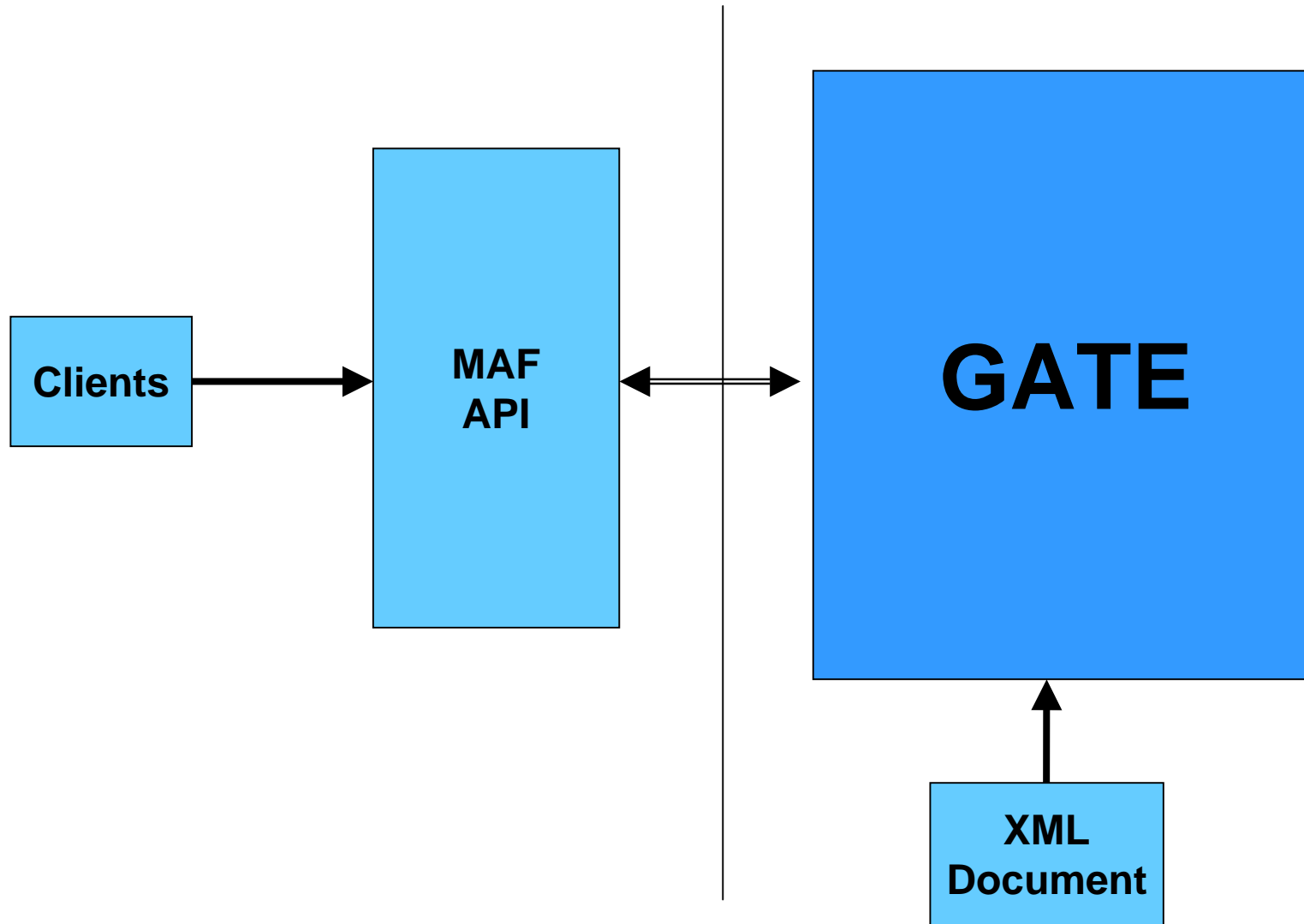


**Julien Nioche
Univ. Sheffield**

LIRICS.MAF API : a quick overview

**Lirics Barcelona Meeting
21 / 06 / 05**

API Implementation for the GATE PRs



```
// sample code to list all strings that has been annotated
// as noun in the text
MAF doc = lyricsDocImpl.getMAF();
WordFormSet wfs = doc.getAllWordForms();
wfs = wfs.getWordFormsWithFeatureID("pos@noun");
Iterator<WordForm> iter = wfs.getIterator();
while(iter.hasNext()) {
    WordForm wf = iter.next();
    TokenSet tkSet = wf.getAllTokens();
    Iterator<Token> tkIter = tkSet.iterator();
    while(tkIter.hasNext()) {
        Token token = tkIter.next();
        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

