <u>mongo_DB_Thread_Collection</u> = None
- mongo DB Comments Instance = None
- list <u>list To Be Plotted</u> = []
- list global_thread_list = []
- list data to give plotly = []

Function Documentation

def a_iAMA_Commenttime_arr.add_thread_list_to_global_list (list_to_append)

```
Adds all elements of for the current year into a global list. This global list will be written into a csv file later on

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

list_to_append (list): The list which will be iterated over and which elements will be added to the global list
Returns:

-
```

Definition at line 248 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.calculate_ar_mean_answer_time_for_questions (id_of_thread, author_of_thread)

```
Calculates the arithmetic mean of the answer time by the iama host in minutes

In dependence of the given tier argument (second argument) the processing of tiers will be filtered 

Args:

id_of_thread (str): The id of the thread which is actually processed. (Necessary for checking if a question

lies on tier 1 or any other tier)

author_of_thread (str): The name of the thread author. (Necessary for checking if a given answer is from the

iama host or not)

Returns:

Whenever there was a minimum of 1 question asked and 1 answer from the iama host:

amount of answer times (int): The amount of the arithmetic mean time of

Whenever there no questions have been asked for that thread / or no answers were given / or all values in the database were null:

None: Returns an empty object of the type None
```

Definition at line 315 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.calculate_time_difference (comment_time_stamp, answer_time_stamp_iama_host)

```
Calculates the time difference in seconds between the a comment and its answer from the iama host

1. The time stamps will be converted from epoch into float and afterwards into str again (necessary for correct subtraction)

2. Then the time stamps will be subtracted from each other

3. The containing time difference will be converted into seconds (int)

Args:

comment_time_stamp (str): The time stamp of the comment answer_time_stamp_iama_host (str): The time stamp of the iAMA hosts answer

Returns:

time difference in seconds (int): The time difference of the comment and its answer by the iAMA host in seconds
```

Definition at line 593 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.check_if_comment_is_a_question (given_string)

```
Simply checks whether a given string is a question or not

1. This method simply checks wether a question mark exists within that string or not..

This is just that simple because messing around with natural processing kits to determine the semantic sense

would blow up my bachelor work...

Args:

given_string (int): The string which will be checked for a question mark

Returns:

True (bool): Whenever the given string is a question
```

False (bool): Whenever the given string is not a question

Definition at line 491 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.check_if_comment_is_answer_from_thread_author (author_of_thread, comment_actual_id, comments_cursor)

```
Checks whether both strings are equal or not

1. A dictionary containing flags whether that a question is answered by the host with the appropriate timestamp will

be created in the beginning.

2. Then the method iterates over every comment within that thread

1.1. Whenever an answer is from the iAMA hosts and the processed comments 'parent_id' matches the iAMA hosts

comments (answers) id, the returned dict will contain appropriate values and will be returned

1.2. If this is not the case, it will be returned in its default condition

Args:

author of thread (str): The name of the thread author (iAMA-Host)

comment actual id (str): The id of the actually processed comment

comments cursor (list): The cursor which shows to the amount of comments which can be iterated

Returns:

True (bool): Whenever the strings do not match

False (bool): Whenever the strings do match

answered that given question)
```

Definition at line 548 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)

```
Checks whether both strings are equal or not

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

author_of_thread (str): The name of the thread author (iAMA-Host)
comment_author (str): The name of the comments author

Returns:

True (bool): Whenever the strings do not match
False (bool): Whenever the strings do match
answered that given question)
```

Definition at line 528 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.check_if_comment_is_on_tier_1 (comment_parent_id)

```
Checks whether a comment relies on the first tier or any other tier

Args:
    comment parent id (str): The name id of the comments parent

Returns:
    True (bool): Whenever the comment lies on tier 1
    False (bool): Whenever the comment lies on any other tier
```

Definition at line 512 of file a_iAMA_Commenttime_arr.py.

def a iAMA Commenttime arr.check script arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate
```

```
1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:
-
Returns:
```

Definition at line 20 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.generate_data_to_be_analyzed ()

```
1. This method iterates over every thread

1.1. It filters if that iterated thread is an iAMA-request or not

1.1.1. If yes: this thread gets skipped and the next one will be processed

1.1.2. If no: this thread will be processed

2. If the thread gets processed it will receive the arithmetic mean of answer time

3. This value will be added to a global list and will be plotted later on

Args:

Returns:
```

Definition at line 267 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client
Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed
Returns:
    -
```

Definition at line 47 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.plot_generated_data ()

```
Plots the data which is to be generated

1. This method plots the data which has been calculated before by using Pltoly-Framework within a self written class

Args:

-
Returns:
```

Definition at line 691 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.prepare_data_for_graph ()

```
Sorts and prepares data for graph plotting

Args:
```

```
Returns:
```

Definition at line 147 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years

1. Triggers the data generation process and moves forward within the years

1.1. By moving through the years a csv file will be created for every year

1.2. Additionally an interactive chart will be plotted

Args:

Returns:
```

Definition at line 67 of file a_iAMA_Commenttime_arr.py.

def a_iAMA_Commenttime_arr.write_csv_data (list_with_information)

```
Creates a csv file containing all necessary information about the average comment time of the iama host

Args:
    list with information (list) : Contains various information about thread and comment time Returns:
    -
```

Definition at line 632 of file a_iAMA_Commenttime_arr.py.

Variable Documentation

string a_iAMA_Commenttime_arr.argument_plot_time_unit = ""

Definition at line 720 of file a_iAMA_Commenttime_arr.py.

string a_iAMA_Commenttime_arr.argument_tier_in_scope = ""

Definition at line 717 of file a_iAMA_Commenttime_arr.py.

int a iAMA Commenttime arr.argument year beginning = 0

Definition at line 708 of file a_iAMA_Commenttime_arr.py.

int a_iAMA_Commenttime_arr.argument_year_ending = 0

Definition at line 714 of file a_iAMA_Commenttime_arr.py.

list a_iAMA_Commenttime_arr.data_to_give_plotly = []

Definition at line 752 of file a_iAMA_Commenttime_arr.py.

list a_iAMA_Commenttime_arr.global_thread_list = []

Definition at line 738 of file a_iAMA_Commenttime_arr.py.

list a_iAMA_Commenttime_arr.list_To_Be_Plotted = []

Definition at line 735 of file a_iAMA_Commenttime_arr.py.

a_iAMA_Commenttime_arr.mongo_DB_Client_Instance = None

Definition at line 723 of file a_iAMA_Commenttime_arr.py.

a_iAMA_Commenttime_arr.mongo_DB_Comments_Instance = None

Definition at line 732 of file a iAMA Commenttime arr.py.

a_iAMA_Commenttime_arr.mongo_DB_Thread_Collection = None

Definition at line 729 of file a_iAMA_Commenttime_arr.py.

a_iAMA_Commenttime_arr.mongo_DB_Threads_Instance = None

Definition at line 726 of file a_iAMA_Commenttime_arr.py.

int a_iAMA_Commenttime_arr.year_actually_in_progress = 0

Definition at line 711 of file a_iAMA_Commenttime_arr.py.

a_iAMA_Commenttime_med Namespace Reference

Functions

- def check script arguments ()
- def initialize_mongo_db_parameters (actually_processed_year)
- def start data generation for analysis ()
- def prepare_data_for_graph ()
- def <u>add_thread_list_to_global_list</u> (list_to_append)
- def generate data to be analyzed ()
- def <u>calculate ar mean answer time for questions</u> (id_of_thread, author_of_thread)
- def check if comment is a question (given_string)
- def <u>check_if_comment_is_on_tier_1</u> (comment_parent_id)
- def <u>check if comment is not from thread author</u> (author_of_thread, comment_author)
- def <u>check if comment is answer from thread author</u> (author_of_thread, comment_actual_id, comments cursor)
- def <u>calculate time difference</u> (comment_time_stamp, answer_time_stamp_iama_host)
- def <u>write_csv_data</u> (list_with_information)
- def plot generated data ()

Variables

- int argument year beginning = 0
- int year actually in progress = 0
- int argument_year_ending = 0
- string <u>argument tier in scope</u> = ""
- string <u>argument plot time unit</u> = ""
- mongo DB Client Instance = None
- <u>mongo DB Threads Instance</u> = None
- mongo_DB_Thread_Collection = None
- mongo DB Comments Instance = None
- list list <u>To Be Plotted</u> = []
- list global_thread_list = []
- list data to give plotly = []

Function Documentation

def a_iAMA_Commenttime_med.add_thread_list_to_global_list (list_to_append)

```
Adds all elements of for the current year into a global list. This global list will be written into a csv file later on

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

list_to_append (list): The list which will be iterated over and which elements will be added to the global list Returns:

--
```

Definition at line 248 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.calculate_ar_mean_answer_time_for_questions (id_of_thread, author_of_thread)

```
Calculates the arithmetic mean of the answer time by the iama host in minutes

In dependence of the given tier argument (second argument) the processing of tiers will be filtered 

Args:

id_of_thread (str): The id of the thread which is actually processed. (Necessary for checking 
if a question

lies on tier 1 or any other tier)

author_of_thread (str): The name of the thread author. (Necessary for checking if a given answer 
is from the

iama host or not)

Returns:

Whenever there was a minimum of 1 question asked and 1 answer from the iama host:

amount of answer times (int): The amount of the arithmetic mean time of 
Whenever there no questions have been asked for that thread / or no answers were given / 
or all values in the database were null:

None: Returns an empty object of the type None
```

Definition at line 315 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.calculate_time_difference (comment_time_stamp, answer_time_stamp_iama_host)

```
Calculates the time difference in seconds between the a comment and its answer from the iama host

1. The time stamps will be converted from epoch into float and afterwards into str again (necessary for correct subtraction)

2. Then the time stamps will be subtracted from each other

3. The containing time difference will be converted into seconds (int)

Args:

comment_time_stamp (str): The time stamp of the comment answer_time_stamp_iama_host (str): The time stamp of the iAMA hosts answer

Returns:

time difference in seconds (int): The time difference of the comment and its answer by the iAMA host in seconds
```

Definition at line 593 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.check_if_comment_is_a_question (given_string)

```
Simply checks whether a given string is a question or not

1. This method simply checks wether a question mark exists within that string or not..

This is just that simple because messing around with natural processing kits to determine the semantic sense

would blow up my bachelor work...

Args:

given_string (int): The string which will be checked for a question mark

Returns:

True (bool): Whenever the given string is a question
```

False (bool): Whenever the given string is not a question

Definition at line 491 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.check_if_comment_is_answer_from_thread_author (author_of_thread, comment_actual_id, comments_cursor)

```
Checks whether both strings are equal or not

1. A dictionary containing flags whether that a question is answered by the host with the appropriate timestamp will

be created in the beginning.

2. Then the method iterates over every comment within that thread

1.1. Whenever an answer is from the iAMA hosts and the processed comments 'parent_id' matches the iAMA hosts

comments (answers) id, the returned dict will contain appropriate values and will be returned

1.2. If this is not the case, it will be returned in its default condition

Args:

author of thread (str): The name of the thread author (iAMA-Host)

comment actual id (str): The id of the actually processed comment

comments cursor (list): The cursor which shows to the amount of comments which can be iterated

Returns:

True (bool): Whenever the strings do not match

False (bool): Whenever the strings do match

answered that given question)
```

Definition at line 548 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)

```
Checks whether both strings are equal or not

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

author_of_thread (str): The name of the thread author (iAMA-Host)
comment_author (str): The name of the comments author

Returns:

True (bool): Whenever the strings do not match
False (bool): Whenever the strings do match
answered that given question)
```

Definition at line 528 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.check_if_comment_is_on_tier_1 (comment_parent_id)

```
Checks whether a comment relies on the first tier or any other tier

Args:
    comment parent id (str): The name id of the comments parent

Returns:
    True (bool): Whenever the comment lies on tier 1
    False (bool): Whenever the comment lies on any other tier
```

Definition at line 512 of file a_iAMA_Commenttime_med.py.

def a iAMA Commenttime med.check script arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate
```

```
1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:
-
Returns:
```

Definition at line 20 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.generate_data_to_be_analyzed ()

```
1. This method iterates over every thread

1.1. It filters if that iterated thread is an iAMA-request or not

1.1.1. If yes: this thread gets skipped and the next one will be processed

1.1.2. If no: this thread will be processed

2. If the thread gets processed it will receive the arithmetic mean of answer time

3. This value will be added to a global list and will be plotted later on

Args:

Returns:
```

Definition at line 267 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client
Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed
Returns:
    -
```

Definition at line 47 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.plot_generated_data ()

```
Plots the data which is to be generated

1. This method plots the data which has been calculated before by using Pltoly-Framework within a self written class

Args:

- Returns:
-
```

Definition at line 691 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.prepare_data_for_graph ()

```
Sorts and prepares data for graph plotting

Args:
```

```
Returns:
```

Definition at line 147 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years

1. Triggers the data generation process and moves forward within the years

1.1. By moving through the years a csv file will be created for every year

1.2. Additionally an interactive chart will be plotted

Args:

Returns:
```

Definition at line 67 of file a_iAMA_Commenttime_med.py.

def a_iAMA_Commenttime_med.write_csv_data (list_with_information)

```
Creates a csv file containing all necessary information about the average comment time of the iama host

Args:
    list with information (list) : Contains various information about thread and comment time Returns:
    -
```

Definition at line 632 of file a_iAMA_Commenttime_med.py.

Variable Documentation

string a_iAMA_Commenttime_med.argument_plot_time_unit = ""

Definition at line 720 of file a_iAMA_Commenttime_med.py.

string a_iAMA_Commenttime_med.argument_tier_in_scope = ""

Definition at line 717 of file a_iAMA_Commenttime_med.py.

int a iAMA Commenttime med.argument year beginning = 0

Definition at line 708 of file a_iAMA_Commenttime_med.py.

int a_iAMA_Commenttime_med.argument_year_ending = 0

Definition at line 714 of file a_iAMA_Commenttime_med.py.

list a_iAMA_Commenttime_med.data_to_give_plotly = []

Definition at line 752 of file a_iAMA_Commenttime_med.py.

list a_iAMA_Commenttime_med.global_thread_list = []

Definition at line 738 of file a_iAMA_Commenttime_med.py.

list a_iAMA_Commenttime_med.list_To_Be_Plotted = []

Definition at line 735 of file a_iAMA_Commenttime_med.py.

a_iAMA_Commenttime_med.mongo_DB_Client_Instance = None

Definition at line 723 of file a_iAMA_Commenttime_med.py.

a_iAMA_Commenttime_med.mongo_DB_Comments_Instance = None

Definition at line 732 of file a_iAMA_Commenttime_med.py.

a_iAMA_Commenttime_med.mongo_DB_Thread_Collection = None

Definition at line 729 of file a_iAMA_Commenttime_med.py.

a_iAMA_Commenttime_med.mongo_DB_Threads_Instance = None

Definition at line 726 of file a_iAMA_Commenttime_med.py.

int a_iAMA_Commenttime_med.year_actually_in_progress = 0

Definition at line 711 of file a_iAMA_Commenttime_med.py.

a_question_Answered_Yes_No_Extrema Namespace Reference

Functions

- def check script arguments ()
- def initialize_mongo_db_parameters (actually_processed_year)
- def start data generation for analysis ()
- def generate_data_now()
- def process answered questions within thread (id_of_thread, author_of_thread, thread_creation_date)
- def check if comment is a question (given string)
- def check if comment is not from thread author (author_of_thread, comment_author)
- def <u>check if comment has been answered by thread author</u> (author_of_thread, comment_acutal_id, comments_cursor)
- def <u>calculate time difference</u> (comment_time_stamp, answer_time_stamp_iama_host)
- def <u>sort questions</u> (list_which_is_to_be_sorted)
- def <u>create_question_list_containing_all_years</u> (list_with_comments_per_years)
- def write csv and count unanswered (list_with_comments)
- def plot generated data ()

Variables

- int argument year beginning = 0
- int year actually in progress = 0
- int <u>argument year ending</u> = 0
- argument_sorting = bool
- int argument amount of top quotes = 0
- <u>mongo DB Client Instance</u> = None
- <u>mongo_DB_Threads_Instance</u> = None
- <u>mongo DB Thread Collection</u> = None
- mongo_DB_Comments_Instance = None
- list <u>question information list</u> = []
- list data to give plotly = []

Function Documentation

def a_question_Answered_Yes_No_Extrema.calculate_time_difference (comment_time_stamp, answer_time_stamp_iama_host)

```
Calculates the time difference in seconds between the a comment and its answer from the iama host

1. The time stamps will be converted from epoch into float and afterwards into str again (necessary for correct subtraction)

2. Then the time stamps will be subtracted from each other

3. The containing time difference will be converted into seconds (int)

Args:

comment_time_stamp (str): The time stamp of the comment answer_time_stamp_iama_host (str): The time stamp of the iAMA hosts answer

Returns:

time difference in seconds (int): The time difference of the comment and its answer by the iAMA host in seconds
```

Definition at line 425 of file a_question_Answered_Yes_No_Extrema.py.

def

a_question_Answered_Yes_No_Extrema.check_if_comment_has_been_answered_by_thread_auth or (author_of_thread, comment_acutal_id, comments_cursor)

```
Checks whether both strings are equal or not
1. A dictionary containing flags whether that a question is answered by the host with the appropriate
timestamp will
   be created in the beginning.
2. Then the method iterates over every comment within that thread
    1.1. Whenever an answer is from the iAMA hosts and the processed comments 'parent id' matches
the iAMA hosts
       comments (answers) id, the returned dict will contain appropriate values and will be
returned
    1.2. If this is not the case, it will be returned in its default condition
Args:
    author of thread (str) : The name of the thread author (iAMA-Host)
    comment acutal id (str) : The id of the actually processed comment
    comments cursor (list): The cursor which shows to the amount of comments which can be iterated
Returns:
   True (bool): Whenever the strings do not match
    False (bool): Whenever the strings do match
    answered that given question)
```

Definition at line 381 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.check_if_comment_is_a_question (given_string)

```
Simply checks whether a given string is a question or not

1. This method simply checks wether a question mark exists within that string or not..

This is just that simple because messing around with natural processing kits to determine the semantic sense

would blow up my bachelor work...

Args:

given_string (str): The string which will be checked for a question mark

Returns:

True (bool): Whenever the given string is a question
```

