



VISIT THE DOME

Thang Nguyen

Ruta Bakhda

1

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

- Upto now: Only labelling for sentences or short sequence of text in each paragraph

logout task selection

All progress is saved automatically. You can return to the task selection at any time.



Actor, artist, philanthropist: My mother's selfless love with me at the holidays and always. (64 segments remaining)

The holidays are my favorite time of year. ? As ? my home fills with the joy and laughter of my six children and four grandchildren, ? I'm reminded of ? how lucky ? I am ? to have the most wonderful job in the world ? - ? being a mother and grandmother. ? It's the single most important thing ? I've done with my life, ? and ? I know ? just how important ? the job is ? because ? I am constantly reminded of ? what an influence ? my own mother was in my

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

- \wat\src\de\aitools\aq\wat\components\SegmentLabeling

➤ `readSegments`: used to read and render content of paragraph into WAT ST's interface

Name	Date modified	Type	Size
 SegmentLabeling	16/06/2019 11:23	JAVA File	10 KB
 TextBox	16/06/2019 11:23	JAVA File	3 KB

```
private void readSegments(final File taskDirectory)
throws IOException {
    try (final BufferedReader reader = new BufferedReader(new FileReader(
        File(taskDirectory, "text.txt")))) {
```

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

```
private void readSegments(final File taskDirectory)
throws IOException {
    try (final BufferedReader reader = new BufferedReader(new FileReader(
        new File(taskDirectory, this.getName() + ".txt")))) {
        List<Segment> paragraph = new ArrayList<>();

        String line;
        int s = 0;
        while ((line = reader.readLine()) != null) {
            line = line.trim();
            if (line.isEmpty()) {
                if (!paragraph.isEmpty()) {
                    paragraph.get(paragraph.size() - 1).setLabels(
                        this.labelsEndOfParagraph);
                    this.segmentParagraphs.add(paragraph);
                }
                paragraph = new ArrayList<>();
            } else {
                if (!paragraph.isEmpty()) {
                    paragraph.get(paragraph.size() - 1).setLabels(
                        this.labelsInParagraph);
                }
                final Segment segment = new Segment(String.valueOf(s), line);
                paragraph.add(segment);
                this.addUnit(segment);
                ++s;
            }
        }
    }
}
```

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

You have completed 0 of 3 tasks.

Task	Progress
002-actorartistphilanthropistmymot	0/64 segments
003-greecesuffereuroexitsinglecurr	0/141 segments
005-treatingafricanswithanunte	0/111 segments

logout

List of Paragraphs

Actor, artist, philanthropist: My mother's selfless love with me at the holidays and always. (64 segments remaining)

The holidays are my favorite time of year. As my home fills with the joy and laughter of my six children and four grandchildren, I'm reminded of how lucky I am to have the most wonderful job in the world - being a mother and grandmother. It's the single most important thing I've done with my life, and I know just how important the job is because I am constantly reminded of what an influence my own mother was in my life. My mother Mieke survived three and a half horrific years in a Japanese concentration camp during World War II. During that time, she focused all of her energy on caring for fellow prisoners who were far worse off than she was.

List of Segments

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

Original code

```
String line;
int s = 0;
while ((line = reader.readLine()) != null) {
    line = line.trim();
    if (line.isEmpty()) {
        if (!paragraph.isEmpty()) {
            paragraph.get(paragraph.size() - 1).setLabels(
                this.labelsEndOfParagraph);
            this.segmentParagraphs.add(paragraph);
        }
        paragraph = new ArrayList<>();
    } else {
        if (!paragraph.isEmpty()) {
            paragraph.get(paragraph.size() - 1).setLabels(
                this.labelsInParagraph);
        }
        final Segment segment = new Segment(String.valueOf(s), line);
        paragraph.add(segment);
        this.addUnit(segment);
        ++s;
    }
}
```