```
// sample code to list all strings that has  
// as noun in the text  
MAF doc = lyricsDocImpl.getMAF();  
WordFormSet wfs = doc.getAllWordForms();  
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Iterator<WordForm> iter = wfs.getIterator();  
while(iter.hasNext()) {  
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    Iterator<Token> tkIter = tkSet.iterator();  
    while(tkIter.hasNext()) {  
        Token token = tkIter.next();  
        System.out.print(token.getTokenString());  
        System.out.print(" ");  
    }  
    System.out.println();  
}
```

From LyricsDocumentImpl
Find out the MAF
Information

```
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        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

All wordForms in MAF
document will have
MAF information attached

```
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    TokenSet tkSet = wf.getAllTokens();
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    while(tkIter.hasNext()) {
        Token token = tkIter.next();
        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

Find out only those
wordForms which have feature
"pos" and value "noun"

```
// sample code to list all strings that has been annotated
// as noun in the text
MAF doc = lyricsDocImpl.getMAF();
WordFormSet wfs = doc.getAllWordForms();
wfs = wfs.getWordFormsWithFeatureID("pos@noun");
Iterator<WordForm> iter = wfs.getIterator();
while(iter.hasNext()) {
    WordForm wf = iter.next();
    TokenSet tkSet = wf.getAllTokens();
    Iterator<Token> tkIter = tkSet.iterator();
    while(tkIter.hasNext()) {
        Token token = tkIter.next();
        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

Obtain an iterator for such
wordForms

```
// sample code to list all strings that has been annotated
// as noun in the text
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WordFormSet wfs = doc.getAllWordForms();
wfs = wfs.getWordFormsWithFeatureID("pos@noun");
Iterator<WordForm> iter = wfs.getIterator();
while(iter.hasNext()) {
    WordForm wf = iter.next();
    TokenSet tkSet = wf.getAllTokens();
    Iterator<Token> tkIter = tkSet.iterator();
    while(tkIter.hasNext()) {
        Token token = tkIter.next();
        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

Consider one wordForm
at a time


```
// sample code to list all strings that has been annotated  
// as noun in the text
```

```
MAF doc = lyricsDocImpl.getMAF();
```

```
WordFormSet wfs = doc.getAllWordForms();
```

```
wfs = wfs.getWordFormsWithFeature(NOUN);
```

```
Iterator<WordForm> iter = wfs.getIterator();
```

```
while(iter.hasNext()) {
```

```
    WordForm wf = iter.next();
```

```
    TokenSet tkSet = wf.getAllTokens();
```

```
    Iterator<Token> tkIter = tkSet.iterator();
```

```
    while(tkIter.hasNext()) {
```

```
        Token token = tkIter.next();
```

```
        System.out.print(token.getTokenString());
```

```
        System.out.print(" ");
```

```
    }
```

```
    System.out.println();
```

```
}
```

For each wordForm find out all underlying tokens

```
// sample code to list all strings that has been annotated
// as noun in the text
MAF doc = lyricsDocImpl.getMAF();
WordFormSet wfs = doc.getAllWordForms();
wfs = wfs.getWordFormsWithFeatureID("pos@noun");
Iterator<WordForm> iter = wfs.getIterator();
while(iter.hasNext()) {
    WordForm wf = iter.next();
    TokenSet tkSet = wf.getAllTokens();
    Iterator<Token> tkIter = tkSet.iterator();
    while(tkIter.hasNext()) {
        Token token = tkIter.next();
        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

Obtain an Iterator to iterate through all tokens

```
// sample code to list all strings that has been annotated
// as noun in the text
MAF doc = lyricsDocImpl.getMAF();
WordFormSet wfs = doc.getAllWordForms();
wfs = wfs.getWordFormsWithFeatureID("pos@noun");
Iterator<WordForm> iter = wfs.getIterator();
while(iter.hasNext()) {
    WordForm wf = iter.next();
    TokenSet tkSet = wf.getAllTokens();
    Iterator<Token> tkIter = tkSet.iterator();
    while(tkIter.hasNext()) {
        Token token = tkIter.next();
        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

Considering one Token
at a time

```
// sample code to list all strings that has been annotated
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MAF doc = lyricsDocImpl.getMAF();
WordFormSet wfs = doc.getAllWordForms();
wfs = wfs.getWordFormsWithFeatureID("pos@noun");
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    TokenSet tkSet = wf.getAllTokens();
    Iterator<Token> tkIter = tkSet.iterator();
    while(tkIter.hasNext()) {
        Token token = tkIter.next();
        System.out.print(token.getTokenString());
        System.out.print(" ");
    }
    System.out.println();
}
```

Finally printing the token value