

P A R S  M E

# SHARED TASK ANNOTATION TOOLS

Struga, 8 April 2016

# PHASE 2



# PHASE 2 VALIDATION

The screenshot shows a Google Sheets interface for a document titled "Pilot2 ST - Hebrew - Annotator 1". The spreadsheet has columns A through I and rows 1 through 4. The data is as follows:

	A	B	C	D	First		Second	
1	Rank	Token	No space (nsp)	MTW identifiers	MWE identifier	Type	MWE identifier	Type
2								
3	1	אין						
4	2	מנחם						

The validation menu is open, showing the following options:

- \*SHARED\_TASK\_TOOLS\*
- All changes saved in Drive
- Go to last edited cell in column E
- Validate Annotation** (highlighted with a red circle and arrow)

# PHASE 2 VALIDATION

<http://tiny.cc/parsemeValidate>



**ParsemeValidatePhase2.jar**



```
java -jar ParsemeValidatePhase2.jar Language
```



# PHASE 2 VALIDATION

```
java -jar ParsemeValidatePhase2.jar Swedish
```

Annotation with double annotate root type or not root type?! or even using the same number for two different annotations...

```
** -- File --> Pilot2 ST - Swedish - Annotator 1.tsv
```

```
** -- At line number --> 188
```

```
** -- The Token is --> 16 lägga 1 VPC
```



**Italian, Hebrew, Romanian, Swedish, Turkish,  
English, Portuguese, Maltese, Spanish, Greek**

# PHASE 2 VALIDATION

```
java -jar ParsemeValidatePhase2.jar Polish
```

```
All the annotations seem to be in good order!
```



Polish, German, French, Hungarian



# PHASE 2 MERGING

PARSEME SharedTask Master Spreadsheet federico.sangati@gmail.com

File Edit View Insert Format Data Tools Add-ons Help Last edit was 2 days ago Comments Share

fx <https://drive.google.com/open?id=1DjNZmDRZA2iSTupjS1O9WYznali9H4R1RFwJDqSvdQ>