False (bool): Whenever the given string is not a question

Definition at line 340 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)

```
Checks whether both strings are equal or not

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

author of thread (str): The name of the thread author (iAMA-Host)
comment_author (str): The name of the comments author

Returns:

True (bool): Whenever the strings do not match
False (bool): Whenever the strings do match
answered that given question)
```

Definition at line 361 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

Returns:
```

Definition at line 22 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.create_question_list_containing_all_years (list_with_comments_per_years)

```
Creates a list, containing all questions from all years

Args:
    list_with_comments_per_years (list) : The list containing the current years questions

Returns:
    -
```

Definition at line 494 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.generate_data_now ()

Definition at line 165 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB client
Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed
Returns:
    -
```

Definition at line 59 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.plot_generated_data ()

```
Plots the data which is to be generated

1. This method plots the data which has been calculated before by using Pltoly-Framework within a self written class

Args:

Returns:
```

Definition at line 583 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.process_answered_questions_within_thread (id_of_thread, author_of_thread, thread_creation_date)

```
Checks whether an iterated question has been answered by the iama host or not
1. This method checks at first whether an iterated comment contains values (e.g. is not none)
   1.1. If not: That comment will be skipped / if no comment is remaining None will be returned
    1.2. If yes: That comment will be processed
2. Now it will be checked whether that iterated comment is a question or not
3. Afterwards it will be checked wether that comment is a comment from the iAMA Host or not
    3.1. If this is not the case the next comment will be processed
4. Whenever that processed comment is a question and not (!!) from the thread author:
    amount of tier any questions (int) will be increased by one
5. Now it will be checked whether that comment has a comment (answer) below it which is from the
iAMA-host
    5.1. If yes: amount of tier any questions answered (int) will be increased by one and the
dictionary, which
       is to be returned will be filled with values
    5.2. If no: the dictionary, which is to be returned will be filled with values
Args:
    id of thread (str) : Contains the id of the thread which is to be iterated
    author of thread (str) : Contains the name of the thread author
    thread creation date (str): Contains the time
   amount_of_questions_not_answered (int) : The amount of questions which have not been answered
```

Definition at line 217 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.sort_questions (list_which_is_to_be_sorted)

```
Sorts a list of questions for a year, depending on the upvotes

1. This method prepares the data, in kind of sorting and counting amount of questions not being answered

2. It also returns the number of unanswered questions, necessary for chart plotting

Args:
    list_which_is_to_be_sorted (list): The list you want to sort regarding the sorting arguments give on execution

Returns:
    questions_sorted (list): The amount of questions, sorted on upvotes
```

Definition at line 462 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years

1. Triggers the data generation process and moves forward within the years

1.1. By moving through the years a csv file will be created for every year

1.2. At the end a csv file will be generated containing all questions of all years, sorted

1.3. Additionally an interactive chart will be plotted

Args:

Returns:
```

Definition at line 79 of file a_question_Answered_Yes_No_Extrema.py.

def a_question_Answered_Yes_No_Extrema.write_csv_and_count_unanswered (list_with_comments)

Definition at line 516 of file a_question_Answered_Yes_No_Extrema.py.

Variable Documentation

int a_question_Answered_Yes_No_Extrema.argument_amount_of_top_quotes = 0

Definition at line 613 of file a_question_Answered_Yes_No_Extrema.py.

a_question_Answered_Yes_No_Extrema.argument_sorting = bool

Definition at line 610 of file a_question_Answered_Yes_No_Extrema.py.

int a question Answered Yes No Extrema.argument year beginning = 0

Definition at line 600 of file a_question_Answered_Yes_No_Extrema.py.

int a question Answered Yes No Extrema.argument year ending = 0

Definition at line 606 of file a_question_Answered_Yes_No_Extrema.py.

list a_question_Answered_Yes_No_Extrema.data_to_give_plotly = []

- Definition at line 642 of file a_question_Answered_Yes_No_Extrema.py.
- a_question_Answered_Yes_No_Extrema.mongo_DB_Client_Instance = None

 Definition at line 617 of file a_question_Answered_Yes_No_Extrema.py.
- a_question_Answered_Yes_No_Extrema.mongo_DB_Comments_Instance = None

 Definition at line 626 of file a_question_Answered_Yes_No_Extrema.py.
- a_question_Answered_Yes_No_Extrema.mongo_DB_Thread_Collection = None

 Definition at line 623 of file a_question_Answered_Yes_No_Extrema.py.
- a_question_Answered_Yes_No_Extrema.mongo_DB_Threads_Instance = None

 Definition at line 620 of file a_question_Answered_Yes_No_Extrema.py.
- list a_question_Answered_Yes_No_Extrema.question_information_list = []

 Definition at line 630 of file a_question_Answered_Yes_No_Extrema.py.
- int a_question_Answered_Yes_No_Extrema.year_actually_in_progress = 0

 Definition at line 603 of file a_question_Answered_Yes_No_Extrema.py.

a_question_Answered_Yes_No_Tier_Percentage Namespace Reference

Functions

- def check script arguments ()
- def <u>initialize_mongo_db_parameters</u> (actually_processed_year)
- def start data generation for analysis ()
- def <u>generate_data_to_be_analyzed</u> ()
- def question answering distribution tier1 tierx tierany (id_of_thread, author_of_thread)
- def check if comment is a question (given_string)
- def <u>check_if_comment_is_on_tier_1</u> (comment_parent_id)
- def check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)
- def <u>check if comment is answer from thread author</u> (author_of_thread, comment_actual_id, comments_cursor)
- def <u>write csv</u> (list_with_information)
- def add local list to global list (list to append)
- def <u>prepare data for graph</u> ()
- def <u>plot_generated_data</u> ()

Variables

- int argument year beginning = 0
- int year_actually_in_progress = 0
- int <u>argument year ending</u> = 0
- string <u>argument_tier_in_scope</u> = ""
- mongo DB Client Instance = None
- <u>mongo_DB_Threads_Instance</u> = None
- <u>mongo_DB_Thread_Collection</u> = None
- <u>mongo DB Comments Instance</u> = None
- list global_question_list = []
- list <u>year question list</u> = []
- list <u>data_to_give_plotly</u> = []

Function Documentation

def a_question_Answered_Yes_No_Tier_Percentage.add_local_list_to_global_list (list_to_append)

```
Adds all elements of for the current year into a global list. This global list will be written into a csv file later on

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

list_to_append (list): The list which will be iterated over and which elements will be added to the global list
Returns:

-
```

Definition at line 483 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.check_if_comment_is_a_question (given_string)

```
Simply checks whether a given string is a question or not

1. This method simply checks whether a question mark exists within that string or not..

This is just that simple because messing around with natural processing kits to determine the semantic sense

would blow up my bachelor work...

Args:

given_string (str): The string which will be checked for a question mark

Returns:

True (bool): Whenever the given string is a question
```

False (bool): Whenever the given string is not a question

Definition at line 326 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def

a_question_Answered_Yes_No_Tier_Percentage.check_if_comment_is_answer_from_thread_auth or (author_of_thread, comment_actual_id, comments_cursor)

Definition at line 386 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def

a_question_Answered_Yes_No_Tier_Percentage.check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)

```
Checks whether both strings are equal or not

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

author_of_thread (str): The name of the thread author (iAMA-Host)
comment_author (str): The name of the comments author

Returns:

True (bool): Whenever the strings do not match
False (bool): Whenever the strings do match
answered that given question)
```

Definition at line 365 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.check_if_comment_is_on_tier_1 (comment_parent_id)

```
Simply checks whether a given string is a question posted on tier 1 or not

1. This method simply checks whether a question has been posted on tier 1 by looking whether the given string contains the substring "t3_" or not

Args:

comment parent id (str): The string which will be checked for "t3 " appearance in it Returns:

-
```

Definition at line 347 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

-
Returns:
```

Definition at line 20 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.generate_data_to_be_analyzed ()

Definition at line 141 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client

Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed Returns:
    -
```

Definition at line 45 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.plot_generated_data ()

```
Plots the data which is to be generated

1. This method plots the data which has been calculated before by using Pltoly-Framework within a self written class

Args:

-
Returns:
```

Definition at line 528 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.prepare_data_for_graph ()

```
Sorts and prepares data for graph plotting

Args:
-
Returns:
```

Definition at line 502 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def

a_question_Answered_Yes_No_Tier_Percentage.question_answering_distribution_tier1_tierx_tier any (id_of_thread, author_of_thread)

Definition at line 184 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years

1. Triggers the data generation process and moves forward within the years

1.1. By moving through the years a csv file will be created for every year

1.2. Additionally an interactive chart will be plotted

Args:

Returns:
```

Definition at line 65 of file a_question_Answered_Yes_No_Tier_Percentage.py.

def a_question_Answered_Yes_No_Tier_Percentage.write_csv (list_with_information)

Creates a csv file containing all necessary information about the distribution of questions on the tiers $\frac{1}{2}$

This method iterates over the the given list, which contains every single questions of that year (or all years)

and writes a csv file containing misc information about those questions.

Args:

 ${\tt list_with_information~(list): Contains~various~information~about~thread~and~comment~time~Returns:}$

_

Definition at line 417 of file a question Answered Yes No Tier Percentage.py.

Variable Documentation

string a_question_Answered_Yes_No_Tier_Percentage.argument_tier_in_scope = ""

Definition at line 556 of file a question Answered Yes No Tier Percentage.py.

int a_question_Answered_Yes_No_Tier_Percentage.argument_year_beginning = 0

Definition at line 547 of file a_question_Answered_Yes_No_Tier_Percentage.py.

int a_question_Answered_Yes_No_Tier_Percentage.argument_year_ending = 0

Definition at line 553 of file a_question_Answered_Yes_No_Tier_Percentage.py.

list a_question_Answered_Yes_No_Tier_Percentage.data_to_give_plotly = []

Definition at line 587 of file a_question_Answered_Yes_No_Tier_Percentage.py.

list a_question_Answered_Yes_No_Tier_Percentage.global_question_list = []

Definition at line 572 of file a_question_Answered_Yes_No_Tier_Percentage.py.

a_question_Answered_Yes_No_Tier_Percentage.mongo_DB_Client_Instance = None

Definition at line 560 of file a_question_Answered_Yes_No_Tier_Percentage.py.

a question Answered Yes No Tier Percentage.mongo DB Comments Instance = None

Definition at line 569 of file a_question_Answered_Yes_No_Tier_Percentage.py.

- a_question_Answered_Yes_No_Tier_Percentage.mongo_DB_Thread_Collection = None

 Definition at line 566 of file a_question_Answered_Yes_No_Tier_Percentage.py.
- a_question_Answered_Yes_No_Tier_Percentage.mongo_DB_Threads_Instance = None

 Definition at line 563 of file a_question_Answered_Yes_No_Tier_Percentage.py.
- int a_question_Answered_Yes_No_Tier_Percentage.year_actually_in_progress = 0

 Definition at line 550 of file a_question_Answered_Yes_No_Tier_Percentage.py.
- list a_question_Answered_Yes_No_Tier_Percentage.year_question_list = []

 Definition at line 575 of file a_question_Answered_Yes_No_Tier_Percentage.py.

a_question_Tier_Distribution Namespace Reference

Functions

- def <u>initialize mongo db parameters</u> (actually_processed_year)
- def check_script_arguments ()
- def start data generation for analysis ()
- def generate data to be analyzed ()
- def <u>question_distribution_tier1_tierx</u> (id_of_thread, author_of_thread)
- def check if comment is a question (given string)
- def check if comment is on tier 1 (comment_parent_id)
- def check if comment is not from thread author (author_of_thread, comment_author)
- def <u>add_actual_year_list_to_global_list</u> (list_to_append)
- def <u>write csv</u> (list_with_information)
- def prepare data for graph ()
- def plot generated data ()

Variables

- int <u>argument_year_beginning</u> = 0
- int year_actually_in_progress = 0
- int argument year ending = 0
- mongo_DB_Client_Instance = None
- <u>mongo DB Threads Instance</u> = None
- <u>mongo_DB_Thread_Collection</u> = None
- <u>mongo DB Comments Instance</u> = None
- list <u>current year question list</u> = []
- list global_year_question_list = []
- list <u>data_to_give_plotly</u> = []

Function Documentation

def a_question_Tier_Distribution.add_actual_year_list_to_global_list (list_to_append)

```
Iterates over a given list with thread information and adds every single element to a global list
    The global list will be printed to csv in the end

Args:
    list to append (list): List with thread information which will be appended to a global list
Returns:
    -
```

Definition at line 329 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.check_if_comment_is_a_question (given_string)

```
Simply checks whether a given string is a question or not

1. This method simply checks whether a question mark exists within that string or not..

This is just that simple because messing around with natural processing kits to determine the semantic sense

would blow up my bachelor work...

Args:
```

```
given_string (str) : The string which will be checked for a question mark
Returns:
True (bool): Whenever the given string is a question
```

False (bool): Whenever the given string is not a question

Definition at line 269 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)

```
Checks whether both strings are equal or not

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

author_of_thread (str): The name of the thread author (iAMA-Host)
comment_author (str): The name of the comments author

Returns:

True (bool): Whenever the strings do not match
False (bool): Whenever the strings do match
answered that given question)
```

Definition at line 308 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.check_if_comment_is_on_tier_1 (comment_parent_id)

Definition at line 290 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given

2. Then necessary variables will be filled with appropriate values

Args:

-
Returns:
```

Definition at line 40 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.generate_data_to_be_analyzed ()

```
Generates the data which will be analyzed

1. This method iterates over every thread

1.1. It filters if that iterated thread is an iAMA-request or not
```

```
1.1.1. If yes: this thread gets skipped and the next one will be processed
1.1.2. If no: this thread will be processed
2. If the thread gets processed it will receive the distribution of questions on the tiers
3. This value will be added to a global list and will be plotted later on

Args:

--
Returns:
```

Definition at line 143 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client
Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed
Returns:
    -
```

Definition at line 20 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.plot_generated_data ()

```
Plots the data which is to be generated

1. This method plots the data which has been calculated before by using Pltoly-Framework within a self written class

Args:

Returns:
```

Definition at line 437 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.prepare_data_for_graph ()

```
Sorts and prepares data for graph plotting

Args:
-
Returns:
```

Definition at line 412 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.question_distribution_tier1_tierx (id_of_thread, author_of_thread)

```
Generates the data which will be analyzed

1. It iterates over every comment and
    1.1. checks if the iterated comment is a question
    1.2. checks if the iterated comment has been posted on tier 1 level
    1.3. checks if that comment is from the iAMA-Host himself or not
```

```
2. Now the posted question will be added to a global list, which will be used for csv writing and
chart generation
    later on

Args:
    id_of_thread (str) : Contains the id of the processed thread
    author_of_thread (str) : Contains the iAMA-Hosts name
Returns:
```

Definition at line 186 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years

1. Triggers the data generation process and moves forward within the years

1.1. By moving through the years a csv file will be created for every year

1.2. Additionally an interactive chart will be plotted

Args:

Returns:
```

Definition at line 67 of file a_question_Tier_Distribution.py.

def a_question_Tier_Distribution.write_csv (list_with_information)

```
Creates a csv file containing all necessary information about the distribution of questions on the tiers

This method iterates over the "current_year_question_list", which contains every single questions of that year and writes a csv file containing misc information about those questions.

One thing is to be said: The .csv file will be written in binary mode, therefore looking at them in a plain text editor could be a problem - please use excel for that.

I had to use "binary" mode, otherwise the questions-text could not be written into the csv file, because windows has some problem by converting some special chars to utf.

Args:

list with information (list): Contains information about questions for the current year Returns:
```

Definition at line 345 of file a_question_Tier_Distribution.py.

Variable Documentation

int a_question_Tier_Distribution.argument_year_beginning = 0

Definition at line 454 of file a_question_Tier_Distribution.py.

int a_question_Tier_Distribution.argument_year_ending = 0

Definition at line 460 of file a_question_Tier_Distribution.py.

list a_question_Tier_Distribution.current_year_question_list = []

Definition at line 476 of file a_question_Tier_Distribution.py.

list a_question_Tier_Distribution.data_to_give_plotly = []

Definition at line 491 of file a_question_Tier_Distribution.py.

list a_question_Tier_Distribution.global_year_question_list = []

Definition at line 479 of file a_question_Tier_Distribution.py.

a_question_Tier_Distribution.mongo_DB_Client_Instance = None

Definition at line 464 of file a_question_Tier_Distribution.py.

a_question_Tier_Distribution.mongo_DB_Comments_Instance = None

Definition at line 473 of file a_question_Tier_Distribution.py.

a_question_Tier_Distribution.mongo_DB_Thread_Collection = None

Definition at line 470 of file a_question_Tier_Distribution.py.

a_question_Tier_Distribution.mongo_DB_Threads_Instance = None

Definition at line 467 of file a_question_Tier_Distribution.py.

int a_question_Tier_Distribution.year_actually_in_progress = 0

Definition at line 457 of file a_question_Tier_Distribution.py.

a thread Lifespan N Average Commenttime Namespace Reference

Functions

- def check script arguments ()
- def <u>initialize_mongo_db_parameters</u> (actually_processed_year)
- def start data generation for analysis ()
- def prepare_data_for_graph_life_span ()
- def prepare_data_for_comment_time ()
- def generate data to be analyzed ()
- def <u>calculate time difference</u> (id_of_thread, creation_date_of_thread)
- def <u>write csv</u> (list_with_information)
- def <u>add_thread_list_to_global_list</u> (list_to_append)
- def prepare dict by time separation for comment time ()
- def plot generated data ()

Variables

- int argument year beginning = 0
- string <u>argument_calculation</u> = ""
- int argument_year_ending = 0
- int year actually in progress = 0
- string <u>argument_plot_time_unit</u> = ""
- mongo DB Client Instance = None
- mongo_DB_Threads_Instance = None
- mongo DB Thread Collection = None
- mongo DB Comments Instance = None
- list global_thread_list = []
- list <u>temp_time_difference_list</u> = []
- list <u>list_with_currents_year_infos</u> = []
- list <u>data to give plotly</u> = []

Function Documentation

def a_thread_Lifespan_N_Average_Commenttime.add_thread_list_to_global_list (list_to_append)

```
Adds all elements of for the current year into a global list. This global list will be written into a csv file later on

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

list_to_append (list): The list which will be iterated over and which elements will be added to the global list
Returns:
```

Definition at line 742 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.calculate_time_difference (id_of_thread, creation date of thread)

dict_to_be_returned (dict): Containing information about the time difference

Definition at line 480 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

Returns:
```

Definition at line 21 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.generate_data_to_be_analyzed ()

Definition at line 422 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client
Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed
Returns:
    -
```

Definition at line 48 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.plot_generated_data ()

```
Plots the data which is to be generated

1. This method plots the data which has been calculated before by using Pltoly-Framework within a self written class

Args:

- Returns:
```

Definition at line 881 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.prepare_data_for_comment_time ()

```
Prepares the average mean comment time per thread

Args:
-
Returns:
```

Definition at line 316 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.prepare_data_for_graph_life_span ()

```
Calculates the distribution of single values regarding the chosen time argument

Args:
-
Returns:
```

Definition at line 215 of file a_thread_Lifespan_N_Average_Commenttime.py.

def

a_thread_Lifespan_N_Average_Commenttime.prepare_dict_by_time_separation_for_comment_tim e ()

```
Restructures the dictionary which is to be plotted for the display of the average mean comment time

1. This method processes the data in dependence of the committed time

Args:

-
Returns:
-
```

Definition at line 761 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years

1. Triggers the data generation process and moves forward within the years

1.1. By moving through the years a csv file will be created for every year

1.2. Additionally an interactive chart will be plotted

Args:

-
Returns:
```

Definition at line 68 of file a_thread_Lifespan_N_Average_Commenttime.py.

def a_thread_Lifespan_N_Average_Commenttime.write_csv (list_with_information)

```
Creates a csv file containing all necessary information about the life span of a thread and various information about comments

Args:

list with information (list): Contains various information about thread and comment time Returns:

-
```

Definition at line 685 of file a_thread_Lifespan_N_Average_Commenttime.py.

