NLP Parser

NLP Parser parses the text into token model. Token model is a model that contains the structure of the text. Parser classifies these model into several queries.

Query and Transformation

Query is a set pattern that will parse token model. The matches result will be transformed into command model. The command model properties are as following.

- `command` - The command that will tell **Execution Router**
- `target` - The target of execution
- `related_tokens` - The tokens that are related to the target. For example, in `current date`, `current` is related tokens
- `type` - The type of command
- `source` - It can be an input for the target for execution

1. WhatQuery

The match pattern:

1. Index 0 → Position: `DET`
2. Index 1 → Position: `NOUN`
3. Index 2 → Position: `AUX`, optional
4. Index 3 → Position: `ADV`
5. Index 4 → Position: `PUNCT`, optional

Example matches:

- What time is it now?
- What time is now?
- What time now?

Token transformation:

1. `command`: `NOUN`

2. WhoQuery

The match pattern:

1. Index 0 → Position: `PRON`
2. Index 1 → Position: `AUX`
3. Index 2 → Position: `PRON`

Example matches:

- Who are you?
- Who is that?

Token transformation:

None

3. AuxiliaryQuery

Example matches:

1. Index 0 → Position: `NOUN`
2. Index 1 → Position: `ADV`, optional
3. Index 2 → Position: `AUX`
4. Index 3 → Position: `PUNCT`, optional

Example matches:

- Current time is?

Token transformation:

1. `command`: `NOUN`

4. CommandQuery

Pattern 1

Example matches:

1. Index 0 → Position: `VERB`
2. Index 1 → Position: `PRON`, optional
3. Index 2 → Position: `DET`, optional
4. Index 3 → Position: `ADJ`, optional
5. Index 4 → Position: `NOUN`

Example matches:

- Show me directory media

Pattern 2

Example matches:

1. Index 0 → Position: `VERB`
2. Index 1 → Position: `PRON`, optional
3. Index 2 → Position: `DET`, optional
4. Index 3 → Position: `ADJ`, optional
5. Index 4 → Position: `PROPN`

Example matches:

- Show me running containers

Token transformation:

1. `target`: `NOUN` or `PROPN`

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