

Anchor-dropping Interface for ReadAlong Studio

Abstract

ReadAlongStudio is an application by NRC to help indigenous language learners by aligning the text and audio streams together, so that when the learner can see the individual words highlighted as they are being spoken in the audio.

The particular challenge is to help the aligner produce better alignments when it fails, by putting the human back in the loop with anchors. The anchors are inserted in XML version of text, and Studio will split the text and audio into chunks before and after the anchor, align them separately, and join the results afterwards. We created an anchor dropping interface to facilitate inserting such anchors in the text.

Methodology

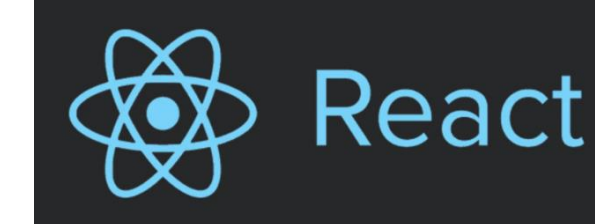
Backend:

1. Developing with .NET 5.0
2. Unit Test with XUnit and Moq



Frontend:

1. Developing with React.js
2. Unit Test with Cypress



Deliverable

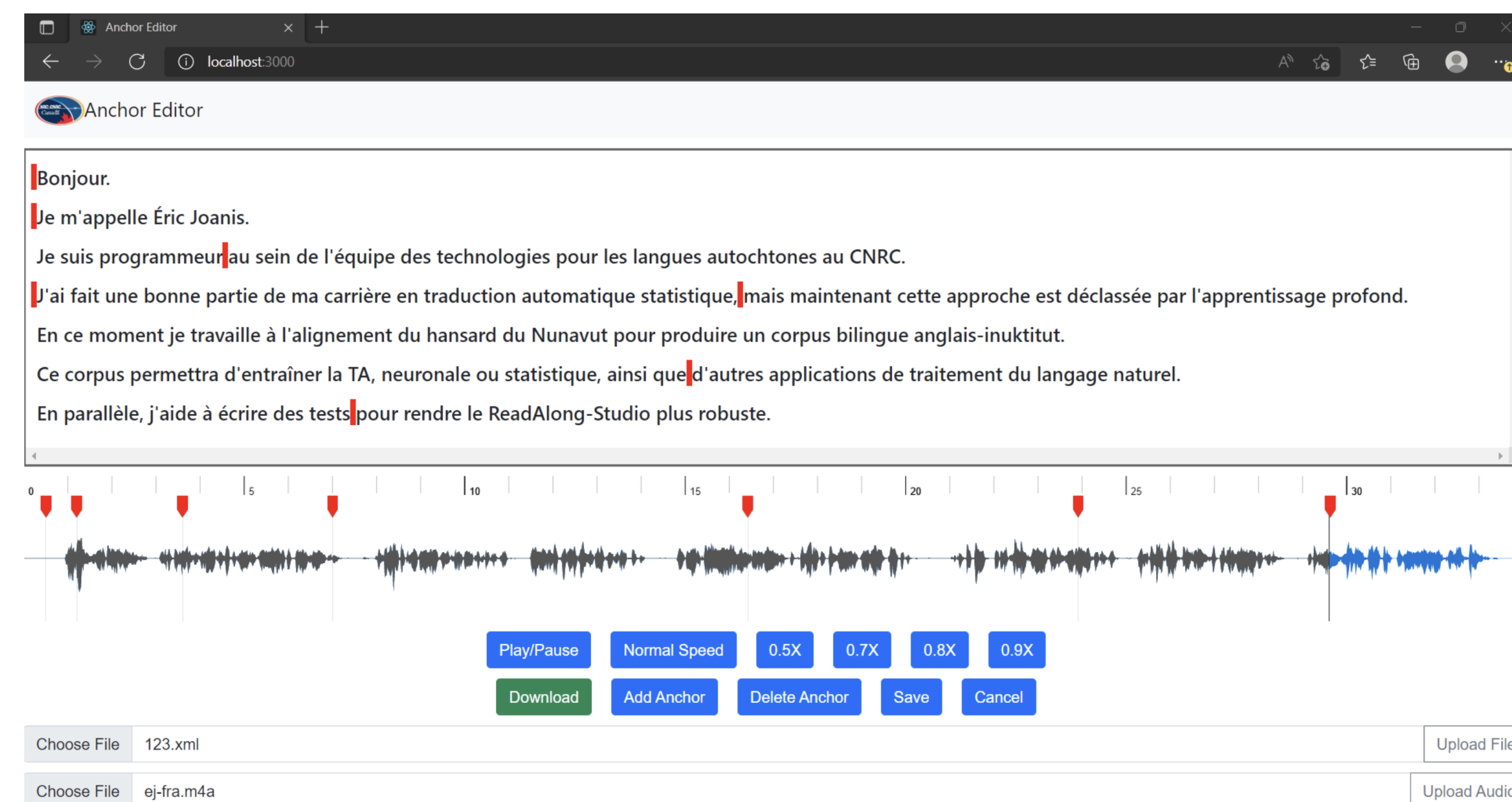
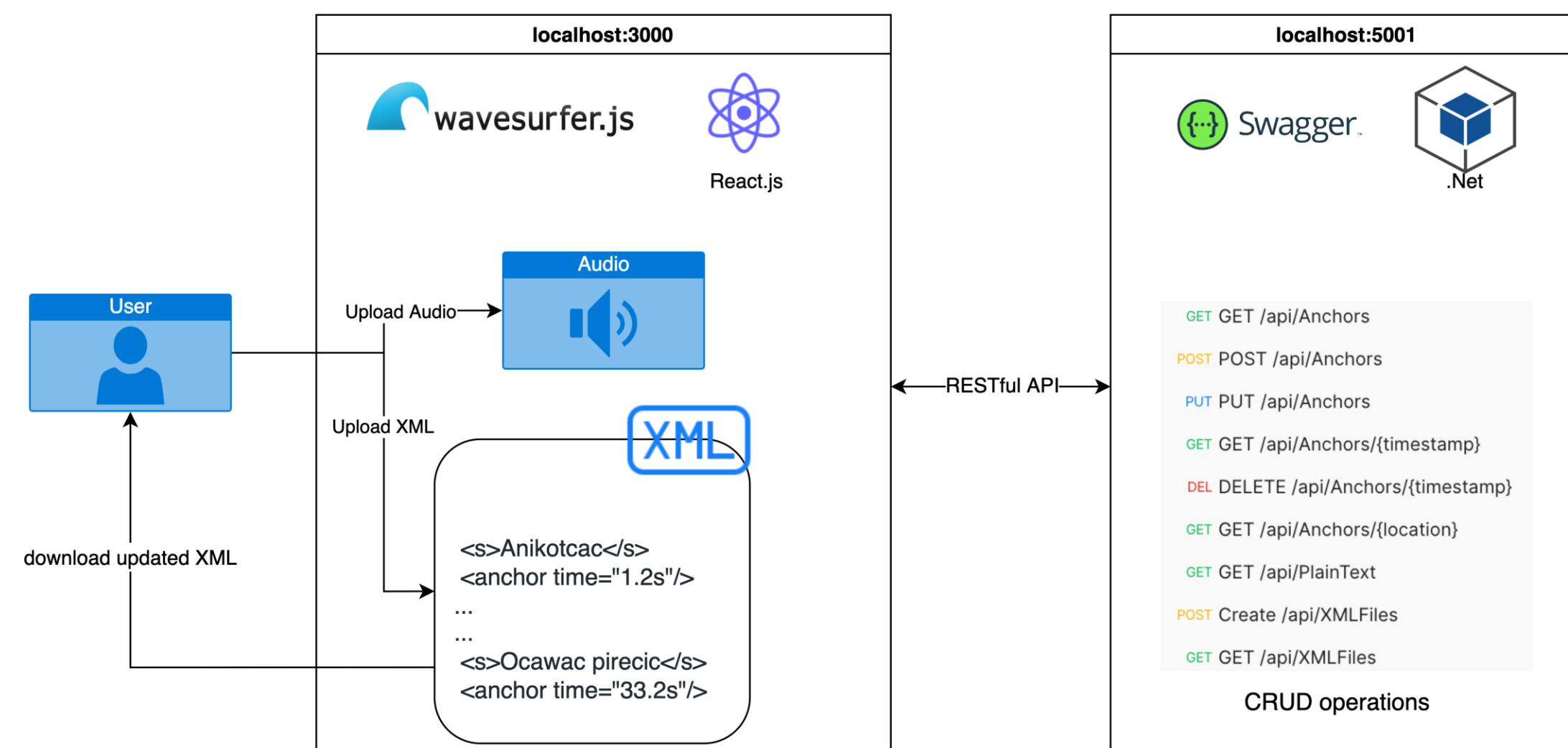
1. GitHub Repo:

<https://github.com/Rijkstarhn/NRC-Anchor-Editor>



2. A full manual and unit testing
3. A detailed readme

Architecture



Web Application Demo

Conclusion

Before:

Users should manually edit the location and timestamps of anchors in XML manually

```
<s>Bonjour.</s>  
<anchor time="1.62s"/>  
<s>Je m'appelle Éric Joanis.</s>
```



Before: Manual Editing in XML Files

Now:

All anchors editing operations including 1. Add, 2. Delete, 3. Create, 4. Updating anchors can be done in one application

Bonjour.
Je m'appelle Éric Joanis.



Now: Automate editing in a Web Application