Modified code

```
final Segment a = new Segment(String.valueOf(0),
    "<font color=red><b>Label of Paragraph</b></font>");
paragraph.add(a);

int s = 1;
while ((line = reader.readLine()) != null) {
    line = line.trim();
    if (line.isEmpty()) {
        if (!paragraph.isEmpty()) {
            paragraph.get(paragraph.size() - 1).setLabels(
                this.labelsEndOfParagraph);
            this.segmentParagraphs.add(paragraph);
        }
        paragraph = new ArrayList<>();
    } else {
        if (!paragraph.isEmpty()) {
            paragraph.get(paragraph.size() - 1).setLabels(
                this.labelsInParagraph);
        }
        final Segment segment = new Segment(String.valueOf(s), line);
        paragraph.add(segment);
        this.addUnit(segment);
        ++s;
    }
}
```

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

Original code

Actor, artist, philanthropist: My mother's selfless love with me at the holidays and always. (64 segments remaining)

The holidays are my favorite time of year. As my home fills with the joy and laughter of my six children and four grandchildren, I'm reminded of how lucky I am to have the most wonderful job in the world - being a mother and grandmother. It's the single most important thing I've done with my life, and I know just how important the job is because I am constantly reminded of what an influence my own mother was in my

Modified code

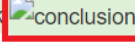




Actor, artist, philanthropist: My mother's selfless love with me at the holidays and always. (64 segments remaining)


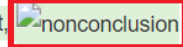




Label of Paragraph AS The holidays are my favorite time of year. As my home fills with the joy and laughter of my six children and four grandchildren, I'm reminded of how lucky I am to have the most wonderful job in the world - being a mother and grandmother. It's the single most important thing I've done with my life, and I know just how important the job is because I am constantly reminded of what an influence my

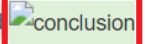





TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

Original code

Treating Africans with an untested Ebola drug. (108 segments remaining)

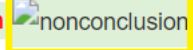
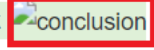




It was reported in The Guardian last week  that Emergency, an Italian NGO, administered an untested heart drug known as Amiodarone, to patients at an Ebola treatment centre in Lakka, Sierra Leone.  The British medics sent  to work at the centre raised alarm as early as November about Emergency's approaches  to palliative care. 


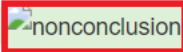




Amiodarone, a drug licenced  to regulate the heartbeat,  has never been tested outside of a lab setting  to treat humans or animals infected with Ebola.  It was neither approved by the Sierra Leonean health ministry nor listed among the 53 drugs  that have an antiviral effect on Ebola. 

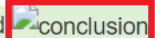





In a report to UK Med, the British healthcare professionals argued  that "the toxic side effects of Amiodarone could in fact be contributing to increased morbidity within the ETC [Ebola treatment centre]".  While  the mortality rate at Emergency's centre is disputed   ranging from 58 and 67 percent  the death rate

Modified code

Treating Africans with an untested Ebola drug. (108 segments remaining)

Label of Paragraph  It was reported in The Guardian last week  that Emergency, an Italian NGO, administered an untested heart drug known as Amiodarone, to patients at an Ebola treatment centre in Lakka, Sierra Leone.  The British medics sent  to work at the centre raised alarm as early as November about Emergency's approaches  to palliative care. 

Amiodarone, a drug licenced  to regulate the heartbeat,  has never been tested outside of a lab setting  to treat humans or animals infected with Ebola.  It was neither approved by the Sierra Leonean health ministry nor listed among the 53 drugs  that have an antiviral effect on Ebola. 