	A	B	C	D	E
1	Language Family	Language	Annotator	File name	Link
19		Portuguese	Zilio	Pilot2 ST - Portuguese - Annotator 2	<a href="https://docs.google.com/spreadsheets/d/1_myIZ6lkvUjnpxytMu6yRi3a9HE5lvRIQbGnakCM8yE">https://docs.google.com/spreadsheets/d/1_myIZ6lkvUjnpxytMu6yRi3a9HE5lvRIQbGnakCM8yE</a>
20			Carlos	Pilot2 ST - Portuguese - Annotator 3	<a href="https://docs.google.com/spreadsheets/d/1jSpjy117HhVUq0U0bT747IOTN-pzbgB8QKwjzT_XeA">https://docs.google.com/spreadsheets/d/1jSpjy117HhVUq0U0bT747IOTN-pzbgB8QKwjzT_XeA</a>
21			Aline	Pilot2 ST - Portuguese - Annotator 4	<a href="https://docs.google.com/spreadsheets/d/1uFjVcJW63zkllb_-ln8-DI7EIRQVajsjXz2JAUR8B0/edf">https://docs.google.com/spreadsheets/d/1uFjVcJW63zkllb_-ln8-DI7EIRQVajsjXz2JAUR8B0/edf</a>
22			Merged	Pilot2 ST - Portuguese - Merged	<a href="https://docs.google.com/spreadsheets/d/1GB8TzmYYeeWNqkmn4wiF1x2klQyz8EgLLDQhOD">https://docs.google.com/spreadsheets/d/1GB8TzmYYeeWNqkmn4wiF1x2klQyz8EgLLDQhOD</a>
23		Romanian	Template	Pilot2 ST - Romanian - Template	<a href="https://drive.google.com/open?id=1cTaCsYIXzSGC784zR5U5zS3N6BU_mqolSP3BDCUdEHM">https://drive.google.com/open?id=1cTaCsYIXzSGC784zR5U5zS3N6BU_mqolSP3BDCUdEHM</a>
24			Annotator 1 Name	Pilot2 ST - Romanian - Annotator 1	<a href="https://drive.google.com/open?id=116jpzo2DQ1GILxy8KZe2byWk-i31SDVEM2YoJloncxM">https://drive.google.com/open?id=116jpzo2DQ1GILxy8KZe2byWk-i31SDVEM2YoJloncxM</a>
25			Annotator 2 Name	Pilot2 ST - Romanian - Annotator 2	<a href="https://drive.google.com/open?id=1ZvA6HQLsSDXPJGUveyT3tKZ-rr-TnDwYG71xuK5bdyU">https://drive.google.com/open?id=1ZvA6HQLsSDXPJGUveyT3tKZ-rr-TnDwYG71xuK5bdyU</a>
26			Merged	Pilot2 ST - Romanian - Merged	<a href="https://docs.google.com/spreadsheets/d/1zXNQM1BOcNDILpQVEBXV8sYRSE0S7SgncA7My2">https://docs.google.com/spreadsheets/d/1zXNQM1BOcNDILpQVEBXV8sYRSE0S7SgncA7My2</a>
27		English	Template	Pilot2 ST - English - Template	<a href="https://drive.google.com/open?id=1I0Mt7naeUFPZAOPjlltH9pS5jleGVJjMlEgGsEGq5o">https://drive.google.com/open?id=1I0Mt7naeUFPZAOPjlltH9pS5jleGVJjMlEgGsEGq5o</a>
28			Annotator 1 Name	Pilot2 ST - English - Annotator 1	<a href="https://drive.google.com/open?id=12bA3c1UDM2fcGpT_7OAH1vreG88gwUSTTcse0DdkW3c">https://drive.google.com/open?id=12bA3c1UDM2fcGpT_7OAH1vreG88gwUSTTcse0DdkW3c</a>
29			Annotator 2 Name	Pilot2 ST - English - Annotator 2	<a href="https://drive.google.com/open?id=1WuzY5DB9CVHFe5zRZyi_aYWgwEOQZRpNNMHmw2t39">https://drive.google.com/open?id=1WuzY5DB9CVHFe5zRZyi_aYWgwEOQZRpNNMHmw2t39</a>
30			Annotator 3 Name	Pilot2 ST - English - Annotator 3	<a href="https://drive.google.com/open?id=1kmsLwzqXae2Ljgg56M0ba-gs8cBvyzss-FjRkn-5yUj">https://drive.google.com/open?id=1kmsLwzqXae2Ljgg56M0ba-gs8cBvyzss-FjRkn-5yUj</a>
31			...		
32		German	Template	Pilot2 ST - German - Template	<a href="https://drive.google.com/open?id=1Kwe4YAF-5xjFIYfraK0TupAWt7H6RXeucPuC1k4pQkw">https://drive.google.com/open?id=1Kwe4YAF-5xjFIYfraK0TupAWt7H6RXeucPuC1k4pQkw</a>
33			Annotator 1 Name	Pilot2 ST - German - Annotator 1	<a href="https://drive.google.com/open?id=1YniU-FsLQIGxhPukAPbhdDkoYQqVd4PIFyBHHzYGkw">https://drive.google.com/open?id=1YniU-FsLQIGxhPukAPbhdDkoYQqVd4PIFyBHHzYGkw</a>
34			Annotator 2 Name	Pilot2 ST - German - Annotator 2	<a href="https://drive.google.com/open?id=1Ox689acF4cry-YI5aUy9Qyd71wloh6V57kSvTXvaEyY">https://drive.google.com/open?id=1Ox689acF4cry-YI5aUy9Qyd71wloh6V57kSvTXvaEyY</a>
35			Annotator 3 Name	Pilot2 ST - German - Annotator 3	<a href="https://drive.google.com/open?id=1-x-FhwfHhskRjhg6A428kQ9NlqxoCaG0HZwQ7n_Fpwc">https://drive.google.com/open?id=1-x-FhwfHhskRjhg6A428kQ9NlqxoCaG0HZwQ7n_Fpwc</a>
36			...		
37		Swedish	Template	Pilot2 ST - Swedish - Template	<a href="https://drive.google.com/open?id=1uNVa2lpGVnBvFv3wBr57KTIhYf5CoriZBwAhdPyBkIU">https://drive.google.com/open?id=1uNVa2lpGVnBvFv3wBr57KTIhYf5CoriZBwAhdPyBkIU</a>
38			Annotator 1 Name	Pilot2 ST - Swedish - Annotator 1	<a href="https://drive.google.com/open?id=1YSeJETkNKHJZ4RZfY9xH6r-ZwR8Xmk_kB4-pdnmiM2o">https://drive.google.com/open?id=1YSeJETkNKHJZ4RZfY9xH6r-ZwR8Xmk_kB4-pdnmiM2o</a>
39			Annotator 2 Name	Pilot2 ST - Swedish - Annotator 2	<a href="https://drive.google.com/open?id=1QjqpmH-852HojjVd5rwaH2zRlyeT2Ek3IQml8BjYAxI">https://drive.google.com/open?id=1QjqpmH-852HojjVd5rwaH2zRlyeT2Ek3IQml8BjYAxI</a>
40			Annotator 3 Name	Pilot2 ST - Swedish - Annotator 3	<a href="https://drive.google.com/open?id=1Y9G2RWIZ83ZEYsiRaxjtkvaCS3PqzNU6xHsv1y5gQEc">https://drive.google.com/open?id=1Y9G2RWIZ83ZEYsiRaxjtkvaCS3PqzNU6xHsv1y5gQEc</a>

