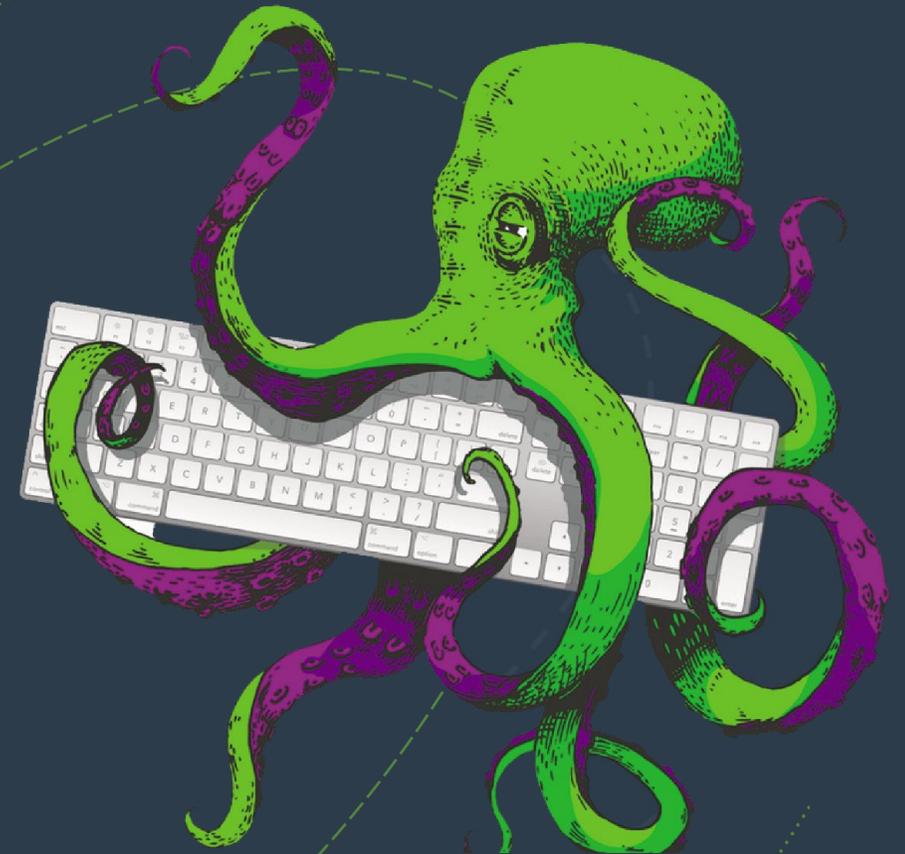


AI INNOVATIONS

IN DYSLEXIA SUPPORT



Dyslexia

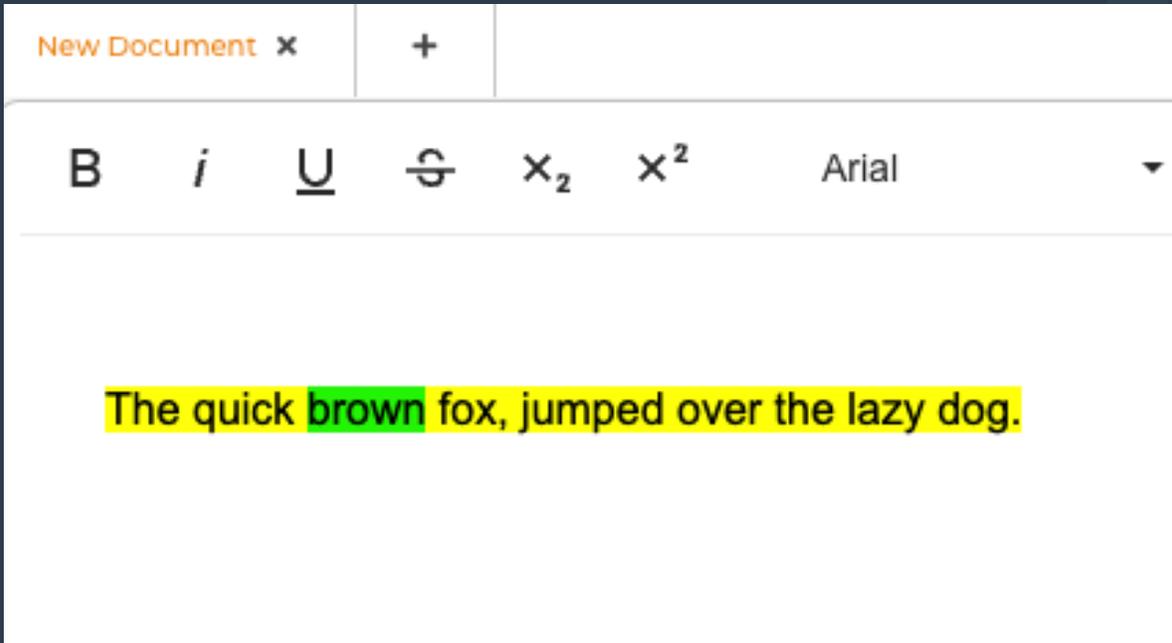
Dyslexia

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DYSLEXIA COMPENSATING

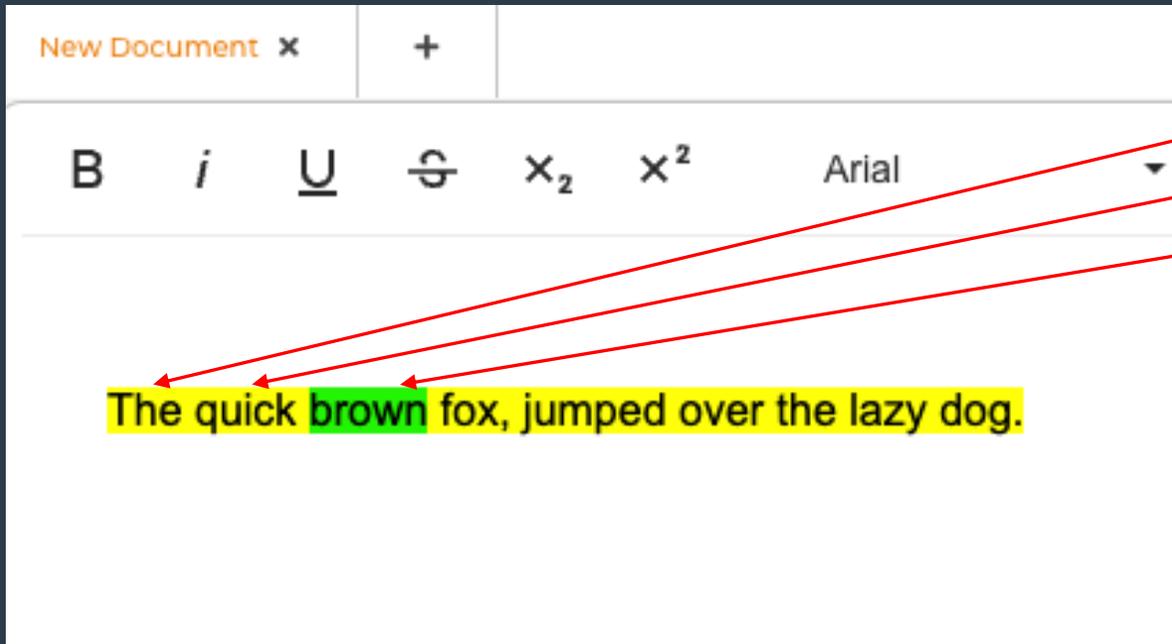
The challenge



```
</div>
▼ <asgard-tab _ngghost-fny-c160 class="ng-star-inserted">
  ▼ <div _ngcontent-fny-c160 asgardpaneindex class="asgard-tab active-tab">
    ▼ <asgard-file-editor _ngcontent-fny-c160 class="ng-star-inserted" style="pointer-event: all;">
      ▼ <div class="froala-editor fr-box fr-basic fr-top" editorid="7acb6966-de57-baba-d326-a3b930a584f6" role="application"> (flex)
        ▶ <div class="fr-toolbar fr-desktop fr-top fr-basic fr-sticky-off" data-sticky-offset="true" data-top="0px" data-bottom="auto" style="top: 0px;"> (flex) </div>
        <div class="fr-sticky-dummy" style="height: 50px;"></div>
        ▼ <div class="fr-wrapper" dir="auto" style="height: 100%; overflow: auto;">
          ▼ <iframe src="about:blank" frameborder="0" class="fr-iframe" style="height: 90px;">
            ▼ #document (https://alinea.sensotec.be/)
              <!DOCTYPE html>
              ▼ <html>
                ▶ <head> (flex) </head>
                ▼ <body class="fr-view" dir="auto" contenteditable="true" aria-disabled="false" spellcheck="false">
                  <p>The quick brown fox, jumped over the lazy dog.</p>
                  ::after
                </body>
              </html>
            </iframe>
            <span class="fr-placeholder" style="font-size: 16px; line-height: normal; margin-top: 16px; padding-top: 20px; padding-left: 20px; margin-left: 0px; padding-right: 20px; margin-right: 0px; text-align: start;">Type something</span>
            ::after
          </div>
        </div>
      </div>
    </div>
  </div>
  <div class="fr-second-toolbar">
    ::after
  </div>
</div>
</asgard-file-editor>
<!-->
<!-->
<!-->
▼ <div _ngcontent-fny-c160>
  ▼ <asgard-tab-bottom-toolbar _ngcontent-fny-c160>
    ▼ <footer class="as-footer as-wrapper ng-star-inserted">
      ▼ <nav class="bottom-nav"> (flex)
        ▼ <ul class="as-footer__left"> (flex)
          ▶ <li asgardtooltip="BOTTOMBAR.PDF_THUMBNAI..." class="mat-tooltip-trigger hide
```