In a report to UK Med, the British healthcare professionals argued  that "the toxic side effects of Amiodarone could in fact be contributing to increased morbidity within the ETC [Ebola treatment centre]".  While  the mortality rate at Emergency's centre is disputed   ranging from 58 and 67 percent  the death rate

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

- Original code

```
2019-06-16-12-00-11.395 -120 ANNOTATOR INFO action open
2019-06-16-12-00-18.956 -120 ANNOTATOR segment-labeling 0 conclusion
2019-06-16-12-00-23.049 -120 ANNOTATOR segment-labeling 6 nonconclusion
2019-06-16-12-00-30.632 -120 ANNOTATOR segment-labeling 11 conclusion
```

- Modified code

```
2019-06-16-12-09-24.034 -120 ANNOTATOR INFO action open
2019-06-16-12-09-38.893 -120 ANNOTATOR segment-labeling 0 nonconclusion
2019-06-16-12-09-41.246 -120 ANNOTATOR segment-labeling 1 conclusion
2019-06-16-12-09-43.519 -120 ANNOTATOR segment-labeling 7 nonconclusion
2019-06-16-12-09-45.691 -120 ANNOTATOR segment-labeling 12 conclusion
```

TASK: ADDING THE LABEL FOR ENTIRE PARAGRAPH

- Compare between original and modified code

	Original Code	Modified Code
Label for entire paragraph	No	Yes
Number of segments	n	n+1
Index of the first segment	0	1
Index of segment of entire paragraph	Null	0

AUTOMATIC TASK ASSIGNMENT

- Task generation is automatic
- Mechanism is needed to assign auto generated tasks
- Input :
 - Text file containing annotators name
 - Input csv file containing speech texts
 - Limit to assign same task to number of users

STEPS

- Calculate and store the tasks
- Calculate the total number of annotators
- Task per annotator = (number of tasks * max task assignment) / number of annotators
- For each task, for the max task assignment, it will randomly select an annotator and assign task
- Output :
 - Dictionary containing annotators and assigned task

```

Lukas
'4720452', '4720454', '4720455', '4720456', '4720461', '4720462', '4720465', '4
720467', '4720472', '4720473', '4720474', '4720475', '4720476', '4720478', '4720
481', '4720488', '4720491', '4720492', '4720493', '4720503', '4720508', '4720513
', '4720523' ]

Thang
'4720452', '4720465', '4720470', '4720472', '4720481', '4720483', '4720491', '4
720493', '4720495', '4720502', '4720503', '4720525', '4720531', '4720543', '4720
545', '4720546', '4720561', '4720562', '4720563', '4720564', '4720565' ]

Wei-fan
'4720452', '4720455', '4720456', '4720458', '4720461', '4720465', '4720466', '4
720467', '4720472', '4720474', '4720476', '4720483', '4720495', '4720505', '4720
513', '4720543', '4720544', '4720547', '4720562', '4720563', '4720564' ]

Yamen
'4720454', '4720458', '4720461', '4720462', '4720466', '4720473', '4720475', '4
720478', '4720488', '4720491', '4720492', '4720493', '4720505', '4720508', '4720
522', '4720525', '4720540', '4720544', '4720546', '4720563', '4720564' ]

Annie
'4720454', '4720455', '4720466', '4720467', '4720470', '4720473', '4720478', '4
720481', '4720483', '4720492', '4720502', '4720505', '4720513', '4720523', '4720
531', '4720540', '4720543', '4720544', '4720545', '4720547', '4720561', '4720562
', '4720565' ]

Ruta
'4720456', '4720458', '4720462', '4720470', '4720474', '4720475', '4720476', '4
720488', '4720495', '4720502', '4720503', '4720508', '4720525', '4720531', '4720
540', '4720545', '4720546', '4720547', '4720561', '4720565' ]

G:\project\new project>