+ Main Phase1 Phase2 Romance Germanic Slavic Other Test

# PHASE 2 MERGING

Rank	Token	No space (nsp)	MTW identifiers	First	
				MWE identifier	Type
1	W				
2	stanie				
3	obrzydzenia				
4	przyprawiającego			[1, 1]	IPrepV, IPrepV
5	o			[1, 1]	
6	nowe				
7	mdłości				
8	nie				
9	zauważył				
10	nawet	nsp			

Rank	Token	No space (nsp)	MTW identifiers	First	
				MWE identifier	Type
1	Jakiś				
2	czas				
3	mierzyli			[null, 1]	[null, ID]
4	się			[null, 1]	
5	wzrokiem	nsp		[null, 1]	
6	.				



# ANNOTATION TOOLS

# TOOL SELECTION PROCESS

BRAT

CAT

FLAT

CATMA

WebAnno

MAT

Pub annotation

TELEGRAM-BOT



BRAT

CAT

FLAT

TELEGRAM-BOT



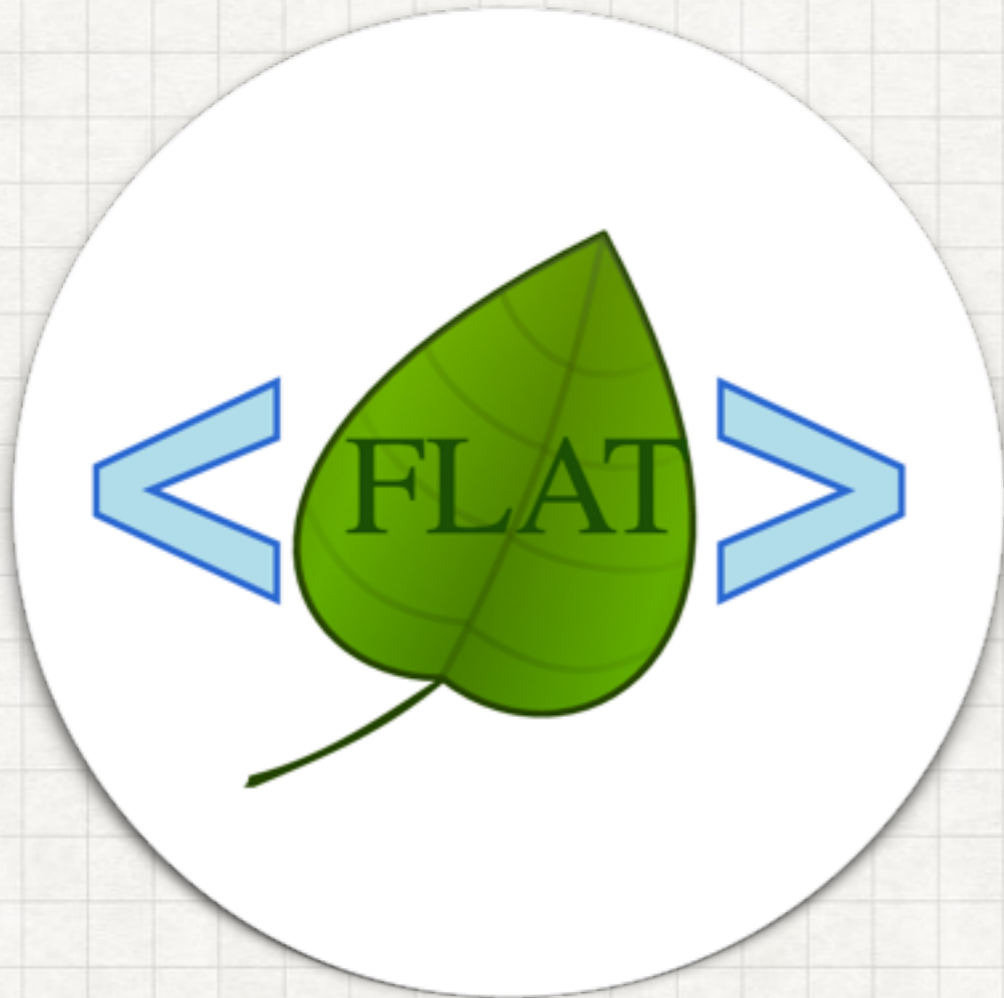
# TOOL SELECTION PROCESS

	Tool:	<b>BRAT</b>	<b>CAT</b>	<b>FLAT</b>	<b>TELEGRAM-BOT</b>
WebSite:		<a href="http://brat.nlplab.org/">http://brat.nlplab.org/</a>	<a href="https://dl.fbk.eu/resources/cat-content-annotation-tool">https://dl.fbk.eu/resources/cat-content-annotation-tool</a>	<a href="https://github.com/proycon/flat/">https://github.com/proycon/flat/</a>	<a href="https://telegram.me/Parseme_Bot">https://telegram.me/Parseme_Bot</a>
Demo:		<a href="http://weaver.nlplab.org/~smp/brat-rtl/">weaver.nlplab.org/~smp/brat-rtl/</a>	:8080/CAT_WEB_APP_I1 (username: sangati password:	<a href="http://flat.science.ru/">http://flat.science.ru/</a>	<a href="https://telegram.me/Parseme_Bot">https://telegram.me/Parseme_Bot</a>
<b>DECISION</b>		<b>Eliminated due to no support discontinuous overlapping MWEs, and heavy development effort needed for customization</b>	<b>Eliminated due to no guarantee of support while the code is not open source.</b>	<b>Retained for a demo in Struga</b>	<b>Retained for a demo in Struga</b>
Is your tool <b>utf-8 compatible</b> (deals with different alphabets: Latin, Cyrillic, diacritics, etc.)?		Y	Y	Y	Y
Can it handle <b>right-to-left</b> languages?		Y (currently working on it, see Behrang conversation)	N	Not yet	Y
Server Needed		Y	N	Yes (central distribution repository - easy to upgrade when new features are available)	Y (via Google Application Engine - it should be free given that required resources are probably below standard quota but costs need to be verified)
Can it handle <b>predefined tokens</b> , that is to say, is there a way for the tool to accept a pre-tokenized sentence? This units will be the minimal-blocks the users can select, so ideally we don't want the selection to be on a sub-span of a token.		Pre-tokenisation is supported and the annotator can double-click on a token to select it in its entirety	Yes, but not below word level (spaces are inserted between tokens)	Y	Y (in some devices the highlighting of selected tokens may be limited)
Can it let the user assign to the selected sequence a category belonging to a set of <b>predefined categories</b> ?		Y	Y	Y	Y