Variable Documentation

string a_thread_Lifespan_N_Average_Commenttime.argument_calculation = ""

Definition at line 900 of file a_thread_Lifespan_N_Average_Commenttime.py.

string a_thread_Lifespan_N_Average_Commenttime.argument_plot_time_unit = ""

Definition at line 909 of file a_thread_Lifespan_N_Average_Commenttime.py.

int a_thread_Lifespan_N_Average_Commenttime.argument_year_beginning = 0

Definition at line 897 of file a_thread_Lifespan_N_Average_Commenttime.py.

int a_thread_Lifespan_N_Average_Commenttime.argument_year_ending = 0

Definition at line 903 of file a_thread_Lifespan_N_Average_Commenttime.py.

list a_thread_Lifespan_N_Average_Commenttime.data_to_give_plotly = []

Definition at line 945 of file a_thread_Lifespan_N_Average_Commenttime.py.

- list a_thread_Lifespan_N_Average_Commenttime.global_thread_list = []
 - Definition at line 924 of file a_thread_Lifespan_N_Average_Commenttime.py.
- list a_thread_Lifespan_N_Average_Commenttime.list_with_currents_year_infos = []

 Definition at line 930 of file a thread Lifespan N Average Commenttime.py.
- a_thread_Lifespan_N_Average_Commenttime.mongo_DB_Client_Instance = None

 Definition at line 912 of file a_thread_Lifespan_N_Average_Commenttime.py.
- a_thread_Lifespan_N_Average_Commenttime.mongo_DB_Comments_Instance = None

 Definition at line 921 of file a_thread_Lifespan_N_Average_Commenttime.py.
- a_thread_Lifespan_N_Average_Commenttime.mongo_DB_Thread_Collection = None

 Definition at line 918 of file a_thread_Lifespan_N_Average_Commenttime.py.
- a_thread_Lifespan_N_Average_Commenttime.mongo_DB_Threads_Instance = None

 Definition at line 915 of file a_thread_Lifespan_N_Average_Commenttime.py.
- list a_thread_Lifespan_N_Average_Commenttime.temp_time_difference_list = []

 Definition at line 927 of file a thread Lifespan N Average Commenttime.py.
- int a_thread_Lifespan_N_Average_Commenttime.year_actually_in_progress = 0

 Definition at line 906 of file a_thread_Lifespan_N_Average_Commenttime.py.

a_thread_Lifespan_N_Average_Questiontime Namespace Reference

Functions

- def check script arguments ()
- def initialize_mongo_db_parameters (actually_processed_year)
- def start data generation for analysis ()
- def <u>prepare_data_for_graph_life_span</u> ()
- def prepare_data_for_comment_time ()
- def generate data to be analyzed ()
- def <u>calculate time difference</u> (id_of_thread, creation_date_of_thread)
- def <u>write csv</u> (list_with_information)
- def <u>add_thread_list_to_global_list</u> (list_to_append)
- def prepare dict by time separation for comment time ()
- def plot generated data ()

Variables

- int argument year beginning = 0
- string <u>argument_calculation</u> = ""
- int argument_year_ending = 0
- int year actually in progress = 0
- string <u>argument_plot_time_unit</u> = ""
- mongo DB Client Instance = None
- mongo_DB_Threads_Instance = None
- mongo DB Thread Collection = None
- mongo DB Comments Instance = None
- list global_thread_list = []
- list <u>temp_time_difference_list</u> = []
- list <u>list_with_currents_year_infos</u> = []
- list <u>data to give plotly</u> = []

Function Documentation

def a thread Lifespan N Average Questiontime.add thread list to global list (list to append)

```
Adds all elements of for the current year into a global list. This global list will be written into a csv file later on

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

list_to_append (list): The list which will be iterated over and which elements will be added to the global list
Returns:

-
```

Definition at line 751 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.calculate_time_difference (id_of_thread, creation date of thread)

```
Calculates the difference between thread creation date and the last comment found in that thread
1. The creation date of a thread gets determined
2. Then the comments will be iterated over, creating a dictionary which is structured as follows:
  {
      ('first Comment After Thread Started', int),
      ('thread life span', int),
      ('arithmetic Mean Response Time', int),
      ('median Response Time', int),
      ('id')
 }
3. That returned dictionary will be appended to a global list
4. That List will be iterated later on and the appropriate graph will be plotted
    id of thread (str) : The string which contains the id of the actually processed thread
    creation date of thread (str) : The string which contains the creation date of the thread (in
epoch formatation)
Returns:
```

dict_to_be_returned (dict): Containing information about the time difference

Definition at line 480 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

-
Returns:
```

Definition at line 21 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.generate_data_to_be_analyzed ()

Definition at line 422 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client
Args:
    actually processed year (int) : The year with which parameters the database should be accessed
```

```
Returns:
```

Definition at line 48 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.plot_generated_data ()

```
Plots the data which is to be generated

1. This method plots the data which has been calculated before by using Pltoly-Framework within a self written class

Args:

Returns:
```

Definition at line 890 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.prepare_data_for_comment_time ()

```
Prepares the average mean comment time per thread

Args:
-
Returns:
```

Definition at line 316 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.prepare_data_for_graph_life_span ()

Definition at line 215 of file a_thread_Lifespan_N_Average_Questiontime.py.

def

a_thread_Lifespan_N_Average_Questiontime.prepare_dict_by_time_separation_for_comment_time ()

```
Restructures the dictionary which is to be plotted for the display of the average mean comment time

1. This method processes the data in dependence of the committed time

Args:

-
Returns:
-
```

Definition at line 770 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a_thread_Lifespan_N_Average_Questiontime.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years

1. Triggers the data generation process and moves forward within the years

1.1. By moving through the years a csv file will be created for every year

1.2. Additionally an interactive chart will be plotted

Args:

-
Returns:
```

Definition at line 68 of file a_thread_Lifespan_N_Average_Questiontime.py.

def a thread Lifespan N Average Questiontime.write csv (list with information)

```
Creates a csv file containing all necessary information about the life span of a thread and various information about comments

Args:
    list with information (list) : Contains various information about thread and comment time Returns:
    -
```

Definition at line 694 of file a_thread_Lifespan_N_Average_Questiontime.py.

Variable Documentation

string a_thread_Lifespan_N_Average_Questiontime.argument_calculation = ""

Definition at line 909 of file a_thread_Lifespan_N_Average_Questiontime.py.

string a_thread_Lifespan_N_Average_Questiontime.argument_plot_time_unit = ""

Definition at line 918 of file a_thread_Lifespan_N_Average_Questiontime.py.

int a_thread_Lifespan_N_Average_Questiontime.argument_year_beginning = 0

Definition at line 906 of file a_thread_Lifespan_N_Average_Questiontime.py.

int a_thread_Lifespan_N_Average_Questiontime.argument_year_ending = 0

Definition at line 912 of file a_thread_Lifespan_N_Average_Questiontime.py.

list a_thread_Lifespan_N_Average_Questiontime.data_to_give_plotly = []

Definition at line 954 of file a_thread_Lifespan_N_Average_Questiontime.py.

- list a_thread_Lifespan_N_Average_Questiontime.global_thread_list = []
 - Definition at line 933 of file a_thread_Lifespan_N_Average_Questiontime.py.
- list a_thread_Lifespan_N_Average_Questiontime.list_with_currents_year_infos = []

 Definition at line 939 of file a thread Lifespan N Average Questiontime.py.
- a_thread_Lifespan_N_Average_Questiontime.mongo_DB_Client_Instance = None

 Definition at line 921 of file a_thread_Lifespan_N_Average_Questiontime.py.
- a_thread_Lifespan_N_Average_Questiontime.mongo_DB_Comments_Instance = None

 Definition at line 930 of file a_thread_Lifespan_N_Average_Questiontime.py.
- a_thread_Lifespan_N_Average_Questiontime.mongo_DB_Thread_Collection = None

 Definition at line 927 of file a_thread_Lifespan_N_Average_Questiontime.py.
- a_thread_Lifespan_N_Average_Questiontime.mongo_DB_Threads_Instance = None

 Definition at line 924 of file a_thread_Lifespan_N_Average_Questiontime.py.
- list a_thread_Lifespan_N_Average_Questiontime.temp_time_difference_list = []

 Definition at line 936 of file a_thread_Lifespan_N_Average_Questiontime.py.
- int a_thread_Lifespan_N_Average_Questiontime.year_actually_in_progress = 0

 Definition at line 915 of file a_thread_Lifespan_N_Average_Questiontime.py.

ar_analyzer Namespace Reference

Functions

- def average means of values f threads ()
- def std_derivation ()

Variables

- thread information
- thread_year = thread_information['Year']
- <u>thread id</u> = <u>thread information</u>['Thread id']
- <u>thread_author</u> = <u>thread_information</u>['Thread author']
- <u>thread ups</u> = <u>thread information</u>['Thread ups']
- <u>thread_downs</u> = <u>thread_information</u>['Thread downs']
- <u>thread_creation_time_stamp</u> = <u>thread_information</u>['Thread creation time stamp']
- thread average comment vote score total
- thread average comment vote score tier 1
- thread average comment vote score tier x
- thread_average_question_vote_score_total
- thread_average_question_vote_score_tier_1
- thread average question vote score tier x
- thread num comments total skewed
- thread num comments total = thread information['Thread num comments total']
- thread_num_comments_tier_1 = thread_information['Thread num comments tier 1']
- thread num comments tier x = thread information['Thread num comments tier x']
- thread num questions total = thread information['Thread num questions total']
- <u>thread_num_questions_tier_1</u> = <u>thread_information</u>['Thread num questions tier 1']
- thread_num_questions_tier_x = thread_information['Thread num questions tier x']
- thread num questions answered by iama host total
- thread num questions answered by iama host tier 1
- thread num questions answered by iama host tier x
- <u>thread_num_comments_answered_by_iama_host_total</u>
- thread num comments answered by iama host tier 1
- thread_num_comments_answered_by_iama_host_tier_x
- thread average reaction time between comments total
- thread average reaction time between comments tier 1
- thread_average_reaction_time_between_comments_tier_x
- thread average reaction time between questions total
- thread average reaction time between questions tier 1
- thread average reaction time between questions tier x
- thread_average_response_to_comment_time_iama_host_total
- thread average response to comment time iama host tier 1
- thread average response to comment time iama host tier x
- thread average response to question time iama host total
- thread average response to question time iama host tier 1
- thread_average_response_to_question_time_iama_host_tier_x
- thread amount of questioners total
- thread_amount_of_questioners_tier_1
- thread amount of questioners tier x
- <u>thread_amount_of_commentators_total</u>
- <u>thread_amount_of_commentators_tier_1</u>
- thread amount of commentators tier x
- thread_life_span_until_last_comment

• thread life span until last question

Function Documentation

def ar_analyzer.average_means_of_values_f_threads ()

```
Calculation of the average means of different values

Args:
-
Returns:
```

Definition at line 110 of file ar analyzer.py.

def ar_analyzer.std_derivation ()

Definition at line 259 of file ar_analyzer.py.

Variable Documentation

ar_analyzer.thread_amount_of_commentators_tier_1

ar_analyzer.thread_amount_of_commentators_tier_x

Definition at line 100 of file ar analyzer.py.

ar_analyzer.thread_amount_of_commentators_total

Definition at line 96 of file ar_analyzer.py.

ar_analyzer.thread_amount_of_questioners_tier_1

Definition at line 91 of file ar_analyzer.py.

ar_analyzer.thread_amount_of_questioners_tier_x

```
Initial value: 1 = thread_information[
    2   'Thread amount of questioners tier x']
Definition at line 93 of file ar_analyzer.py.
```

ar_analyzer.thread_amount_of_questioners_total

Definition at line 89 of file ar_analyzer.py.

ar_analyzer.thread_author = thread_information['Thread author']

Definition at line 17 of file ar_analyzer.py.

ar_analyzer.thread_average_comment_vote_score_tier_1

Definition at line 25 of file ar analyzer.py.

ar_analyzer.thread_average_comment_vote_score_tier_x

Definition at line 27 of file ar_analyzer.py.

ar_analyzer.thread_average_comment_vote_score_total

Definition at line 22 of file ar_analyzer.py.

ar_analyzer.thread_average_question_vote_score_tier_1

Definition at line 32 of file ar_analyzer.py.

ar_analyzer.thread_average_question_vote_score_tier_x

Definition at line 34 of file ar_analyzer.py.

ar_analyzer.thread_average_question_vote_score_total

Definition at line 30 of file ar_analyzer.py.

ar analyzer.thread average reaction time between comments tier 1

Definition at line 63 of file ar_analyzer.py.

ar_analyzer.thread_average_reaction_time_between_comments_tier_x

Definition at line 65 of file ar_analyzer.py.

ar_analyzer.thread_average_reaction_time_between_comments_total

Definition at line 61 of file ar_analyzer.py.

ar_analyzer.thread_average_reaction_time_between_questions_tier_1

Definition at line 70 of file ar_analyzer.py.

ar_analyzer.thread_average_reaction_time_between_questions_tier_x

Definition at line 72 of file ar_analyzer.py.

ar_analyzer.thread_average_reaction_time_between_questions_total

Definition at line 68 of file ar_analyzer.py.

ar_analyzer.thread_average_response_to_comment_time_iama_host_tier_1

Definition at line 77 of file ar analyzer.py.

ar analyzer.thread average response to comment time iama host tier x

Definition at line 79 of file ar_analyzer.py.

ar_analyzer.thread_average_response_to_comment_time_iama_host_total

Definition at line 75 of file ar_analyzer.py.

ar analyzer.thread average response to question time iama host tier 1

Definition at line 84 of file ar_analyzer.py.

ar_analyzer.thread_average_response_to_question_time_iama_host_tier_x

Definition at line 86 of file ar analyzer.py.

ar_analyzer.thread_average_response_to_question_time_iama_host_total

Definition at line 82 of file ar analyzer.py.

ar_analyzer.thread_creation_time_stamp = thread_information['Thread creation time stamp']

Definition at line 20 of file ar_analyzer.py.

ar_analyzer.thread_downs = thread information['Thread downs']

Definition at line 19 of file ar_analyzer.py.

ar_analyzer.thread_id = thread_id information['Thread id']

Definition at line 16 of file ar_analyzer.py.

ar_analyzer.thread_information

Definition at line 10 of file ar analyzer.py.

ar analyzer.thread life span until last comment

Definition at line 104 of file ar analyzer.py.

ar analyzer.thread life span until last question

Definition at line 106 of file ar_analyzer.py.

ar_analyzer.thread_num_comments_answered_by_iama_host_tier_1

Definition at line 56 of file ar analyzer.py.

ar_analyzer.thread_num_comments_answered_by_iama_host_tier_x

Definition at line 58 of file ar_analyzer.py.

ar analyzer.thread num comments answered by iama host total

Definition at line 54 of file ar_analyzer.py.

ar analyzer.thread num comments tier 1 = thread information['Thread num comments tier 1']

Definition at line 40 of file ar_analyzer.py.

ar analyzer.thread num comments tier x = thread information['Thread num comments tier x']

Definition at line 41 of file ar_analyzer.py.

ar analyzer.thread num comments total = thread information['Thread num comments total']

Definition at line 39 of file ar_analyzer.py.

ar analyzer.thread num comments total skewed

Definition at line 37 of file ar_analyzer.py.

ar_analyzer.thread_num_questions_answered_by_iama_host_tier_1

Definition at line 49 of file ar_analyzer.py.

ar_analyzer.thread_num_questions_answered_by_iama_host_tier_x

Definition at line 51 of file ar_analyzer.py.

ar_analyzer.thread_num_questions_answered_by_iama_host_total

Definition at line 47 of file ar analyzer.py.

ar_analyzer.thread_num_questions_tier_1 = thread_information['Thread num questions tier 1']

Definition at line 44 of file ar_analyzer.py.

ar_analyzer.thread_num_questions_tier_x = thread num questions tier x']

Definition at line 45 of file ar_analyzer.py.

ar_analyzer.thread_num_questions_total = thread_information['Thread num questions total']

Definition at line 43 of file ar_analyzer.py.

ar_analyzer.thread_ups = thread_information['Thread ups']

Definition at line 18 of file ar_analyzer.py.

ar_analyzer.thread_year = thread_information['Year']

Definition at line 15 of file ar analyzer.py.

c_crawl_Author_Information Namespace Reference

Functions

- def check script arguments ()
- def <u>initialize_mongo_db_parameters</u> (actually_processed_year)
- def start data generation for analysis ()
- def generate data now ()
- def <u>calculate_time_difference</u> (time_value_1, time_value_2)
- def get author information (name of author)

Variables

- int argument year beginning = 0
- int <u>year_actually_in_progress</u> = 0
- int <u>argument_year_ending</u> = 0
- string <u>argument inverse crawling</u> = ""
- mongo db client instance = None
- mongo db threads instance = None
- <u>mongo_db_thread_collection</u> = None
- mongo_db_author_instance = None
- <u>reddit instance</u> = praw.Reddit(user_agent="University_Regensburg_iAMA_Crawler_0.001")

Function Documentation

def c_crawl_Author_Information.calculate_time_difference (time_value_1, time_value_2)