```

ADDING ANNOTATORS AND TASKS IN WAT-SL

```
annotator.Lukas.name = Lukas
annotator.Lukas.password = visitthedome
annotator.Lukas.tasks = 4720452 4720454 4720455 4720456 4720461 4720462 4720465 4720467 4720472 4720473 4720474 4720475 4720476 4720478 4720481 4720488 4720491 4720492
4720493 4720503 4720508 4720513 4720523
```

```
annotator.Thang.name = Thang
annotator.Thang.password = visitthedome
annotator.Thang.tasks = 4720452 4720465 4720470 4720472 4720481 4720483 4720491 4720493 4720495 4720502 4720503 4720525 4720531 4720543 4720545 4720546 4720561 4720562
4720563 4720564 4720565
```

```
annotator.Wei-fan.name = Wei-fan
annotator.Wei-fan.password = visitthedome
annotator.Wei-fan.tasks = 4720452 4720455 4720456 4720458 4720461 4720465 4720466 4720467 4720472 4720474 4720476 4720483 4720495 4720505 4720513 4720543 4720544
4720547 4720562 4720563 4720564
```

```
annotator.Yamen.name = Yamen
annotator.Yamen.password = visitthedome
annotator.Yamen.tasks = 4720454 4720458 4720461 4720462 4720466 4720473 4720475 4720478 4720488 4720491 4720492 4720493 4720505 4720508 4720523 4720525 4720540 4720544
4720546 4720563 4720564
```






```
annotator.Annie.name = Annie
annotator.Annie.password = visitthedome
annotator.Annie.tasks = 4720454 4720455 4720466 4720467 4720470 4720473 4720478 4720481 4720483 4720492 4720502 4720505 4720513 4720523 4720531 4720540 4720543 4720544
4720545 4720547 4720561 4720562 4720565
```

```
annotator.Ruta.name = Ruta
annotator.Ruta.password = visitthedome
annotator.Ruta.tasks = 4720456 4720458 4720462 4720470 4720474 4720475 4720476 4720488 4720495 4720502 4720503 4720508 4720525 4720531 4720540 4720545 4720546 4720547
4720561 4720565
```

ANNOTATION AGREEMENT

- Cohen's kappa
- Measures inter-rater agreement for qualitative items
- Expresses the level of agreement between annotators for classification problems
- In our case,
 - Conclusion
 - Non conclusion

- Implementation : Using Scikit library
- Once, all annotators are done with annotation
- Results will be generated in Wat-SL

<input type="checkbox"/> Name	Date modified	Type	Size
 annie.txt	17-06-2019 14:05	Text Document	4 KB
 lukas.txt	17-06-2019 14:06	Text Document	4 KB
 ruta.txt	17-06-2019 14:06	Text Document	4 KB
 weifan.txt	17-06-2019 14:06	Text Document	4 KB
 yamen.txt	17-06-2019 14:06	Text Document	4 KB

RESULT TEXT FILE FOR EACH ANNOTATOR

```
segment-labeling.0 = nonconclusion
segment-labeling.1 = conclusion
segment-labeling.10 = conclusion
segment-labeling.100 = nonconclusion
segment-labeling.101 = nonconclusion
segment-labeling.102 = nonconclusion
segment-labeling.103 = nonconclusion
segment-labeling.104 = conclusion
segment-labeling.105 = nonconclusion
segment-labeling.106 = nonconclusion
segment-labeling.107 = nonconclusion
segment-labeling.108 = nonconclusion
segment-labeling.11 = nonconclusion
segment-labeling.12 = nonconclusion
segment-labeling.13 = conclusion
segment-labeling.14 = nonconclusion
segment-labeling.15 = nonconclusion
segment-labeling.16 = nonconclusion
segment-labeling.17 = nonconclusion
segment-labeling.18 = conclusion
segment-labeling.19 = conclusion
segment-labeling.2 = conclusion
segment-labeling.20 = conclusion
segment-labeling.21 = nonconclusion
segment-labeling.22 = nonconclusion
segment-labeling.23 = nonconclusion
segment-labeling.24 = nonconclusion
segment-labeling.25 = nonconclusion
segment-labeling.26 = nonconclusion
segment-labeling.27 = nonconclusion
segment-labeling.28 = nonconclusion
```

- So now each annotation file of user will be converted into required form of `sklearn.metrics.cohen_kappa_score`
- Output : Float kappa statistics