Can it let the user select a <b>discontinuous</b> sequence of tokens (non-adjacent tokens)?		Only via word relations ?	Y	Y	Y
Can it let the user select two or more <b>overlapping sequences</b> of tokens (and assign to each of them a separate category)?		Y	Yes (but rendering is not optimal)	Y	Y (not in the current demo, but can be implemented [SIMPLE])
Does it have an <b>authentication procedure</b> , and can it handle 50-60 distinct users?		Y	Yes, but not yet tested with so many users	Yes, but not yet tested with so many users	Y
Can we define <b>user roles</b> (e.g., project managers, language managers, annotators)?		N	No (each user has a separate workspace)	Limited (only setting read or write permissions on workspaces)	Y (not in the current demo, but can be implemented [MODERATE])
Does the tool provide the language managers with an <b>interface to upload a corpus and assign to each annotator a specific set of sentences</b> ? Ideally we would need a sub-set of sentences to be annotated by at least two annotators to compute inter-annotation agreement.		No, though we have some functionality for comparisons.	N	Yes, but only manually as a preprocessing step	Y (in principle can be implemented [MODERATE+]: a user can submit a file to the bot, but might be wiser to do this manually)
Does it allow to <b>export the data</b> in a standard annotation format (xml, json, tsv)?		Y	Y	Y	Y
Does the tool include a <b>revision phase</b> where a subset of sentences annotated by two users goes to an <b>adjudicator</b> user (different from the previous two) who will need to select the correct annotation?		N	N	No, but willing to implement a separate user interface for that.	Y (not in the current demo, but can be implemented [MODERATE])
Could we count on a reference person of the annotation tool who would be <b>willing to help</b> in the process of setting up the project and customizing the tool for our need.		We still respond to questions and feature requests. Most likely not be able to dedicate enough time for any major coding efforts.	Y/N (willing to answer questions but not solving issues or implementing new features)	Y (eager to implement new features and improve existing ones)	Y (eager to implement new features and improve existing ones)
Other comments			- documents cannot be too big (need to split them)	- can be integrated with UCTO (tokenizer) to tokenize sentence or convert pre-tokenized sentence in FoLiA format - All changes history saved, user can revert them - document based (although you can activate sentence perspective where each sentence is separated from the next) - documents cannot be too big (need to split them)	- the interface is rather modest (basically a messaging app with only text and buttons) and cannot be made fancier, but depending how you look at it, it may be an advantage as it imposes extra pressure to make the logic of the system tidy and as simple as possible.