```
Calculates the time difference between two floats in epoch style and returns seconds

Args:
    time_value_1 (float): The first time value to be used for calculation
    time value 2 (float): The second time value to be used for calculation

Returns:
    time diff seconds (int): The amount of time difference in seconds
```

Definition at line 233 of file c_crawl_Author_Information.py.

def c_crawl_Author_Information.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

-
Returns:
```

Definition at line 18 of file c_crawl_Author_Information.py.

def c_crawl_Author_Information.generate_data_now ()

```
Crawls author information and writes them into the mongoDB database with the name
'iAMA Reddit Authors'
It does this by first checking the given crawling direction. The ability to crawl bidirectional
allows you to build
up you database in a much more faster way, because you can start one instance crawling forward while
the other
instance crawls backward.
This method works in the following way:
1. Checks for crawling direction
2. It checks whether an iterated collection is no "system.indexes".
3. By iterating over all collections it checks for iAMA-Requests and skips them. Because we do not
want requests
in our dataset, because we want data of actually created iama threads
4. Now it will be checked whether the author already exists within the database (collection name).
This will be
done by always re-initialising the collection.names() which is necessary to always have a
up2date-overview!
    4.1. Whenever the author does not exist yet get the necessary information and write it into
the database
    4.2. Whenever the author does already exist skip that calculation part
Args:
Returns:
```

Definition at line 103 of file c_crawl_Author_Information.py.

def c_crawl_Author_Information.get_author_information (name_of_author)

```
Calculates various information about the author
   Because I have created this script shortly before my evaluation everything listed here is not
   written in a very sequential / procedural way, therefore I ask for you understanding.
   The method does the following:
    1. Referencing a reddit author object, which is necessary to get all that necessary data
    2. Declaration of necessary variables for later assignment
    3. Trial of receiving the authors birthday
        We have to try this here, because, if the account has already been deleted a http error
will be thrown
        and we would have to recrawl all that data.
    4. Receival authors comment / link karma - amount
    5. Trial of receiving of all links / comments the author every made
       Because it could happen, that there is an internal error in reddit ongoing (Error 500) which
        the connection and therefore we would have to recrawl all of our data
    6. Iteration of all comments / links and therefore saving the time difference (in seconds)
between each created
       comment / link
    7. Calculation of time difference between acc birth & first iama in seconds
    8. Patching up a big dictionary which will be sorted (alphabetically correct)
    9. Return that dictionary
Args:
   name of author (str): The name of the author which information need to be calculated
   dict to be returned (dict): Dictionary containing various information about the author. It will
be written
```

Definition at line 269 of file c_crawl_Author_Information.py.

def c_crawl_Author_Information.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB client
Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed
Returns:
    -
```

Definition at line 48 of file c_crawl_Author_Information.py.

def c_crawl_Author_Information.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years
After every year cycle the mongo db parameters will be reinitialized

Args:
-
Returns:
```

Definition at line 68 of file c_crawl_Author_Information.py.

Variable Documentation

string c_crawl_Author_Information.argument_inverse_crawling = ""

Definition at line 499 of file c_crawl_Author_Information.py.

int c_crawl_Author_Information.argument_year_beginning = 0

Definition at line 490 of file c crawl Author Information.py.

int c_crawl_Author_Information.argument_year_ending = 0

Definition at line 496 of file $c_crawl_Author_Information.py$.

c_crawl_Author_Information.mongo_db_author_instance = None

Definition at line 511 of file c_crawl_Author_Information.py.

c_crawl_Author_Information.mongo_db_client_instance = None

Definition at line 502 of file c_crawl_Author_Information.py.

c_crawl_Author_Information.mongo_db_thread_collection = None

Definition at line 508 of file c_crawl_Author_Information.py.

c_crawl_Author_Information.mongo_db_threads_instance = None

Definition at line 505 of file c_crawl_Author_Information.py.

c_crawl_Author_Information.reddit_instance =
praw.Reddit(user_agent="University_Regensburg_iAMA_Crawler_0.001")

Definition at line 514 of file c_crawl_Author_Information.py.

int c_crawl_Author_Information.year_actually_in_progress = 0

Definition at line 493 of file c_crawl_Author_Information.py.

c_crawl_Differences Namespace Reference

Functions

- def check script arguments ()
- def initialize_mongo_db_parameters ()
- def crawl missing collection into comments database (name_of_missing_collection)
- def check_if_collection_is_missing_in_comments_database ()
- def <u>crawl_missing_collection_into_threads_database</u> (name_of_missing_collection)
- def check if collection is missing in threads database ()
- def start crawling for diffs ()

Variables

- mongo DB Client Instance = None
- <u>mongo_DB_Threads_Instance</u> = None
- <u>mongo DB Thread Collection</u> = None
- mongo DB Comments Instance = None
- mongo DB Comments Collection = None
- string argument_year_beginning = ""
- string argument_year_ending = ""
- string argument inverse crawling = ""

Function Documentation

def c_crawl_Differences.check_if_collection_is_missing_in_comments_database ()

```
Checks if a specific collection (thread) is missing in the appropriate comments database

The method starts the diff checking for all collections within the threads database.

Whenever a thread exists in the comment database but not in the threads database it will be crawled from the

reddit servers and written into the database.

Args:

-
Returns:
```

Definition at line 213 of file c_crawl_Differences.py.

def c_crawl_Differences.check_if_collection_is_missing_in_threads_database ()

```
Checks if a specific collection (thread) is missing in the appropriate threads database

The method starts the diff checking for all collections within the threads database.

Whenever a thread exists in the comment database but not in the threads database it will be crawled from the reddit servers and written into the database.

Args:

Returns:
```

Definition at line 353 of file c_crawl_Differences.py.

def c_crawl_Differences.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

---
Returns:
```

Definition at line 14 of file c_crawl_Differences.py.

def c_crawl_Differences.crawl_missing_collection_into_comments_database (name_of_missing_collection)

Definition at line 76 of file c_crawl_Differences.py.

def c_crawl_Differences.crawl_missing_collection_into_threads_database (name_of_missing_collection)

Definition at line 269 of file c_crawl_Differences.py.

def c_crawl_Differences.initialize_mongo_db_parameters ()

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client

Args:
-
Returns:
```

Definition at line 49 of file c_crawl_Differences.py.

def c_crawl_Differences.start_crawling_for_diffs ()

```
This method starts the crawling, with the method you have defined in your arguments

Args:
-
Returns:
```

Definition at line 406 of file c_crawl_Differences.py.

Variable Documentation

string c_crawl_Differences.argument_inverse_crawling = ""

Definition at line 481 of file c_crawl_Differences.py.

string c_crawl_Differences.argument_year_beginning = ""

Definition at line 475 of file c_crawl_Differences.py.

string c_crawl_Differences.argument_year_ending = ""

Definition at line 478 of file c_crawl_Differences.py.

c_crawl_Differences.mongo_DB_Client_Instance = None

Definition at line 460 of file c_crawl_Differences.py.

c_crawl_Differences.mongo_DB_Comments_Collection = None

Definition at line 472 of file c_crawl_Differences.py.

c_crawl_Differences.mongo_DB_Comments_Instance = None

Definition at line 469 of file c_crawl_Differences.py.

c_crawl_Differences.mongo_DB_Thread_Collection = None

Definition at line 466 of file c_crawl_Differences.py.

c_crawl_Differences.mongo_DB_Threads_Instance = None

Definition at line 463 of file c_crawl_Differences.py.

c_crawl_Random_Author_Information Namespace Reference

Functions

- def check script arguments ()
- def initialize_mongo_db_parameters ()
- def start data generation for analysis ()
- def <u>generate_data_now</u> (randomized_author_name)
- def <u>calculate_time_difference</u> (time_value_1, time_value_2)
- def get author information (name of author)

Variables

- <u>argument limit crawling amount</u> = None
- <u>mongo_db_client_instance</u> = None
- mongo db random author instance = None
- mongo db random author collection = None
- mongo db iama author instance = None
- mongo db iama author collection = None
- int mongo_db_iama_author_collection_amount = 0
- reddit instance = praw.Reddit(user_agent="University_Regensburg_iAMA_Crawler_0.001")

Function Documentation

def c_crawl_Random_Author_Information.calculate_time_difference (time_value_1, time_value_2)

```
Calculates the time difference between two floats in epoch style and returns seconds

Args:

time_value_1 (float): The first time value to be used for calculation
time value 2 (float): The second time value to be used for calculation

Returns:

time_diff_seconds (int): The amount of time difference in seconds
```

Definition at line 159 of file c_crawl_Random_Author_Information.py.

def c_crawl_Random_Author_Information.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

-
Returns:
```

Definition at line 17 of file c_crawl_Random_Author_Information.py.

def c crawl Random Author Information.generate data now (randomized author name)

```
Crawls author information and writes them into the mongoDB database with the name
'iAMA Reddit Authors Random'
It does this by first checking the given crawling direction. The ability to crawl bidirectional
allows you to build
up you database in a much more faster way, because you can start one instance crawling forward while
the other
instance crawls backward.
This method works in the following way:
1. Checks for crawling direction
2. It checks whether an iterated collection is no "system.indexes".
3. By iterating over all collections it checks for iAMA-Requests and skips them. Because we do not
want requests
in our dataset, because we want data of actually created iama threads
4. Now it will be checked whether the author already exists within the database (collection name).
This will be
done by always re-initialising the collection.names() which is necessary to always have a
up2date-overview!
    4.1. Whenever the author does not exist yet get the necessary information and write it into
the database
    4.2. Whenever the author does already exist skip that calculation part
Args:
Returns:
```

Definition at line 107 of file c_crawl_Random_Author_Information.py.

def c_crawl_Random_Author_Information.get_author_information (name_of_author)

```
Calculates various information about the author
   Because I have created this script shortly before my evaluation everything listed here is not
   written in a very sequential / procedural way, therefore I ask for you understanding.
   The method does the following:
    1. Referencing a reddit author object, which is necessary to get all that necessary data
    2. Declaration of necessary variables for later assignment
    3. Trial of receiving the authors birthday
        We have to try this here, because, if the account has already been deleted a http error
will be thrown
        and we would have to recrawl all that data.
    4. Receival authors comment / link karma - amount
    5. Trial of receiving of all links / comments the author every made
       Because it could happen, that there is an internal error in reddit ongoing (Error 500) which
        the connection and therefore we would have to recrawl all of our data
    6. Iteration of all comments / links and therefore saving the time difference (in seconds)
between each created
       comment / link
    7. Calculation of time difference between acc birth & first iama in seconds
    8. Patching up a big dictionary which will be sorted (alphabetically correct)
    9. Return that dictionary
Args:
   name of author (str): The name of the author which information need to be calculated
   dict to be returned (dict): Dictionary containing various information about the author. It will
be written
```

Definition at line 195 of file c_crawl_Random_Author_Information.py.

def c_crawl_Random_Author_Information.initialize_mongo_db_parameters ()

```
Instantiates all necessary variables for the correct usage of the mongoDB client

Args:
-
Returns:
```

Definition at line 43 of file c_crawl_Random_Author_Information.py.

def c_crawl_Random_Author_Information.start_data_generation_for_analysis ()

```
Starts the data processing by swichting through the years
After every year cycle the mongo db parameters will be reinitialized

Args:
-
Returns:
```

Definition at line 68 of file c_crawl_Random_Author_Information.py.

Variable Documentation

c_crawl_Random_Author_Information.argument_limit_crawling_amount = None

Definition at line 422 of file c_crawl_Random_Author_Information.py.

c_crawl_Random_Author_Information.mongo_db_client_instance = None

Definition at line 425 of file c crawl Random Author Information.py.

c_crawl_Random_Author_Information.mongo_db_iama_author_collection = None

Definition at line 437 of file c_crawl_Random_Author_Information.py.

int c_crawl_Random_Author_Information.mongo_db_iama_author_collection_amount = 0

Definition at line 440 of file c_crawl_Random_Author_Information.py.

c_crawl_Random_Author_Information.mongo_db_iama_author_instance = None

Definition at line 434 of file c_crawl_Random_Author_Information.py.

c_crawl_Random_Author_Information.mongo_db_random_author_collection = None

Definition at line 431 of file c_crawl_Random_Author_Information.py.

c_crawl_Random_Author_Information.mongo_db_random_author_instance = None

Definition at line 428 of file c_crawl_Random_Author_Information.py.

c_crawl_Random_Author_Information.reddit_instance =
praw.Reddit(user_agent="University_Regensburg_iAMA_Crawler_0.001")

Definition at line 443 of file c_crawl_Random_Author_Information.py.

c_crawl_Threads_N_Comments Namespace Reference

Functions

- def initialize mongo db parameters ()
- def check_script_arguments ()
- def convert argument year to epoch (year)
- def crawl_data ()
- def crawl_threads ()
- def crawl comments ()
- def check if coll in db already exists up2date (submission)

Variables

- mongo_DB_Client_Instance = None
- <u>reddit_Instance</u> = None
- <u>argument crawl type</u> = None
- argument year beginning = None
- argument year end = None
- <u>argument_hours_to_shift</u> = None
- time_shift_difference

Function Documentation

def c_crawl_Threads_N_Comments.check_if_coll_in_db_already_exists_up2date (submission)

```
Checks if a collection already exists in the database or not

This is necessary, otherwise thread information would be written into the database twice.

It works the following way:

1. Define a tolerance factor (necessary because reddit skews information about the amount of "upvotes"). Without defining that tolerance factor every thread would be created anew.

After messing around a few days I found this one to be the best value to work with

2. Create values for temporary values for checking

3. Check and recreate collection if necessary

4. Return appropriate boolean value if collection already existed within the database or not

Args:

submission (Submission): The thread which will be processed / iterated over at the moment Returns:

True / False (bool): Whenever the collection already exists within the database (True) or not
```

Definition at line 373 of file c_crawl_Threads_N_Comments.py.

def c_crawl_Threads_N_Comments.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given

2. Then necessary variables will be filled with appropriate values
```

```
Args:
-
Returns:
```

Definition at line 36 of file c_crawl_Threads_N_Comments.py.

def c_crawl_Threads_N_Comments.convert_argument_year_to_epoch (year)

```
"Converts" a given string into the appropriate epoch string format (int)

Args:
    year (str): The year which will be "converted" into epoch format (necessary for correct PRAW API behaviour)

Returns:
    year (int): The year "converted" into epoch format as integer
```

Definition at line 71 of file c_crawl_Threads_N_Comments.py.

def c_crawl_Threads_N_Comments.crawl_comments ()

```
Crawls thread information and writes them into the mongoDB storage
It works as follwoing:
1. At first an attempt to the amazon cloud search will be made, with necessary parameters which
returns an object,
    of the class "Generator" which contains all comments for the given / crawled time windows
2. After that the "Generator"s elements will be iterated over
    2.1. It will be checked if that iterated collection already exists within the database or not
        2.2.1. If it already exists, it will be checked whether if it is up to date or not
            2.2.1.1. If up2date: do nothing
            2.2.1.2. If not up2date: drop that collection within the database and crawl the
collection anew
        2.2.2. If it does not yet exist: create that collection in the database with the necessary
information
3. Whenever there are no elements left to iterate over the time crawling window will be shifted
into the future by
   using the given amount in hours (fourth argument), whenever the ending year (third argument)
is not reached yet
Args:
Returns:
```

Definition at line 258 of file c_crawl_Threads_N_Comments.py.

def c_crawl_Threads_N_Comments.crawl_data ()

```
Crawls data from reddit, depending on the first argument (threads / comments) you give the script

Args:
-
Returns:
```

Definition at line 121 of file c_crawl_Threads_N_Comments.py.

def c crawl Threads N Comments.crawl threads ()

```
Crawls thread information and writes them into the mongoDB storage
It works as follwoing:
1. At first an attempt to the amazon cloud search will be made, with necessary parameters which
returns an object,
    of the class "Generator" which contains all threads for the given / crawled time windows
2. After that the "Generator"s elements will be iterated over
    2.1. It will be checked if that iterated collection already exists within the database or not
        2.2.1. If it already exists, it will be checked whether if it is up to date or not
            2.2.1.1. If up2date: do nothing
            2.2.1.2. If not up2date: drop that collection within the database and crawl the
collection anew
        2.2.2. If it does not yet exist: create that collection in the database with the necessary
information
3. Whenever there are no elements left to iterate over the time crawling window will be shifted
into the future by
   using the given amount in hours (third argument), whenever the ending year (second argument)
is not reached yet
Args:
Returns:
```

Definition at line 140 of file c_crawl_Threads_N_Comments.py.

def c_crawl_Threads_N_Comments.initialize_mongo_db_parameters ()