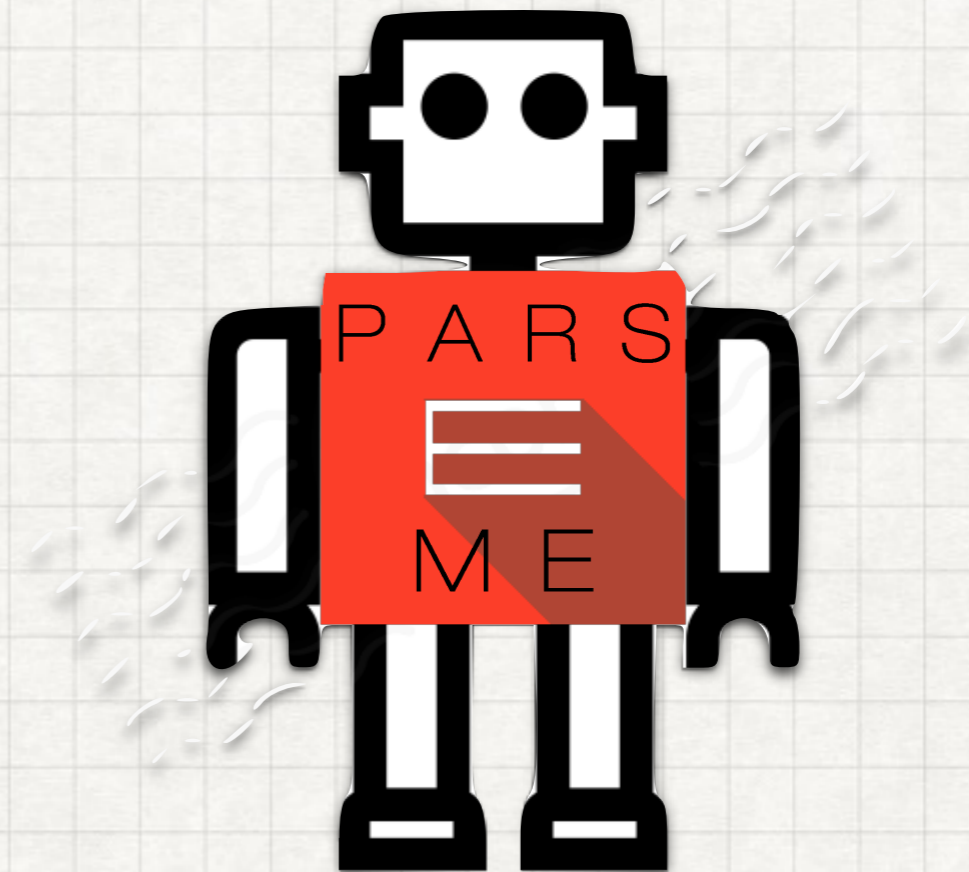


# TOOL SELECTION PROCESS

FLAT



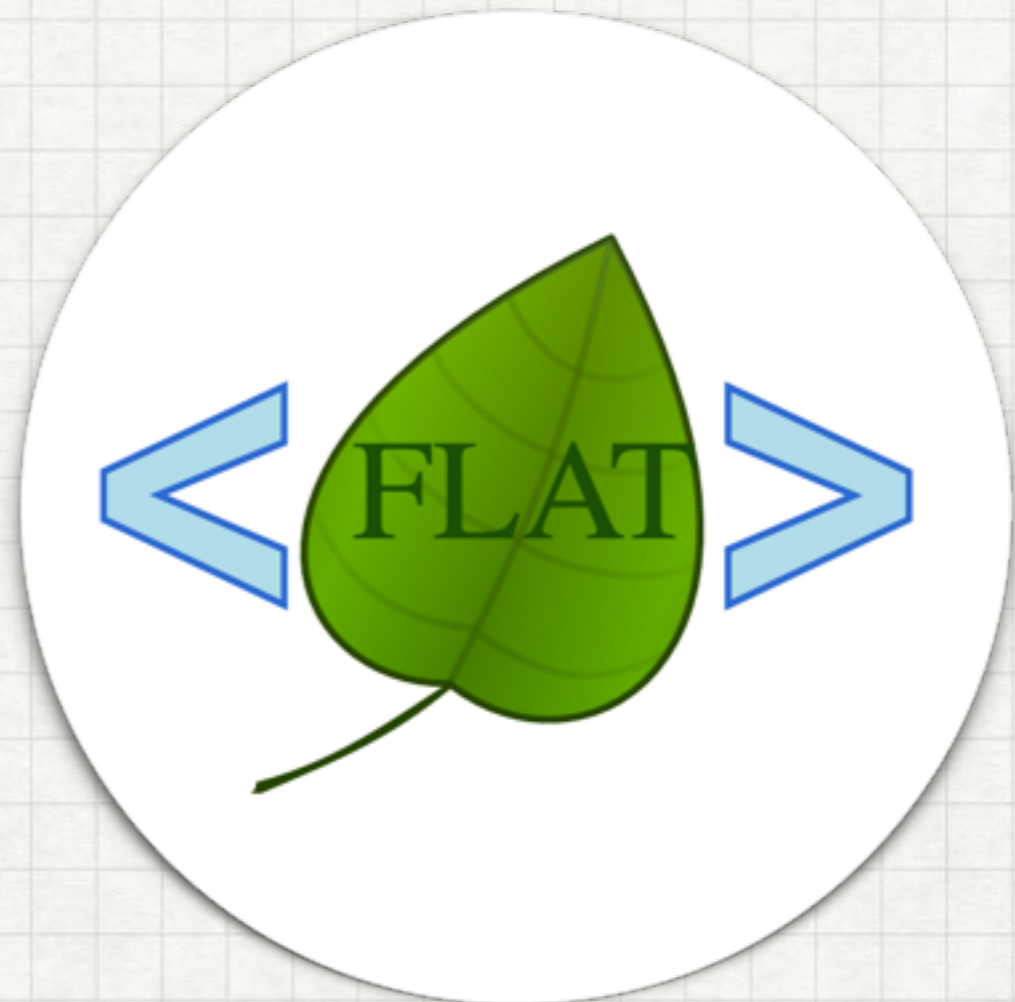
TELEGRAM-BOT



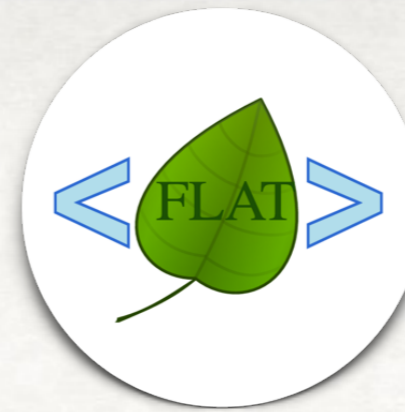


# FLAT

- **FLAT**: web-application that offers an interface for the visualization and editing of FoLiA documents.
- **FoLiA**, a Format for Linguistic Annotation developed in the scope of the CLARIN-NL project and other projects.
- **Maarten van Gompel** (Centre for Language and Speech Technology Radboud Universiteit Nijmegen)



# FLAT



Modes   Annotation Focus   Global annotations   Local annotations   Editor Annotations   Edit Forms   Tools & Options   Document 1

Perspective  
Sentence

Legend • Named Entity  
(Hide)  
OTH  
IPrepV  
ID

3.  
(ID)  
Hospital outpatient clinic diagnostic service for all costs in excess of \$20 a patient.

4.  
(IPrepV)  
Community visiting nurse services at home for up to 240 days an illness.

The President noted that Congress last year passed a law providing grants to states to help pay medical bills of the needy aged.

CALLS PROPOSAL MODEST

He said his plan is designed to "meet the needs of those millions who have no wish to receive care at the taxpayers' expense, but who are nevertheless staggered by the drain on their savings -- or those of their children --

"This is a  
'requirem

"This is no

It is a pro

Every pers

WOULDN'T PAY DOCTORS

The plan does not cover doctor bills.

They would still be paid by the patient.

Apart from the aged care plan the President's most ambitious and costly proposals were for federal scholarships , and grants to build or enlarge medical and dental schools.

The President said the nation's 92 medical and 47 dental schools cannot now handle the student load needed to meet the rising need for health care.

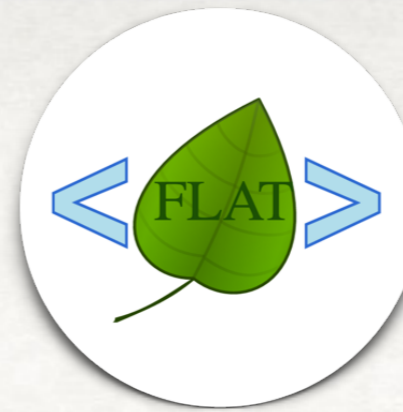
**Annotation Editor**  
Pilot2\_ST\_English\_01.text.1.s.7.w.10

**Named Entity**  
[https://github.com/proycon/parser-support/raw/master/parseme-mwe\\_foliaset.xml](https://github.com/proycon/parser-support/raw/master/parseme-mwe_foliaset.xml)  **Select span>**

Delegate to console   **Ok**



# FLAT



<http://flat.science.ru.nl/register/>

## Create an account

**Username:**

Required. 30 characters or fewer. Letters, digits and @/./+/-/\_ only.

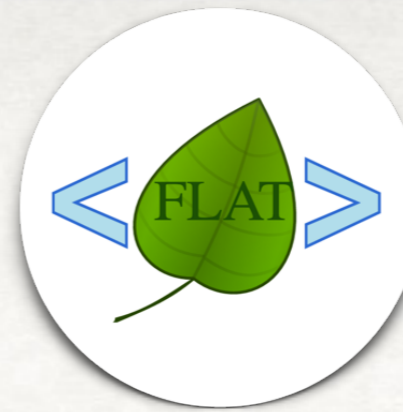
**Password:**

**Password  
confirmation:**

Enter the same password as above, for verification.

Create the account

# FLAT



<http://flat.science.ru.nl/login>

## Log in

**Username:**

**Password:**

**Configuration:**

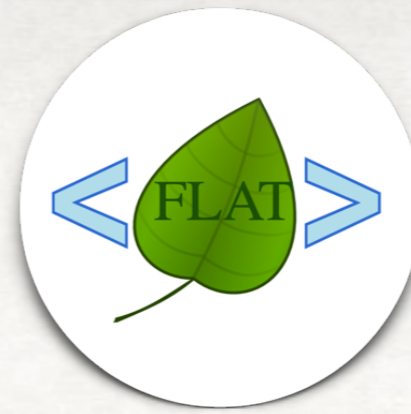
**Log in**

(no account yet? [Register here](#))