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client

Args:
-
Returns:
```

Definition at line 21 of file c_crawl_Threads_N_Comments.py.

Variable Documentation

c crawl Threads N Comments.argument crawl type = None

Definition at line 480 of file c_crawl_Threads_N_Comments.py.

c_crawl_Threads_N_Comments.argument_hours_to_shift = None

Definition at line 496 of file c_crawl_Threads_N_Comments.py.

c_crawl_Threads_N_Comments.argument_year_beginning = None

Definition at line 483 of file c_crawl_Threads_N_Comments.py.

c_crawl_Threads_N_Comments.argument_year_end = None

Definition at line 486 of file c_crawl_Threads_N_Comments.py.

c_crawl_Threads_N_Comments.mongo_DB_Client_Instance = None

Definition at line 474 of file c_crawl_Threads_N_Comments.py.

c_crawl_Threads_N_Comments.reddit_Instance = None

Definition at line 477 of file c_crawl_Threads_N_Comments.py.

c_crawl_Threads_N_Comments.time_shift_difference

Definition at line 516 of file c_crawl_Threads_N_Comments.py.

d_create_Big_CSV_ar Namespace Reference

Functions

- def check script arguments ()
- def <u>initialize_mongo_db_parameters</u> (actually_processed_year)
- def start data generation for analysis ()
- def generate data ()
- def <u>process_specific_thread</u> (thread_id, thread_creation_time_stamp, thread_author)
- def check_if_comment_is_a_question (given_string)
- def check if comment is on tier 1 (comment_parent_id)
- def check if comment is not from thread author (author_of_thread, comment_author)
- def <u>check if comment_has_been_answered_by_thread_author</u> (author_of_thread, comment_actual_id, comments_cursor)
- def calculate time difference (comment_time_stamp, answer_time_stamp_iama_host)
- def <u>calculate_reaction_time_average</u> (list_to_be_processed, thread_creation_time_stamp)
- def <u>calculate life span</u> (thread_creation_time_stamp, time_value_of_last_comment, time_value_of_last_question)
- def add_actual_year_list_to_global_list (list_to_append)
- def write csv data (list_with_information)

Variables

- int argument year beginning = 0
- int argument year ending = 0
- int year_actually_in_progress = 0
- list <u>list current year</u> = []
- list list global year = □

Function Documentation

def d_create_Big_CSV_ar.add_actual_year_list_to_global_list (list_to_append)

```
Iterates over a given list with thread information and adds every single element to a global list
    The global list will be printed to csv in the end

Args:
    list_to_append (list) : List with thread information which will be appended to a global list
Returns:
    -
```

Definition at line 1028 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.calculate_life_span (thread_creation_time_stamp, time value of last comment, time value of last question)

```
('median_Response_Time', int),
    ('id')
}
3. That returned dictionary will be appended to a global list
4. That List will be iterated later on and the appropriate graph will be plotted

Args:
    thread_creation_time_stamp (float) : The time stamp (utc epoch) of the thread creation
    time value of last comment (float) : The time stamp (utc epoch) of the threads last comment
    time_value_of_last_question (float) : The time stamp (utc epoch) of the threads last question

Returns:
    dict_to_be_returned (dict) : Containing information about the time differences:
        Thread creation timestamp <-> Last question time stamp
```

Thread creation timestamp <-> Last comment time stamp

Definition at line 973 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.calculate_reaction_time_average (list_to_be_processed, thread_creation_time_stamp)

```
Calculates the reaction time of a list with time values in it

Args:
    list to be processed (list) : The list which contains time values (utc epoch)
    thread_creation_time_stamp (str) : The string which contains the creation date of the thread
(utc epoch)

Returns:
    None : Whenever there were no time values given
```

np.mean(time_difference) (float): Time arithmetic mean of the reaction time in seconds

Definition at line 889 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.calculate_time_difference (comment_time_stamp, answer_time_stamp_iama_host)

```
Calculates the time difference in seconds between the a comment and its answer from the iama host

1. The time stamps will be converted from epoch into float and afterwards into str again (necessary for correct subtraction)

2. Then the time stamps will be subtracted from each other

3. The containing time difference will be converted into seconds (int)

Args:

comment_time_stamp (str): The time stamp of the comment answer_time_stamp_iama_host (str): The time stamp of the iAMA hosts answer

Returns:

time_difference_in_seconds (int): The time difference of the comment and its answer by the iAMA host in seconds
```

Definition at line 850 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.check_if_comment_has_been_answered_by_thread_author (author_of_thread, comment_actual_id, comments_cursor)

```
Checks whether both strings are equal or not

1. A dictionary containing flags whether that a question is answered by the host with the appropriate timestamp will be created in the beginning.

2. Then the method iterates over every comment within that thread

1.1. Whenever an answer is from the iAMA hosts and the processed comments 'parent_id' matches the iAMA hosts
```

```
comments (answers) id, the returned dict will contain appropriate values and will be returned

1.2. If this is not the case, it will be returned in its default condition

Note: We take a list as 'comments cursor' and not a real cursor, because real cursors can be exhausted, which

could lead to, that not all comments will be iterated. This is especially critical when you have to do

many iterations with only one cursor... [took me 8 hours to figure this "bug" out...]

Args:

author_of_thread (str): The name of the thread author (iAMA-Host)

comment_actual_id (str): The id of the actually processed comment

comments_cursor (list): The list containing all comments

Returns:

True (bool): Whenever the strings do not match

False (bool): Whenever the strings do match

answered that given question)
```

Definition at line 802 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.check_if_comment_is_a_question (given_string)

```
Simply checks whether a given string is a question or not

This method simply checks wether a question mark exists within that string or not..

This is just that simple because messing around with natural processing kits to determine the semantic sense

would blow up my bachelor work...

Args:

given_string (int): The string which will be checked for a question mark

Returns:

True (bool): Whenever the given string is a question
```

False (bool): Whenever the given string is not a question

Definition at line 745 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)

```
Checks whether both strings are equal or not

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

author_of_thread (str): The name of the thread author (iAMA-Host)
comment author (str): The name of the comments author

Returns:

True (bool): Whenever the strings do not match
False (bool): Whenever the strings do match
answered that given question)
```

Definition at line 782 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.check_if_comment_is_on_tier_1 (comment_parent_id)

```
Checks whether a comment relies on the first tier or any other tier

Args:
comment_parent_id (str): The name id of the comments parent
Returns:
```

```
True (bool): Whenever the comment lies on tier 1
False (bool): Whenever the comment lies on any other tier
```

Definition at line 766 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

Returns:
```

Definition at line 20 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.generate_data ()

```
Starts calculating various information about thread and iama behaviour related to the year which is currently being processed

After the caluclations have every iteration the results will ber appended to a list, which will contain all that information for the current year... That list will be writtend to csv and appended to a global list in other methods

Args:

- Returns:
```

Definition at line 105 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client

Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed Returns:
    -
```

Definition at line 45 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.process_specific_thread (thread_id, thread_creation_time_stamp, thread_author)

```
Does the needed operations, for gaining information / knowledge about threads on the given thread id

After the caluclations have every iteration the results will ber appended to a list, which will contain all that information for the current year... That list will be writtend to csv and appended to a global list in other
```

```
Args:
    thread_id (str) : The id, needed for operating (i.E. comparison of parent - child relation)
    thread creation time stamp (int) : Creation time stamp of thread, needed for time difference
calculation
    thread_author (str): The name of the threads author, needed for answer checking of a post
Returns:
    -
```

Definition at line 260 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.start_data_generation_for_analysis ()

```
Starts the whole combination of generating data, checking data and writing them into csv files

1. Triggers the data generation process and moves forward within the years -
by moving through the years a csv file will be created for every year

Args:
-
Returns:
```

Definition at line 65 of file d_create_Big_CSV_ar.py.

def d_create_Big_CSV_ar.write_csv_data (list_with_information)

```
Creates a csv file containing all necessary information about the thread and its mannerism to do research on

Args:

list with information (list): Contains various information about threads mannerism

Returns:
```

Definition at line 1044 of file d_create_Big_CSV_ar.py.

Variable Documentation

int d_create_Big_CSV_ar.argument_year_beginning = 0

Definition at line 1203 of file d_create_Big_CSV_ar.py.

int d_create_Big_CSV_ar.argument_year_ending = 0

Definition at line 1206 of file d_create_Big_CSV_ar.py.

list d_create_Big_CSV_ar.list_current_year = []

Definition at line 1212 of file d_create_Big_CSV_ar.py.

list d_create_Big_CSV_ar.list_global_year = []

Definition at line 1215 of file d_create_Big_CSV_ar.py.

int d_create_Big_CSV_ar.year_actually_in_progress = 0

Definition at line 1209 of file d_create_Big_CSV_ar.py.

d_create_Big_CSV_med Namespace Reference

Functions

- def check script arguments ()
- def <u>initialize_mongo_db_parameters</u> (actually_processed_year)
- def start data generation for analysis ()
- def <u>generate_data</u> ()
- def <u>process_specific_thread</u> (thread_id, thread_creation_time_stamp, thread_author)
- def check if comment is a question (given_string)
- def check if comment is on tier 1 (comment_parent_id)
- def check if comment is not from thread author (author_of_thread, comment_author)
- def <u>check if comment_has been_answered_by_thread_author</u> (author_of_thread, comment_actual_id, comments_cursor)
- def calculate time difference (comment_time_stamp, answer_time_stamp_iama_host)
- def <u>calculate_reaction_time_average</u> (list_to_be_processed, thread_creation_time_stamp)
- def <u>calculate life span</u> (thread_creation_time_stamp, time_value_of_last_comment, time_value_of_last_question)
- def add_actual_year_list_to_global_list (list_to_append)
- def write csv data (list_with_information)

Variables

- int argument year beginning = 0
- int argument year ending = 0
- int year_actually_in_progress = 0
- list <u>list current year</u> = []
- list list global year = □

Function Documentation

def d_create_Big_CSV_med.add_actual_year_list_to_global_list (list_to_append)

```
Iterates over a given list with thread information and adds every single element to a global list
    The global list will be printed to csv in the end

Args:
    list_to_append (list) : List with thread information which will be appended to a global list
Returns:
    -
```

Definition at line 1028 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.calculate_life_span (thread_creation_time_stamp, time value of last comment, time value of last question)

```
Calculates the life span between to time stamps

1. The creation date of a thread gets determined

2. Then the comments will be iterated over, creating a dictionary which is structured as follows:

{
    ('first_Comment_After_Thread_Started', int),
        ('thread_life_span', int),
        ('arithmetic_Mean_Response_Time', int),
```

Thread creation timestamp <-> Last comment time stamp

Definition at line 973 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.calculate_reaction_time_average (list_to_be_processed, thread_creation_time_stamp)

```
Calculates the reaction time of a list with time values in it

Args:
    list to be processed (list): The list which contains time values (utc epoch)
    thread_creation_time_stamp (str): The string which contains the creation date of the thread
(utc epoch)
Returns:
    None: Whenever there were no time values given
```

 $np.median (time_difference) \ (float): Time \ arithmetic \ median \ of \ the \ reaction \ time \ in \ seconds$

Definition at line 889 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.calculate_time_difference (comment_time_stamp, answer_time_stamp_iama_host)

```
Calculates the time difference in seconds between the a comment and its answer from the iama host

1. The time stamps will be converted from epoch into float and afterwards into str again (necessary for correct subtraction)

2. Then the time stamps will be subtracted from each other

3. The containing time difference will be converted into seconds (int)

Args:

comment_time_stamp (str): The time stamp of the comment answer_time_stamp_iama_host (str): The time stamp of the iAMA hosts answer

Returns:

time_difference_in_seconds (int): The time difference of the comment and its answer by the iAMA host in seconds
```

Definition at line 850 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.check_if_comment_has_been_answered_by_thread_author (author_of_thread, comment_actual_id, comments_cursor)

```
Checks whether both strings are equal or not

1. A dictionary containing flags whether that a question is answered by the host with the appropriate timestamp will be created in the beginning.

2. Then the method iterates over every comment within that thread

1.1. Whenever an answer is from the iAMA hosts and the processed comments 'parent_id' matches the iAMA hosts
```

```
comments (answers) id, the returned dict will contain appropriate values and will be returned

1.2. If this is not the case, it will be returned in its default condition

Note: We take a list as 'comments cursor' and not a real cursor, because real cursors can be exhausted, which

could lead to, that not all comments will be iterated. This is especially critical when you have to do

many iterations with only one cursor... [took me 8 hours to figure this "bug" out...]

Args:

author_of_thread (str): The name of the thread author (iAMA-Host)

comment_actual_id (str): The id of the actually processed comment

comments_cursor (list): The list containing all comments

Returns:

True (bool): Whenever the strings do not match

False (bool): Whenever the strings do match

answered that given question)
```

Definition at line 802 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.check_if_comment_is_a_question (given_string)

```
Simply checks whether a given string is a question or not

This method simply checks wether a question mark exists within that string or not..

This is just that simple because messing around with natural processing kits to determine the semantic sense

would blow up my bachelor work...

Args:

given_string (int): The string which will be checked for a question mark

Returns:

True (bool): Whenever the given string is a question
```

False (bool): Whenever the given string is not a question

Definition at line 745 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.check_if_comment_is_not_from_thread_author (author_of_thread, comment_author)

```
Checks whether both strings are equal or not

1. This method simply checks wether both strings match each other or not.

I have built this extra method to have a better overview in the main code..

Args:

author_of_thread (str) : The name of the thread author (iAMA-Host)
comment author (str) : The name of the comments author

Returns:

True (bool): Whenever the strings do not match
False (bool): Whenever the strings do match
answered that given question)
```

Definition at line 782 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.check_if_comment_is_on_tier_1 (comment_parent_id)

```
Checks whether a comment relies on the first tier or any other tier

Args:

comment_parent_id (str): The name id of the comments parent

Returns:
```

```
True (bool): Whenever the comment lies on tier 1
False (bool): Whenever the comment lies on any other tier
```

Definition at line 766 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.check_script_arguments ()

```
Checks if enough and correct arguments have been given to run this script adequate

1. It checks in the first instance if enough arguments have been given
2. Then necessary variables will be filled with appropriate values

Args:

Returns:
```

Definition at line 20 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.generate_data ()

```
Starts calculating various information about thread and iama behaviour related to the year which is currently being processed

After the caluclations have every iteration the results will ber appended to a list, which will contain all that information for the current year... That list will be writtend to csv and appended to a global list in other methods

Args:

- Returns:
```

Definition at line 105 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.initialize_mongo_db_parameters (actually_processed_year)

```
Instantiates all necessary variables for the correct usage of the mongoDB-Client

Args:
    actually_processed_year (int) : The year with which parameters the database should be accessed Returns:
    -
```

Definition at line 45 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.process_specific_thread (thread_id, thread_creation_time_stamp, thread_author)

```
Does the needed operations, for gaining information / knowledge about threads on the given thread id

After the caluclations have every iteration the results will ber appended to a list, which will contain all that information for the current year... That list will be writtend to csv and appended to a global list in other
```

```
Args:
    thread_id (str) : The id, needed for operating (i.E. comparison of parent - child relation)
    thread creation time stamp (int) : Creation time stamp of thread, needed for time difference
calculation
    thread_author (str): The name of the threads author, needed for answer checking of a post
Returns:
```

Definition at line 260 of file d create Big CSV med.py.

def d_create_Big_CSV_med.start_data_generation_for_analysis ()

```
Starts the whole combination of generating data, checking data and writing them into csv files

1. Triggers the data generation process and moves forward within the years -
by moving through the years a csv file will be created for every year

Args:
-
Returns:
```

Definition at line 65 of file d_create_Big_CSV_med.py.

def d_create_Big_CSV_med.write_csv_data (list_with_information)

```
Creates a csv file containing all necessary information about the thread and its mannerism to do research on

Args:

list with information (list): Contains various information about threads mannerism

Returns:
```

Definition at line 1044 of file d_create_Big_CSV_med.py.

Variable Documentation

int d_create_Big_CSV_med.argument_year_beginning = 0

Definition at line 1203 of file d_create_Big_CSV_med.py.

int d_create_Big_CSV_med.argument_year_ending = 0

Definition at line 1206 of file d_create_Big_CSV_med.py.

list d_create_Big_CSV_med.list_current_year = []

Definition at line 1212 of file d_create_Big_CSV_med.py.

list d_create_Big_CSV_med.list_global_year = []

Definition at line 1215 of file d_create_Big_CSV_med.py.

int d_create_Big_CSV_med.year_actually_in_progress = 0

Definition at line 1209 of file d_create_Big_CSV_med.py.

PlotlyBarChart Namespace Reference

Classes

• class <u>PlotlyBarChart</u>

PlotlyBarChart_5_Bars Namespace Reference

Classes

• class <u>PlotlyBarChart5Bars</u>

Class Documentation

PlotlyBarChart.PlotlyBarChart Class Reference

Public Member Functions

- def <u>init</u> (self)
- def main method (self, list of calculated data)

Static Public Member Functions

- def <u>fill x axis list</u> (list_of_calculated_data)
- def fill_y_axis_answered_list (list_of_calculated_data)
- def fill y axis unanswered list (list_of_calculated_data)
- def <u>fill bar percentages values</u> (list_of_calculated_data)
- def fill_chart_title_description (list_of_calculated_data)
- def <u>fill bar description</u> (list_of_calculated_data)
- def generate_chart ()

Static Public Attributes

- <u>time now date</u> = time.strftime("%d.%m.%Y")
- <u>time_now_time</u> = time.strftime("%H:%M:%S")
- string <u>bar x axis text</u> = 'Chart creation date: '
- string <u>chart title</u> = ""
- list <u>bar_value_description</u> = []
- list <u>bar_x_axis_values</u> = []
- list <u>bar_y_axis_first_values</u> = []
- list <u>bar y axis second values</u> = []
- list <u>bar_first_n_second_values_percentage</u> = []

Detailed Description

```
The class to create a stacked bar chart.

This class is heavily modified because it pyplot normally is not designed to run offline this way..

Args:

-
Returns:
-
```

Definition at line 13 of file PlotlyBarChart.py.

Constructor & Destructor Documentation

def PlotlyBarChart.PlotlyBarChart.__init__ (self)

```
Instanciates the class

Args:
```

```
Returns:
```

Definition at line 44 of file PlotlyBarChart.py.

Member Function Documentation

def PlotlyBarChart.PlotlyBarChart.fill_bar_description (list_of_calculated_data)[static]

```
Defines the bar description in dependence to given parameters list_of_calculated_data[0][0]

Args:
    list_of_calculated_data (list) : Will be accessed to gain necessary values

Returns:
    -
```

Definition at line 208 of file PlotlyBarChart.py.

def PlotlyBarChart.PlotlyBarChart.fill_bar_percentages_values (list_of_calculated_data)[static]

```
Calculates percentages to be shown within the graph..