# FLAT



<http://tiny.cc/flatCorpus>



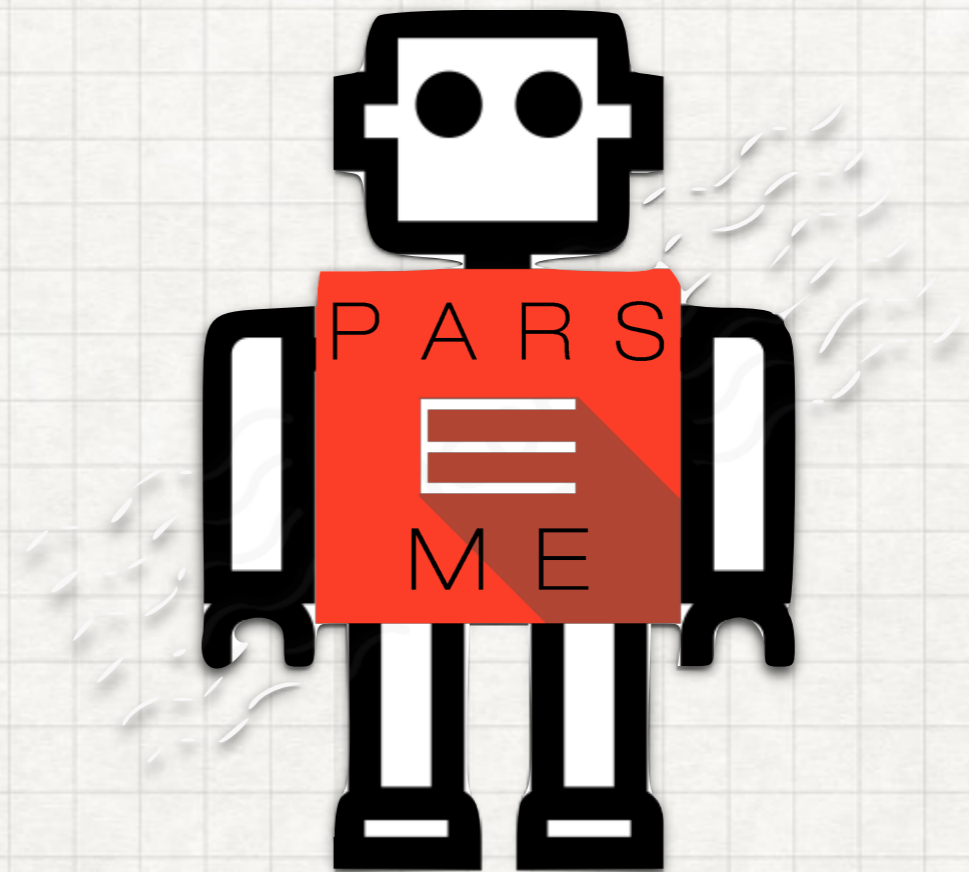
Pilot2\_ST\_English\_FoLiA.zip



Extract it into a local folder

# TELEGRAM-BOT

- In house application  
(Federico with the help of Behrang)
- Based on Telegram platform  
(messaging application)
- Text-based (simple interface  
with text and buttons)



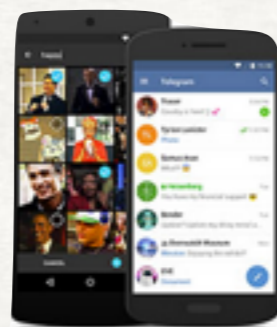


# TELEGRAM-BOT



[web.telegram.org](http://web.telegram.org)

or install Telegram app in your PC/tablet/phone



Telegram for Android



Telegram for iPhone/iPad



Telegram for Windows

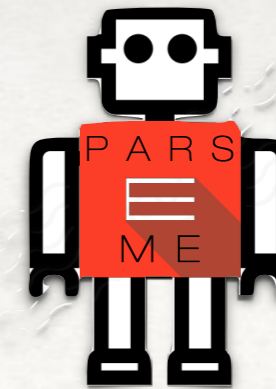
Alternative app for every platform



Telegram Web-version

Telegram for PC/Mac/Linux

# TELEGRAM-BOT



[web.telegram.org](http://web.telegram.org)

Telegram Next >

### Sign in

Please choose your country and enter your full phone number.

Country  
Macedonia

Code      Phone number  
+389      |



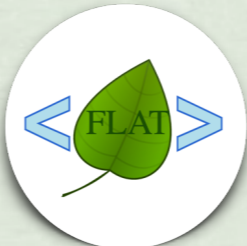
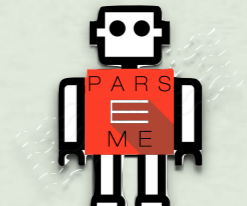
# TELEGRAM-BOT



web.telegram.org

The image shows a screenshot of the Telegram web interface. The top header is blue with the Telegram logo and the word 'Telegram'. Below the header is a search bar containing the text 'parseme'. The search results are displayed in a list. The first result is a bot named 'parsemebot' with a red robot icon, a start screen, and a date of '3/26/16'. This result is circled in red. Below it is a section for 'Global search' with a red circular icon containing the letters 'IO'. The second result is 'ioBot' with the handle '@parseMeBot'. A dotted line connects the search bar to a smaller inset window showing the search results. Another dotted line connects the red circle to a larger inset window showing the chat interface for 'parsemebot', which displays a message: 'Hi FedetL, welcome to the Pa...'. The main interface on the right says 'Please select a chat to start messaging'.

# COMPARISON

	FLAT 	TELEGRAM-BOT 
CUSTOMIZATION	FEATURES COMMON TO OTHER ANNOTATION TASKS (E.G., RIGHT TO LEFT LANGUAGES)	ANY FEATURE SPECIFIC TO PARSEME TASK (E.G., ROLES, TRAINING PHASE, VALIDATION)
DEVICE COMPATIBILITY	WEB INTERFACE: ACCESSIBLE VIA A BROWSER	VIA TELEGRAM APP: ACCESSIBLE VIA A BROWSER OR DEDICATED APP (PC, TABLET or PHONE
INTERFACE	DOCUMENT BASED (MULTIPLE SENTENCES)	SENTENCE BASED