This is not supported within pyplot under normal circumstances.. so we're tricking the HTML settings

Args:

list_of_calculated_data (list) : Will be iterated to gain necessary values

Returns:
```

Definition at line 129 of file PlotlyBarChart.py.

def PlotlyBarChart.PlotlyBarChart.fill_chart_title_description (list_of_calculated_data)[static]

```
Defines the chart title in dependence to sorting method and processed years

Args:

list_of_calculated_data (list): Will be accessed to gain necessary values

Returns:
```

Definition at line 160 of file PlotlyBarChart.py.

def PlotlyBarChart.PlotlyBarChart.fill_x_axis_list (list_of_calculated_data)[static]

```
Fills the "x axis" with the values of the years

Args:
list of calculated data (list): Will be iterated to gain necessary values

Returns:
```

Definition at line 81 of file PlotlyBarChart.py.

def PlotlyBarChart.PlotlyBarChart.fill_y_axis_answered_list (list_of_calculated_data)[static]

```
Fills an bar within the chart with values of the amount of unanswered questions

Args:

list_of_calculated_data (list) : Will be iterated to gain necessary values

Returns:
```

Definition at line 97 of file PlotlyBarChart.py.

def PlotlyBarChart.PlotlyBarChart.fill_y_axis_unanswered_list (list_of_calculated_data)[static]

```
Fills an bar within the chart with values of the amount of unanswered questions

Args:

list_of_calculated_data (list): Will be iterated to gain necessary values

Returns:
```

Definition at line 113 of file PlotlyBarChart.py.

def PlotlyBarChart.PlotlyBarChart.generate_chart ()[static]

```
Generates the chart "temp-plot.html" which will be automatically opened within the browser

Args:
-
Returns:
```

Definition at line 235 of file PlotlyBarChart.py.

def PlotlyBarChart.PlotlyBarChart.main_method (self, list_of_calculated_data)

Definition at line 55 of file PlotlyBarChart.py.

Member Data Documentation

list PlotlyBarChart.PlotlyBarChart.bar_first_n_second_values_percentage = [][static]

Definition at line 42 of file PlotlyBarChart.py.

list PlotlyBarChart.PlotlyBarChart.bar_value_description = [][static]

Definition at line 32 of file PlotlyBarChart.py.

string PlotlyBarChart.PlotlyBarChart.bar_x_axis_text = 'Chart creation date: '[static]

Definition at line 26 of file PlotlyBarChart.py.

list PlotlyBarChart.PlotlyBarChart.bar_x_axis_values = [][static]

Definition at line 33 of file PlotlyBarChart.py.

list PlotlyBarChart.PlotlyBarChart.bar_y_axis_first_values = [][static]

Definition at line 36 of file PlotlyBarChart.py.

list PlotlyBarChart.PlotlyBarChart.bar_y_axis_second_values = [][static]

Definition at line 39 of file PlotlyBarChart.py.

string PlotlyBarChart.PlotlyBarChart.chart_title = ""[static]

Definition at line 29 of file PlotlyBarChart.py.

PlotlyBarChart.PlotlyBarChart.time_now_date = time.strftime("%d.%m.%Y")[static]

Definition at line 23 of file PlotlyBarChart.py.

PlotlyBarChart.PlotlyBarChart.time_now_time = time.strftime("%H:%M:%S")[static]

Definition at line 24 of file PlotlyBarChart.py.

The documentation for this class was generated from the following file:

• PlotlyBarChart.py

PlotlyBarChart_5_Bars.PlotlyBarChart5Bars Class Reference

Public Member Functions

- def init (self)
- def main_method (self, list_of_calculated_data)

Static Public Member Functions

- def <u>fill x axis list</u> (list_of_calculated_data)
- def <u>fill_y_axis_values</u> (list_of_calculated_data)
- def <u>fill bar percentages values</u> (list_of_calculated_data)
- def fill_chart_title_description (list_of_calculated_data)
- def <u>fill bar description</u> (list_of_calculated_data)
- def fill bar annotations ()
- def generate_chart ()

Static Public Attributes

- string <u>color 1</u> = 'rgba(255, 114, 86, 1.0)'
- string <u>color_1_border</u> = 'rgba(238, 106, 80, 1.0)'
- string $\frac{\text{color } 2}{\text{color } 2} = \text{'rgba}(238, 118, 0, 1.0)$ '
- string <u>color_2_border</u> = 'rgba(205, 102, 0, 1.0)'
- string $\frac{\text{color } 3}{\text{color } 3} = \text{'rgba}(0, 201, 87, 1.0)$ '
- string <u>color_3_border</u> = 'rgba(0, 139, 0, 1.0)'
- string $color_4 = 'rgba(0, 205, 205, 1.0)'$
- string color_4_border = 'rgba(0, 139, 139, 1.0)'
- string color 5 = 'rgba(137, 104, 205, 1.0)'
- string color 5 border = 'rgba(39, 71, 139, 1.0)'
- time_now_date = time.strftime("%d.%m.%Y")
- <u>time_now_time</u> = time.strftime("%H:%M:%S")
- string <u>bar_x_axis_text</u> = 'Chart creation date: '
- string <u>chart_title</u> = ""
- list <u>bar value description</u> = []
- list <u>bar_x_axis_values</u> = []
- list bar y axis first values = []
- list <u>bar y axis second values</u> = []
- list <u>bar y axis third values</u> = []
- list <u>bar y axis fourth values</u> = []
- list bar_y_axis_fifth_values = []
- list <u>bar percentages values 1</u> = []
- list bar percentages values 2 = []
- list bar percentages values 3 = []
- list bar_percentages_values_4 = []
- list bar percentages values 5 = []
- list <u>annotations 1</u> = []
- list annotations_2 = []
- list annotations 3 = []
- list annotations_4 = []
- list annotations_5 = []
- list annotations all = []

Detailed Description

```
The class to create a stacked bar chart.

This class is heavily modified because it pyplot normally is not designed to run offline this way..

Args:

-
Returns:

-
```

Definition at line 13 of file PlotlyBarChart_5_Bars.py.

Constructor & Destructor Documentation

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.__init__ (self)

```
Instanciates the class

Args:
-
Returns:
```

Definition at line 71 of file PlotlyBarChart_5_Bars.py.

Member Function Documentation

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.fill_bar_annotations () [static]

Definition at line 291 of file PlotlyBarChart_5_Bars.py.

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.fill_bar_description (list_of_calculated_data)[static]

```
Defines the bar description in dependence to given parameters list_of_calculated_data[0][0]

Args:
    list_of_calculated_data (list) : Will be accessed to gain necessary values

Returns:
    -
```

Definition at line 246 of file PlotlyBarChart_5_Bars.py.

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.fill_bar_percentages_values (list_of_calculated_data)[static]

```
Calculates percentages to be shown within the graph..

This is not supported within pyplot under normal circumstances.. so we're tricking the HTML settings

Args:

list_of_calculated_data (list) : Will be iterated to gain necessary values
```

```
Returns:
```

Definition at line 144 of file PlotlyBarChart_5_Bars.py.

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.fill_chart_title_description (list_of_calculated_data)[static]

```
Defines the chart title in dependence to sorting method and processed years

Args:
    list_of_calculated_data (list) : Will be accessed to gain necessary values

Returns:
```

Definition at line 189 of file PlotlyBarChart_5_Bars.py.

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.fill_x_axis_list (list_of_calculated_data)[static]

```
Fills the "x axis" with the values of the years

Args:
    list of calculated data (list) : Will be iterated to gain necessary values
Returns:
```

Definition at line 108 of file PlotlyBarChart_5_Bars.py.

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.fill_y_axis_values (list_of_calculated_data)[static]

```
Fills an bar within the chart with values of the amount of unanswered questions

Args:

list of calculated data (list): Will be iterated to gain necessary values

Returns:
```

Definition at line 124 of file PlotlyBarChart_5_Bars.py.

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.generate_chart ()[static]

```
Generates the chart "temp-plot.html" which will be automatically opened within the browser

Args:
-
Returns:
```

Definition at line 393 of file PlotlyBarChart_5_Bars.py.

def PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.main_method (self, list_of_calculated_data)

```
Sequential fills the necessary varibales for the graph
Structure of list_of_calculated_data:

[ "sorting", [year, answered, unanswered], [year, answered, unanswered], ... ]
i.e. ["top",
        [2009, 900, 1536],
        [2010, 500, 500],
        [2011, 300, 700]
        ]

Args:
        list_of_calculated_data (list): Contains sorting method, and the years data
Returns:
        -
```

Definition at line 82 of file PlotlyBarChart_5_Bars.py.

Member Data Documentation

```
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.annotations_1 = [][static]
```

Definition at line 64 of file PlotlyBarChart_5_Bars.py.

```
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.annotations_2 = [][static]
```

Definition at line 65 of file PlotlyBarChart_5_Bars.py.

list PlotlyBarChart 5 Bars.PlotlyBarChart5Bars.annotations 3 = [[static]

Definition at line 66 of file PlotlyBarChart_5_Bars.py.

list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.annotations_4 = [][static]

Definition at line 67 of file PlotlyBarChart_5_Bars.py.

list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.annotations_5 = [][static]

Definition at line 68 of file PlotlyBarChart_5_Bars.py.

list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.annotations_all = [] [static]

Definition at line 69 of file PlotlyBarChart_5_Bars.py.

list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_percentages_values_1 = [][static]

Definition at line 58 of file PlotlyBarChart_5_Bars.py.

list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_percentages_values_2 = [] [static]

Definition at line 59 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_percentages_values_3 = [][static]
Definition at line 60 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_percentages_values_4 = [][static]
Definition at line 61 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_percentages_values_5 = [][static]
Definition at line 62 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_value_description = [][static]
Definition at line 47 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_x_axis_text = 'Chart creation date: '[static]
Definition at line 41 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_x_axis_values = [] [static]
Definition at line 49 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_y_axis_fifth_values = [][static]
Definition at line 55 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_y_axis_first_values = [][static]
Definition at line 51 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_y_axis_fourth_values = [][static]
Definition at line 54 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.bar_y_axis_second_values = [][static]
Definition at line 52 of file PlotlyBarChart_5_Bars.py.
list PlotlyBarChart 5 Bars PlotlyBarChart5Bars har y axis third values = [][a+a+ia]

```
Definition at line 53 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.chart_title = "" [static]
   Definition at line 44 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.color_1 = 'rgba(255, 114, 86, 1.0)' [static]
   Definition at line 23 of file PlotlyBarChart 5 Bars.py.
string PlotlyBarChart 5 Bars.PlotlyBarChart5Bars.color 1 border = 'rgba(238, 106, 80,
1.0)'[static]
   Definition at line 24 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.color_2 = 'rgba(238, 118, 0, 1.0)' [static]
   Definition at line 26 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.color_2_border = 'rgba(205, 102, 0,
1.0)'[static]
   Definition at line 27 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.color_3 = 'rgba(0, 201, 87, 1.0)' [static]
   Definition at line 29 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart 5 Bars.PlotlyBarChart5Bars.color 3 border = 'rgba(0, 139, 0, 1.0)' [static]
   Definition at line 30 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.color_4 = 'rgba(0, 205, 205, 1.0)' [static]
   Definition at line 32 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart 5 Bars.PlotlyBarChart5Bars.color 4 border = 'rgba(0, 139, 139,
1.0)'[static]
   Definition at line 33 of file PlotlyBarChart_5_Bars.py.
string PlotlyBarChart 5 Bars.PlotlyBarChart5Bars.color 5 = 'rgba(137, 104, 205, 1.0)' [static]
```

Definition at line 35 of file PlotlyBarChart_5_Bars.py.

string PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.color_5_border = 'rgba(39, 71, 139, 1.0)' [static]

Definition at line 36 of file PlotlyBarChart_5_Bars.py.

PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.time_now_date = time.strftime("%d.%m.%Y")[static]

Definition at line 38 of file PlotlyBarChart_5_Bars.py.

PlotlyBarChart_5_Bars.PlotlyBarChart5Bars.time_now_time = time.strftime("%H:%M:%S")[static]

Definition at line 39 of file PlotlyBarChart_5_Bars.py.

The documentation for this class was generated from the following file:

• PlotlyBarChart 5 Bars.py

File Documentation

a__everything_Big_CSV_analyzer.py File Reference

Namespaces

• <u>a everything Big CSV analyzer</u>

Functions

- def
 - a everything Big CSV analyzer.relation question upvotes with amount of questions answered by iama host ()
- def a __everything_Big_CSV_analyzer.average_means_of_values_f_threads ()
- def a everything Big CSV analyzer relation thread upvotes with amount of comments ()
- def a everything Big CSV_analyzer.relation_thread_upvotes_with_amount_of_questions ()
- def a everything Big CSV analyzer.relation thread downvotes with amount of comments ()
- def a everything Big CSV analyzer.relation thread downvotes with amount of questions ()
- def a everything Big CSV analyzer.relation thread upvotes and iama host response time comments ()
- def a everything Big CSV analyzer.relation thread upvotes and iama host response time questions ()
- def a everything Big CSV analyzer.relation thread downvotes and iama host response time comments ()
- def a everything Big CSV analyzer.relation thread downvotes and iama host response time questions ()
- def a everything Big CSV analyzer.relation thread lifespan to last comment and amount of comments ()
- def a everything Big CSV analyzer.relation thread lifespan to last comment and amount of questions ()
- def a everything Big CSV analyzer.relation thread lifespan to last question and amount of comments ()
- def a everything Big CSV analyzer.relation thread lifespan to last question and amount of question ()
- def
 - <u>a everything Big CSV analyzer.relation_thread_lifespan_to_last_comment_and_iama_host_response_time_t</u> o comments ()
- def
- def
 - <u>a everything Big CSV analyzer.relation thread lifespan to last question and iama host response time to comments ()</u>
- def
- def
 - <u>a</u> everything Big CSV analyzer.relation thread reaction time comments and iama host response time to <u>comments</u> ()
- def
 - <u>a_everything_Big_CSV_analyzer.relation_thread_reaction_time_comments_and_iama_host_response_time_to_questions</u> ()
- def
 - a everything Big CSV analyzer.relation thread reaction time questions and iama host response time to comments ()
- def
 - <u>a</u> everything Big CSV analyzer.relation thread reaction time questions and iama host response time to <u>questions</u> ()
- def
 - <u>a</u> everything Big CSV analyzer.relation thread reaction time comments and amount of comments the i ama_host_answered_to ()

- def
 - <u>a__everything_Big_CSV_analyzer.relation_thread_reaction_time_comments_and_amount_of_questions_the_ia_ma_host_answered_to_()</u>
- def
 - a everything Big CSV analyzer.relation thread reaction time questions and amount of comments the ia ma_host_answered_to()
- def
 - <u>a_everything_Big_CSV_analyzer.relation_thread_reaction_time_questions_and_amount_of_questions_the_ia_ma_host_answered_to()</u>
- def
 - <u>a everything Big CSV analyzer.relation_thread_amount_of_questioners_total_and_num_questions_answere_d_by_iama_host()</u>
- def
 - <u>a_everything_Big_CSV_analyzer.realation_thread_amount_of_commentators_total_and_num_comments_ans_wered_by_iama_host()</u>
- def
 - <u>a__everything_Big_CSV_analyzer.relation_thread_amount_of_questions_and_amount_questions_answered_by_iama_host ()</u>
- def a <u>everything Big CSV analyzer.thread overall correlation</u> ()
- def a <u>everything Big CSV analyzer.question_overall_correlation</u>()
- def a everything Big CSV analyzer.average means of values f authors ()
- def a everything Big CSV analyzer.median of values f authors randomized ()
- def a everything Big CSV analyzer.median of values f authors ()
- def a_everything_Big_CSV_analyzer.arr_of_values_f_authors ()
- def a everything Big CSV analyzer.calculate t tests of author values ()

- a everything Big CSV analyzer.author information iama
- a everything Big CSV analyzer author information iama sampleset randomized
- a everything Big CSV analyzer.author information random
- a_everything_Big_CSV_analyzer.author_information_random_sampleset_randomized
- a everything Big CSV analyzer.thread information
- a everything Big CSV analyzer.question information
- a everything Big CSV analyzer.inplace
- <u>a_everything_Big_CSV_analyzer.author_amount_creation_iama_threads</u> = author_information_iama['amount_creation_iama_threads']
- <u>a everything Big CSV analyzer.author amount creation other threads</u> = author_information_iama['amount_creation_other_threads']
- <u>a everything Big CSV analyzer.author amount of comments except iama</u> = author_information_iama['amount_of_comments_except_iama']
- <u>a_everything_Big_CSV_analyzer.author_amount_of_comments_iama</u> = author_information_iama['amount_of_comments_iama']
- a everything Big CSV analyzer author author birth date = author information iama['author birth date']
- <u>a everything Big CSV analyzer.author author comment karma amount</u> = author information iama['author comment karma amount']
- a everything Big CSV_analyzer.author_author_link_karma_amount = author_information_iama['author_link_karma_amount']
- a everything Big CSV_analyzer.author_author_name = author_information_iama['author_name']
- <u>a_everything_Big_CSV_analyzer.author_comment_creation_every_x_sec</u> = author_information_iama['comment_creation_every_x_sec']
- <u>a everything Big CSV_analyzer.author_thread_creation_every_x_sec</u> = author_information_iama['thread_creation_every_x_sec']
- <u>a everything Big CSV_analyzer.author_time_acc_birth_first_iama_thread</u> = author_information_iama['time_acc_birth_first_iama_thread']

- <u>a everything Big CSV analyzer.author time diff acc creation n first comment = author_information_iama['time_diff_acc_creation_n_first_comment']</u>
- <u>a_everything_Big_CSV_analyzer.author_time_diff_acc_creation_n_first_thread</u> = author_information_iama['time_diff_acc_creation_n_first_thread']
- <u>a_everything_Big_CSV_analyzer.author_amount_creation_iama_threads_randomized</u> = author_information_iama_sampleset_randomized['amount_creation_iama_threads']
- a everything Big CSV analyzer.author amount creation other threads randomized = author_information_iama_sampleset_randomized['amount_creation_other_threads']
- a everything Big CSV analyzer.author amount of comments except iama randomized = author_information_iama_sampleset_randomized['amount_of_comments_except_iama']
- <u>a everything Big CSV analyzer.author amount of comments iama_randomized</u> = author_information_iama_sampleset_randomized['amount_of_comments_iama']
- <u>a everything Big CSV_analyzer.author_author_birth_date_randomized</u> = author_information_iama_sampleset_randomized['author_birth_date']
- <u>a everything Big CSV analyzer.author author comment karma amount randomized</u> = author_information_iama_sampleset_randomized['author_comment_karma_amount']
- <u>a everything Big CSV analyzer.author author link karma amount randomized</u> = author_information_iama_sampleset_randomized['author_link_karma_amount']
- <u>a_everything_Big_CSV_analyzer.author_author_name_randomized</u> = author_information_iama_sampleset_randomized['author_name']
- <u>a_everything_Big_CSV_analyzer.author_comment_creation_every_x_sec_randomized</u> = author_information_iama_sampleset_randomized['comment_creation_every_x_sec']
- <u>a everything Big CSV analyzer.author thread creation every x sec randomized</u> = author_information_iama_sampleset_randomized['thread_creation_every_x_sec']
- <u>a everything Big CSV analyzer.author time acc birth first iama thread randomized</u> = author_information_iama_sampleset_randomized['time_acc_birth_first_iama_thread']
- <u>a everything Big CSV analyzer.author_time_diff_acc_creation_n_first_comment_randomized</u> = author_information_iama_sampleset_randomized['time_diff_acc_creation_n_first_comment']
- <u>a everything Big CSV analyzer.author_time_diff_acc_creation_n_first_thread_randomized</u> = author_information_iama_sampleset_randomized['time_diff_acc_creation_n_first_thread']
- a everything Big CSV analyzer.random author amount creation iama threads = author_information_random['amount_creation_iama_threads']
- <u>a everything Big CSV_analyzer.random_author_amount_creation_other_threads</u> = author_information_random['amount_creation_other_threads']
- <u>a everything Big CSV_analyzer.random_author_amount_of_comments_except_iama</u> = author_information_random['amount_of_comments_except_iama']
- <u>a everything Big CSV_analyzer.random_author_amount_of_comments_iama</u> = author_information_random['amount_of_comments_iama']
- <u>a everything Big CSV analyzer.random author author birth date</u> = author_information_random['author_birth_date']
- <u>a everything Big CSV analyzer.random author author comment karma amount</u> = author_information_random['author_comment_karma_amount']
- <u>a everything Big CSV_analyzer.random_author_author_link_karma_amount</u> = author_information_random['author_link_karma_amount']
- a everything Big CSV analyzer.random author author name = author_information_random['author_name']
- <u>a everything Big CSV analyzer.random author comment creation every x sec</u> = author_information_random['comment_creation_every_x_sec']
- <u>a everything Big CSV_analyzer.random_author_thread_creation_every_x_sec</u> = author_information_random['thread_creation_every_x_sec']
- <u>a everything Big CSV_analyzer.random_author_time_acc_birth_first_iama_thread</u> = author_information_random['time_acc_birth_first_iama_thread']
- a everything Big CSV analyzer.random author time diff acc creation n first comment = \
- a everything Big CSV analyzer.random author time diff acc creation n first thread
- <u>a everything Big CSV_analyzer.random_author_amount_creation_iama_threads_randomized</u> = author_information_random_sampleset_randomized['amount_creation_iama_threads']

- <u>a everything Big CSV analyzer.random author amount creation other threads randomized</u> = author_information_random_sampleset_randomized['amount_creation_other_threads']
- <u>a everything Big CSV_analyzer.random_author_amount_of_comments_except_iama_randomized</u> = author_information_random_sampleset_randomized['amount_of_comments_except_iama']
- <u>a_everything_Big_CSV_analyzer.random_author_amount_of_comments_iama_randomized</u> = author_information_random_sampleset_randomized['amount_of_comments_iama']
- <u>a everything Big CSV analyzer.random author author birth date randomized</u> = author_information_random_sampleset_randomized['author_birth_date']
- <u>a everything Big CSV analyzer.random author author comment karma amount randomized</u> = author_information_random_sampleset_randomized['author_comment_karma_amount']
- <u>a_everything_Big_CSV_analyzer.random_author_author_link_karma_amount_randomized</u> = author_information_random_sampleset_randomized['author_link_karma_amount']
- <u>a_everything_Big_CSV_analyzer.random_author_author_name_randomized</u> = author_information_random_sampleset_randomized['author_name']
- <u>a everything Big CSV analyzer.random author comment creation every x sec randomized</u> = author_information_random_sampleset_randomized['comment_creation_every_x_sec']
- <u>a everything Big CSV analyzer.random author thread creation every x sec randomized</u> = author_information_random_sampleset_randomized['thread_creation_every_x_sec']
- <u>a everything Big CSV_analyzer.random_author_time_acc_birth_first_iama_thread_randomized</u> = author_information_random_sampleset_randomized['time_acc_birth_first_iama_thread']
- a_everything_Big_CSV_analyzer.random_author_time_diff_acc_creation_n_first_comment_randomized = \
- a_everything_Big_CSV_analyzer.random_author_time_diff_acc_creation_n_first_thread_randomized
- a everything Big_CSV_analyzer.question_ups = question_information['Question ups']
- <u>a_everything_Big_CSV_analyzer.question_answered_by_iAMA_host</u> = question_information['Question answered by iAMA host']
- <u>a_everything_Big_CSV_analyzer.thread_year</u> = thread_information['Year']
- a __everything_Big_CSV_analyzer.thread_id = thread_information['Thread id']
- a everything Big CSV analyzer.thread author = thread information['Thread author']
- a everything Big CSV analyzer.thread ups = thread information['Thread ups']
- a everything Big CSV analyzer.thread downs = thread_information['Thread downs']
- <u>a everything Big CSV_analyzer.thread_creation_time_stamp</u> = thread_information['Thread creation time stamp']
- a everything Big CSV analyzer, thread average comment vote score total
- a everything Big CSV analyzer.thread_average_comment_vote_score_tier_1
- a everything Big CSV analyzer.thread average comment vote score tier x
- a everything Big CSV analyzer.thread average question vote score total
- <u>a_everything_Big_CSV_analyzer.thread_average_question_vote_score_tier_1</u>
- <u>a_everything_Big_CSV_analyzer.thread_average_question_vote_score_tier_x</u>
- a everything Big CSV analyzer.thread num comments total skewed
- <u>a everything Big CSV analyzer.thread num comments total</u> = thread_information['Thread num comments total']
- <u>a everything Big CSV analyzer.thread num comments tier 1</u> = thread_information['Thread num comments tier 1']
- <u>a_everything_Big_CSV_analyzer.thread_num_comments_tier_x</u> = thread_information['Thread num comments tier_x']
- <u>a_everything_Big_CSV_analyzer.thread_num_questions_total</u> = thread_information['Thread num questions total']
- <u>a everything Big CSV analyzer.thread num questions tier 1</u> = thread_information['Thread num questions tier 1']
- <u>a everything Big CSV analyzer.thread num questions tier x</u> = thread_information['Thread num questions tier x']
- a everything Big CSV analyzer.thread num questions answered by jama host total
- a everything Big CSV analyzer, thread num questions answered by iama host tier 1
- a everything Big CSV analyzer,thread num questions answered by iama host tier x
- a everything Big CSV analyzer.thread num comments answered by iama host total

- a everything Big CSV analyzer.thread num comments answered by iama host tier 1
- a everything Big CSV analyzer.thread num comments answered by iama host tier x
- a everything Big CSV analyzer.thread average reaction time between comments total
- a everything Big CSV analyzer.thread average reaction time between comments tier 1
- a_everything_Big_CSV_analyzer.thread_average_reaction_time_between_comments_tier_x
- a everything Big CSV analyzer.thread average reaction time between questions total
- a everything_Big_CSV_analyzer.thread_average_reaction_time_between_questions_tier_1
- a everything Big CSV analyzer.thread average reaction time between questions tier x
- a everything Big CSV analyzer.thread average response to comment time iama host total
- a everything Big CSV analyzer.thread average response to comment time iama host tier 1
- a everything Big CSV analyzer.thread average response to comment time iama host tier x
- a __everything_Big_CSV_analyzer.thread_average_response_to_question_time_iama_host_total
- a everything Big CSV analyzer.thread average response to question time iama host tier 1
- a everything Big CSV analyzer.thread average response to question time iama host tier x
- a everything Big CSV_analyzer.thread_amount_of_questioners_total
- a everything Big CSV analyzer.thread amount of questioners tier 1
- a_everything_Big_CSV_analyzer.thread_amount_of_questioners_tier_x
- a everything Big CSV analyzer.thread amount of commentators total
- a_everything_Big_CSV_analyzer.thread_amount_of_commentators_tier_1
- a everything Big CSV analyzer.thread amount of commentators tier x
- a everything Big CSV analyzer.thread life span until last comment
- <u>a_everything_Big_CSV_analyzer.thread_life_span_until_last_question</u>

a_author_Information.py File Reference

Namespaces

• <u>a author Information</u>

Functions

- def a author Information.check script arguments ()
- def a author Information.initialize mongo db parameters ()
- def a_author_Information.write_csv_data ()

- <u>a author Information.mongo db client instance</u> = None
- a_author_Information.mongo_db_author_instance = None
- <u>a author Information.mongo db author collection</u> = None
- int <u>a_author_Information.mongo_db_author_collection_original</u> = 0
- string a author Information.argument db to choose = ""

a_iAMA_Commenttime_arr.py File Reference

Namespaces

• <u>a iAMA Commenttime arr</u>

Functions

- def a iAMA Commenttime arr.check script arguments ()
- def a iAMA Commenttime arr.initialize mongo db parameters (actually_processed_year)
- def a_iAMA_Commenttime_arr.start_data_generation_for_analysis ()
- def a iAMA Commenttime arr.prepare data for graph ()
- def a iAMA Commenttime arr.add thread list to global list (list_to_append)
- def a iAMA Commenttime arr.generate data to be analyzed ()
- def <u>a_iAMA_Commenttime_arr.calculate_ar_mean_answer_time_for_questions</u> (id_of_thread, author_of_thread)
- def a iAMA Commenttime arr.check if comment is a question (given_string)
- def <u>a_iAMA_Commenttime_arr.check_if_comment_is_on_tier_1</u> (comment_parent_id)
- def <u>a iAMA Commenttime arr.check if comment is not from thread author</u> (author_of_thread, comment_author)
- def <u>a_iAMA_Commenttime_arr.check_if_comment_is_answer_from_thread_author</u> (author_of_thread, comment_actual_id, comments_cursor)
- def <u>a iAMA Commenttime arr.calculate time difference</u> (comment_time_stamp, answer_time_stamp_iama_host)
- def <u>a iAMA Commenttime arr.write csv data</u> (list_with_information)
- def a iAMA Commenttime arr.plot generated data ()

- int a iAMA Commenttime arr.argument year beginning = 0
- int a iAMA Commenttime arr.year actually in progress = 0
- int a iAMA Commenttime arr.argument year ending = 0
- string a_iAMA_Commenttime_arr.argument_tier_in_scope = ""
- string a iAMA Commenttime arr.argument plot time unit = ""
- a iAMA Commenttime arr.mongo DB Client Instance = None
- a_iAMA_Commenttime_arr.mongo_DB_Threads_Instance = None
- a iAMA Commenttime arr.mongo DB Thread Collection = None
- <u>a_iAMA_Commenttime_arr.mongo_DB_Comments_Instance</u> = None
- list a iAMA Commenttime arr.list To Be Plotted = []
- list a iAMA Commenttime arr.global thread list = []
- list a_iAMA_Commenttime_arr.data_to_give_plotly = []

a_iAMA_Commenttime_med.py File Reference

Namespaces

• a iAMA Commenttime med

Functions

- def a iAMA Commenttime med.check script arguments ()
- def a iAMA Commenttime med.initialize mongo db parameters (actually_processed_year)
- def a_iAMA_Commenttime_med.start_data_generation_for_analysis ()
- def a iAMA Commenttime med.prepare data for graph ()
- def a iAMA Commenttime med.add thread list to global list (list_to_append)
- def a iAMA Commenttime med.generate data to be analyzed ()
- def <u>a_iAMA_Commenttime_med.calculate_ar_mean_answer_time_for_questions</u> (id_of_thread, author_of_thread)
- def a iAMA Commenttime med.check if comment is a question (given_string)
- def a iAMA Commenttime med.check if comment is on tier 1 (comment_parent_id)
- def <u>a iAMA Commenttime med.check if comment is not from thread author</u> (author_of_thread, comment author)
- def <u>a_iAMA_Commenttime_med.check_if_comment_is_answer_from_thread_author</u> (author_of_thread, comment_actual_id, comments cursor)
- def <u>a iAMA Commenttime med.calculate time difference</u> (comment_time_stamp, answer_time_stamp_iama_host)
- def a iAMA Commenttime med.write csv data (list_with_information)
- def <u>a_iAMA_Commenttime_med.plot_generated_data</u> ()

- int a iAMA Commenttime med.argument year beginning = 0
- int a iAMA Commenttime med.year actually in progress = 0
- int a iAMA Commenttime med.argument year ending = 0
- string a_iAMA_Commenttime_med.argument_tier_in_scope = ""
- string a iAMA Commenttime med.argument plot time unit = ""
- a iAMA Commenttime med.mongo DB Client Instance = None
- a_iAMA_Commenttime_med.mongo_DB_Threads_Instance = None
- <u>a iAMA Commenttime med.mongo DB Thread Collection</u> = None
- a_iAMA_Commenttime_med.mongo_DB_Comments_Instance = None
- list a iAMA Commenttime med.list To Be Plotted = []
- list <u>a_iAMA_Commenttime_med.global_thread_list</u> = []
- list <u>a_iAMA_Commenttime_med.data_to_give_plotly</u> = []

a_question_Answered_Yes_No_Extrema.py File Reference

Namespaces

• a question Answered Yes No Extrema

Functions

- def a question Answered Yes No Extrema.check script arguments ()
- def a question Answered Yes No Extrema.initialize mongo db parameters (actually_processed_year)
- def a question_Answered_Yes_No_Extrema.start_data_generation_for_analysis ()
- def a question Answered Yes No Extrema.generate data now ()
- def <u>a question_Answered_Yes_No_Extrema.process_answered_questions_within_thread</u> (id_of_thread, author_of_thread, thread_creation_date)
- def a question Answered Yes No Extrema.check if comment is a question (given_string)
- def <u>a_question_Answered_Yes_No_Extrema.check_if_comment_is_not_from_thread_author</u> (author_of_thread, comment_author)
- def <u>a question Answered Yes No Extrema.check if comment has been answered by thread author</u> (author of thread, comment acutal id, comments cursor)
- def <u>a question Answered Yes No Extrema.calculate time difference</u> (comment_time_stamp, answer_time_stamp_iama_host)
- def a question Answered Yes No Extrema.sort questions (list_which_is_to_be_sorted)
- def <u>a question Answered Yes No Extrema.create question list containing all years</u> (list_with_comments_per_years)
- def a question Answered Yes No Extrema.write csv and count unanswered (list_with_comments)
- def a_question_Answered_Yes_No_Extrema.plot_generated_data ()

- int a question Answered Yes No Extrema.argument year beginning = 0
- int a question Answered Yes No Extrema.year actually in progress = 0
- int a_question_Answered_Yes_No_Extrema.argument_year_ending = 0
- a_question_Answered_Yes_No_Extrema.argument_sorting = bool
- int a question Answered Yes No Extrema.argument amount of top quotes = 0
- <u>a question Answered Yes No Extrema.mongo DB Client Instance</u> = None
- a_question_Answered_Yes_No_Extrema.mongo_DB_Threads_Instance = None
- <u>a question Answered Yes No Extrema.mongo DB Thread Collection</u> = None
- <u>a_question_Answered_Yes_No_Extrema.mongo_DB_Comments_Instance</u> = None
- list a question Answered Yes No Extrema.question information list = []
- list a question Answered Yes No Extrema.data to give plotly = []

a question Answered Yes No Tier Percentage.py File Reference

Namespaces

• a question Answered Yes No Tier Percentage

Functions

- def a question Answered Yes No Tier Percentage.check script arguments ()
- def <u>a question Answered Yes No Tier Percentage.initialize mongo db parameters</u> (actually_processed_year)
- def a question Answered Yes No Tier Percentage.start data generation for analysis ()
- def a question Answered Yes No Tier Percentage.generate data to be analyzed ()
- def <u>a question Answered Yes No Tier Percentage.question answering distribution tier1 tierx tierany</u> (id_of_thread, author_of_thread)
- def a question Answered Yes No Tier Percentage.check if comment is a question (given string)
- def a question Answered Yes No Tier Percentage.check if comment is on tier 1 (comment_parent_id)
- def <u>a question Answered Yes No Tier Percentage.check if comment is not from thread author</u> (author_of_thread, comment_author)
- def <u>a question Answered Yes No Tier Percentage.check if comment is answer from thread author</u> (author_of_thread, comment_actual_id, comments_cursor)
- def a question Answered Yes No Tier Percentage.write csv (list_with_information)
- def a question Answered Yes No Tier Percentage.add local list to global list (list_to_append)
- def a question_Answered_Yes_No_Tier_Percentage.prepare_data_for_graph ()
- def a question Answered Yes No Tier Percentage.plot generated data ()

- int <u>a_question_Answered_Yes_No_Tier_Percentage.argument_year_beginning</u> = 0
- int a question Answered Yes No Tier Percentage.year actually in progress = 0
- int a question Answered Yes No Tier Percentage.argument year ending = 0
- string a question Answered Yes No Tier Percentage.argument tier in scope = ""
- a_question_Answered_Yes_No_Tier_Percentage.mongo_DB_Client_Instance = None
- a question Answered Yes No Tier Percentage.mongo DB Threads Instance = None
- a question Answered Yes No Tier Percentage.mongo DB Thread Collection = None
- a_question_Answered_Yes_No_Tier_Percentage.mongo_DB_Comments_Instance = None
- list a question Answered Yes No Tier Percentage.global question list = []
- list a <u>question_Answered_Yes_No_Tier_Percentage.year_question_list</u> = []
- list a question Answered Yes No Tier Percentage.data to give plotly = []

a_question_Tier_Distribution.py File Reference

Namespaces

• a question Tier Distribution

Functions

- def <u>a question Tier Distribution.initialize mongo db parameters</u> (actually_processed_year)
- def a question Tier Distribution.check script arguments ()
- def a_question_Tier_Distribution.start_data_generation_for_analysis ()
- def a question Tier Distribution.generate data to be analyzed ()
- def <u>a_question_Tier_Distribution.question_distribution_tier1_tierx</u> (id_of_thread, author_of_thread)
- def a question Tier Distribution.check if comment is a question (given_string)
- def <u>a_question_Tier_Distribution.check_if_comment_is_on_tier_1</u> (comment_parent_id)
- def <u>a_question_Tier_Distribution.check_if_comment_is_not_from_thread_author</u> (author_of_thread, comment_author)
- def a question Tier Distribution.add actual year list to global list (list to append)
- def <u>a question Tier Distribution.write csv</u> (list_with_information)
- def <u>a_question_Tier_Distribution.prepare_data_for_graph</u> ()
- def a question Tier Distribution.plot generated data ()

- int a question Tier Distribution.argument year beginning = 0
- int a question Tier Distribution.year actually in progress = 0
- int a question Tier Distribution.argument year ending = 0
- a_question_Tier_Distribution.mongo_DB_Client_Instance = None
- a question Tier Distribution.mongo DB Threads Instance = None
- a_question_Tier_Distribution.mongo_DB_Thread_Collection = None
- a_question_Tier_Distribution.mongo_DB_Comments_Instance = None
- list a question Tier Distribution.current year question list = []
- list a_question_Tier_Distribution.global_year_question_list = []
- list a question Tier Distribution.data to give plotly = []

a_thread_Lifespan_N_Average_Commenttime.py File Reference

Namespaces

• a thread Lifespan N Average Commenttime

Functions

- def a thread Lifespan N Average Commenttime.check script arguments ()
- def a thread Lifespan N Average Commenttime.initialize mongo db parameters (actually_processed_year)
- def a_thread_Lifespan_N_Average_Commenttime.start_data_generation_for_analysis ()
- def a thread Lifespan N Average Commenttime.prepare data for graph life span ()
- def a thread Lifespan N Average Commenttime.prepare data for comment time ()
- def a thread Lifespan N Average Commenttime.generate data to be analyzed ()
- def <u>a_thread_Lifespan_N_Average_Commenttime.calculate_time_difference</u> (id_of_thread, creation_date_of_thread)
- def <u>a thread Lifespan N Average Commenttime.write csv</u> (list_with_information)
- def a thread Lifespan N Average Commenttime.add thread list to global list (list_to_append)
- def a thread Lifespan N Average Commenttime.prepare dict by time separation for comment time ()
- def <u>a_thread_Lifespan_N_Average_Commenttime.plot_generated_data</u> ()

- int a thread Lifespan N Average Commenttime.argument year beginning = 0
- string a thread Lifespan N Average Commenttime.argument calculation = ""
- int a_thread_Lifespan_N_Average_Commenttime.argument_year_ending = 0
- int a_thread_Lifespan_N_Average_Commenttime.year_actually_in_progress = 0
- string a_thread_Lifespan_N_Average_Commenttime.argument_plot_time_unit = ""
- a thread Lifespan N Average Commenttime.mongo DB Client Instance = None
- a thread Lifespan N_Average_Commenttime.mongo_DB_Threads_Instance = None
- a_thread_Lifespan_N_Average_Commenttime.mongo_DB_Thread_Collection = None
- <u>a thread Lifespan N Average Commenttime.mongo DB Comments Instance</u> = None
- list <u>a_thread_Lifespan_N_Average_Commenttime.global_thread_list</u> = []
- list a thread Lifespan N Average Commenttime.temp time difference list = []
- list a thread Lifespan N Average Commenttime.list with currents year infos = []
- list a thread Lifespan N Average Commenttime.data to give plotly = []

a_thread_Lifespan_N_Average_Questiontime.py File Reference

Namespaces

• a thread Lifespan N Average Questiontime

Functions

- def a thread Lifespan N Average Questiontime.check script arguments ()
- def <u>a thread Lifespan N Average Questiontime.initialize mongo db parameters</u> (actually_processed_year)
- def a thread Lifespan N Average Questiontime.start data generation for analysis ()
- def a thread Lifespan N Average Questiontime.prepare data for graph life span ()
- def a thread Lifespan N Average Questiontime.prepare data for comment time ()
- def a thread Lifespan N Average Questiontime.generate data to be analyzed ()
- def <u>a_thread_Lifespan_N_Average_Questiontime.calculate_time_difference</u> (id_of_thread, creation_date_of_thread)
- def a thread Lifespan N Average Questiontime.write csv (list_with_information)
- def a thread Lifespan N Average Questiontime.add thread list to global list (list_to_append)
- def a thread Lifespan N Average Questiontime.prepare dict by time separation for comment time ()
- def <u>a_thread_Lifespan_N_Average_Questiontime.plot_generated_data</u> ()

- int a thread Lifespan N Average Questiontime.argument year beginning = 0
- string a thread Lifespan N Average Questiontime.argument calculation = ""
- int a_thread_Lifespan_N_Average_Questiontime.argument_year_ending = 0
- int a thread Lifespan N Average Questiontime.year actually in progress = 0
- string a_thread_Lifespan_N_Average_Questiontime.argument_plot_time_unit = ""
- a thread Lifespan N Average Questiontime.mongo DB Client Instance = None
- a_thread_Lifespan_N_Average_Questiontime.mongo_DB_Threads_Instance = None
- a_thread_Lifespan_N_Average_Questiontime.mongo_DB_Thread_Collection = None
- a thread Lifespan N Average Questiontime.mongo DB Comments Instance = None
- list a thread Lifespan N Average Questiontime.global thread list = []
- list a thread Lifespan N Average Questiontime.temp time difference list = []
- list <u>a_thread_Lifespan_N_Average_Questiontime.list_with_currents_year_infos</u> = []
- list <u>a_thread_Lifespan_N_Average_Questiontime.data_to_give_plotly</u> = []

ar_analyzer.py File Reference

Namespaces

• <u>ar analyzer</u>

Functions

- def ar analyzer.average means of values f threads ()
- def ar analyzer.std derivation ()

- ar analyzer.thread information
- ar analyzer.thread year = thread information['Year']
- <u>ar_analyzer.thread_id</u> = thread_information['Thread id']
- <u>ar analyzer.thread author</u> = thread_information['Thread author']
- <u>ar_analyzer.thread_ups</u> = thread_information['Thread ups']
- <u>ar analyzer.thread downs</u> = thread_information['Thread downs']
- ar analyzer.thread creation time stamp = thread_information['Thread creation time stamp']
- <u>ar_analyzer.thread_average_comment_vote_score_total</u>
- ar analyzer.thread average comment vote score tier 1
- ar_analyzer.thread_average_comment_vote_score_tier_x
- ar analyzer.thread average question vote score total
- ar_analyzer.thread_average_question_vote_score_tier_1
- ar_analyzer.thread_average_question_vote_score_tier_x
- ar_analyzer.thread_num_comments_total_skewed
- ar analyzer.thread num comments total = thread information['Thread num comments total']
- ar analyzer.thread num comments tier 1 = thread information['Thread num comments tier 1']
- ar_analyzer.thread_num_comments_tier_x = thread_information['Thread num comments tier x']
- <u>ar_analyzer.thread_num_questions_total</u> = thread_information['Thread num questions total']
- ar_analyzer.thread_num_questions_tier_1 = thread_information['Thread num questions tier 1']
- ar_analyzer.thread_num_questions_tier_x = thread_information['Thread num questions tier x']
- ar analyzer.thread num questions answered by iama host total
- ar_analyzer.thread_num_questions_answered_by_iama_host_tier_1
- ar analyzer.thread num questions answered by iama host tier x
- ar analyzer.thread num comments answered by iama host total
- ar analyzer.thread num comments answered by iama host tier 1
- ar analyzer.thread num comments answered by iama host tier x
- ar_analyzer.thread_average_reaction_time_between_comments_total
- ar analyzer.thread average reaction time between comments tier 1
- ar_analyzer.thread_average_reaction_time_between_comments_tier_x
- <u>ar analyzer.thread average reaction time between questions total</u>
- <u>ar_analyzer.thread_average_reaction_time_between_questions_tier_1</u>
- ar_analyzer.thread_average_reaction_time_between_questions_tier_x
- ar analyzer.thread average response to comment time iama host total
- ar_analyzer.thread_average_response_to_comment_time_iama_host_tier_1
- ar analyzer.thread average response to comment time iama host tier x
- <u>ar_analyzer.thread_average_response_to_question_time_iama_host_total</u>
- ar_analyzer.thread_average_response_to_question_time_iama_host_tier_1
- ar analyzer.thread average response to question time iama host tier x
- ar_analyzer.thread_amount_of_questioners_total
- ar analyzer.thread amount of questioners tier 1
- ar_analyzer.thread_amount_of_questioners_tier_x

- ar analyzer.thread amount of commentators total
- ar_analyzer.thread_amount_of_commentators_tier_1
- <u>ar_analyzer.thread_amount_of_commentators_tier_x</u>
- ar analyzer.thread life span until last comment
- ar analyzer.thread life span until last question

c_crawl_Author_Information.py File Reference

Namespaces

• <u>c crawl Author Information</u>

Functions

- def c crawl Author Information.check script arguments ()
- def <u>c crawl Author Information.initialize mongo db parameters</u> (actually_processed_year)
- def c_crawl_Author_Information.start_data_generation_for_analysis ()
- def c crawl Author Information.generate data now ()
- def <u>c_crawl_Author_Information.calculate_time_difference</u> (time_value_1, time_value_2)
- def <u>c crawl Author Information.get author information</u> (name_of_author)

- int c_crawl_Author_Information.argument_year_beginning = 0
- int c crawl Author Information.year actually in progress = 0
- int c crawl Author Information.argument year ending = 0
- string c_crawl_Author_Information.argument_inverse_crawling = ""
- <u>c crawl Author Information.mongo db client instance</u> = None
- <u>c_crawl_Author_Information.mongo_db_threads_instance</u> = None
- c crawl Author Information.mongo db thread collection = None
- c crawl Author Information.mongo db author instance = None
- <u>c_crawl_Author_Information.reddit_instance</u> = praw.Reddit(user_agent="University_Regensburg_iAMA_Crawler_0.001")

c_crawl_Differences.py File Reference

Namespaces

• c crawl Differences

Functions

- def c crawl Differences.check script arguments ()
- def c crawl Differences.initialize mongo db parameters ()
- def <u>c_crawl_Differences.crawl_missing_collection_into_comments_database</u> (name_of_missing_collection)
- def c crawl Differences.check if collection is missing in comments database ()
- def c_crawl_Differences.crawl_missing_collection_into_threads_database (name_of_missing_collection)
- def c crawl Differences.check if collection is missing in threads database ()
- def <u>c_crawl_Differences.start_crawling_for_diffs</u> ()

- c crawl Differences.mongo DB Client Instance = None
- <u>c crawl Differences.mongo DB Threads Instance</u> = None
- <u>c_crawl_Differences.mongo_DB_Thread_Collection</u> = None
- <u>c crawl Differences.mongo DB Comments Instance</u> = None
- <u>c_crawl_Differences.mongo_DB_Comments_Collection</u> = None
- string c crawl Differences.argument year beginning = ""
- string c_crawl_Differences.argument_year_ending = ""
- string c_crawl_Differences.argument_inverse_crawling = ""

c_crawl_Random_Author_Information.py File Reference

Namespaces

• c crawl Random Author Information

Functions

- def c crawl Random Author Information.check script arguments ()
- def c crawl Random Author Information.initialize mongo db parameters ()
- def c_crawl_Random_Author_Information.start_data_generation_for_analysis ()
- def c crawl Random Author Information.generate data now (randomized_author_name)
- def c_crawl_Random_Author_Information.calculate_time_difference (time_value_1, time_value_2)
- def c crawl Random Author Information.get author information (name_of_author)

- c_crawl_Random_Author_Information.argument_limit_crawling_amount = None
- <u>c crawl Random Author Information.mongo db client instance</u> = None
- <u>c crawl Random Author Information.mongo db random author instance</u> = None
- <u>c_crawl_Random_Author_Information.mongo_db_random_author_collection</u> = None
- <u>c crawl Random Author Information.mongo db iama author instance</u> = None
- <u>c_crawl_Random_Author_Information.mongo_db_iama_author_collection</u> = None
- int c crawl Random Author Information.mongo db iama author collection amount = 0
- <u>c_crawl_Random_Author_Information.reddit_instance</u> = praw.Reddit(user_agent="University_Regensburg_iAMA_Crawler_0.001")

c_crawl_Threads_N_Comments.py File Reference

Namespaces

• c crawl Threads N Comments

Functions

- def c crawl Threads N Comments.initialize mongo db parameters ()
- def c crawl Threads N Comments.check script arguments ()
- def c_crawl_Threads_N_Comments.convert_argument_year_to_epoch (year)
- def c crawl Threads N Comments.crawl data ()
- def c_crawl_Threads_N_Comments.crawl_threads ()
- def c crawl Threads N Comments.crawl comments ()
- def c_crawl_Threads_N_Comments.check_if_coll_in_db_already_exists_up2date (submission)

- <u>c crawl Threads N Comments.mongo DB Client Instance</u> = None
- <u>c crawl Threads N Comments.reddit Instance</u> = None
- <u>c_crawl_Threads_N_Comments.argument_crawl_type</u> = None
- <u>c crawl Threads N Comments.argument year beginning</u> = None
- <u>c_crawl_Threads_N_Comments.argument_year_end</u> = None
- c crawl Threads N Comments.argument hours to shift = None
- <u>c_crawl_Threads_N_Comments.time_shift_difference</u>

d_create_Big_CSV_ar.py File Reference

Namespaces

• <u>d create Big CSV ar</u>

Functions

- def d create Big CSV ar.check script arguments ()
- def <u>d create Big CSV ar.initialize mongo db parameters</u> (actually_processed_year)
- def d_create_Big_CSV_ar.start_data_generation_for_analysis ()
- def d create Big CSV ar.generate data ()
- def d_create_Big_CSV_ar.process_specific_thread (thread_id, thread_creation_time_stamp, thread_author)
- def d create Big CSV ar.check if comment is a question (given_string)
- def d_create_Big_CSV_ar.check_if_comment_is_on_tier_1 (comment_parent_id)
- def <u>d_create_Big_CSV_ar.check_if_comment_is_not_from_thread_author</u> (author_of_thread, comment_author)
- def <u>d create Big CSV ar.check if comment has been answered by thread author</u> (author_of_thread, comment_actual_id, comments_cursor)
- def d create Big CSV ar.calculate time difference (comment_time_stamp, answer_time_stamp_iama_host)
- def d_create_Big_CSV_ar.calculate_reaction_time_average (list_to_be_processed, thread_creation_time_stamp)
- def <u>d_create_Big_CSV_ar.calculate_life_span</u> (thread_creation_time_stamp, time_value_of_last_comment, time_value_of_last_question)
- def d_create_Big_CSV_ar.add_actual_year_list_to_global_list (list_to_append)
- def d create Big CSV ar.write csv data (list_with_information)

- int d_create_Big_CSV_ar.argument_year_beginning = 0
- int d create Big CSV ar.argument year ending = 0
- int d create Big CSV ar.year actually in progress = 0
- list <u>d_create_Big_CSV_ar.list_current_year</u> = []
- list <u>d create Big CSV ar.list global year</u> = []

d_create_Big_CSV_med.py File Reference

Namespaces

• <u>d create Big CSV med</u>

Functions

- def d create Big CSV med.check script arguments ()
- def d create Big CSV med.initialize mongo db parameters (actually_processed_year)
- def d_create_Big_CSV_med.start_data_generation_for_analysis()
- def <u>d create Big CSV med.generate data</u> ()
- def <u>d_create_Big_CSV_med.process_specific_thread</u> (thread_id, thread_creation_time_stamp, thread_author)
- def d create Big CSV med.check if comment is a question (given_string)
- def d_create_Big_CSV_med.check_if_comment_is_on_tier_1 (comment_parent_id)
- def <u>d_create_Big_CSV_med.check_if_comment_is_not_from_thread_author</u> (author_of_thread, comment_author)
- def <u>d_create_Big_CSV_med.check_if_comment_has_been_answered_by_thread_author_(author_of_thread, comment_actual_id, comments_cursor)</u>
- def <u>d create Big CSV med.calculate time difference</u> (comment_time_stamp, answer_time_stamp_iama_host)
- def <u>d_create_Big_CSV_med.calculate_reaction_time_average</u> (list_to_be_processed, thread_creation_time_stamp)
- def <u>d create Big CSV med.calculate life span</u> (thread_creation_time_stamp, time_value_of_last_comment, time_value_of_last_question)
- def d create Big CSV med.add actual year list to global list (list_to_append)
- def <u>d_create_Big_CSV_med.write_csv_data</u> (list_with_information)

- int d create Big CSV med.argument year beginning = 0
- int d create Big CSV med.argument year ending = 0
- int d create Big CSV med.year actually in progress = 0
- list d_create_Big_CSV_med.list_current_year = []
- list d create Big CSV med.list global year = []

PlotlyBarChart.py File Reference

Classes

• class <u>PlotlyBarChart.PlotlyBarChart</u>

Namespaces

• <u>PlotlyBarChart</u>

PlotlyBarChart_5_Bars.py File Reference

Classes

• class <u>PlotlyBarChart 5 Bars.PlotlyBarChart5Bars</u>

Namespaces

• <u>PlotlyBarChart 5 Bars</u>

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