DYSLEXIA COMPENSATING

The solution



0	The
4	quick
10	brown
16	fox
20	jumped
27	over
32	the
36	lazy
41	dog

DYSLEXIA COMPENSATING

Next step

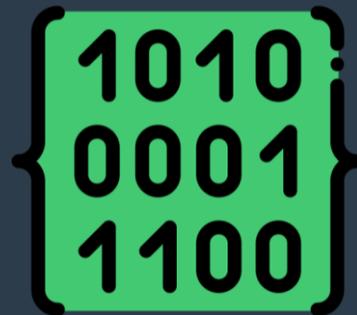


OUTCOMES

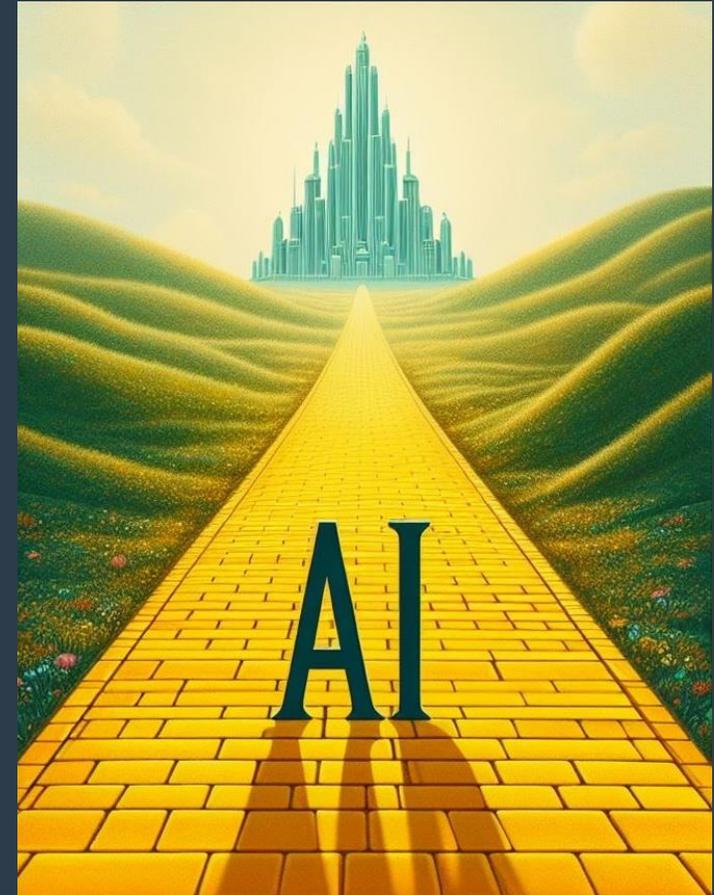
Processing



Complexity



Introduction



IS IT FIXED NOW?

Unified solution

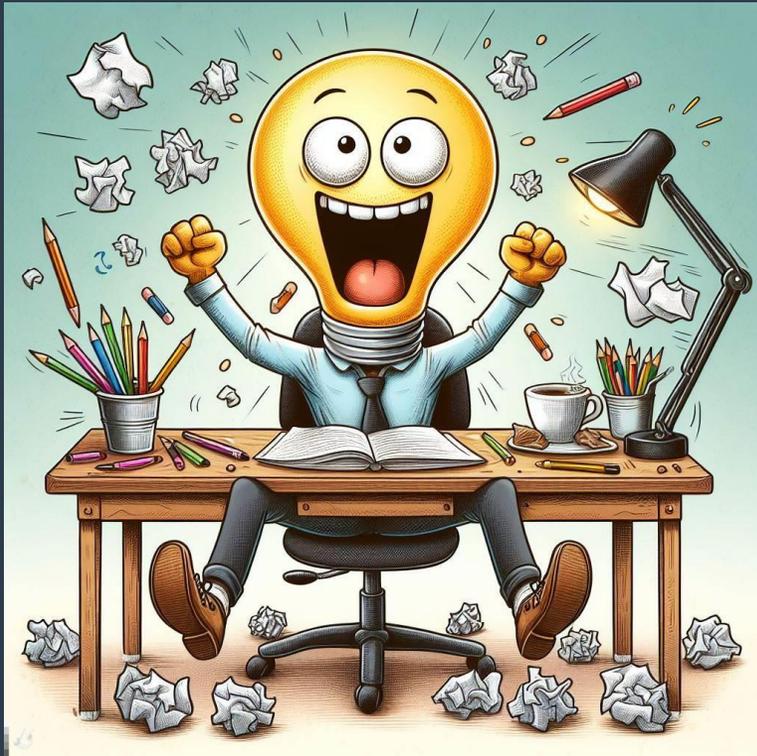


Personal toolset



CONCLUSIONS

AI for stakeholders



Expected impact of AI



WHAT IS DYSLEXIA?

What is dyslexia?

Affects Reading Comprehension

Is not related to intelligence in any way

How can we help unlock someone's full potential?

WEB2SPEECH

Web2Speech

- Browser Extension
- Reads webpages to improve reading comprehension
- Extra support through dictionaries, markers,...

Navigation is the most complex task

- Finding words quickly is crucial
- Some pages can be very complex
- HTML, it's often more of a guideline

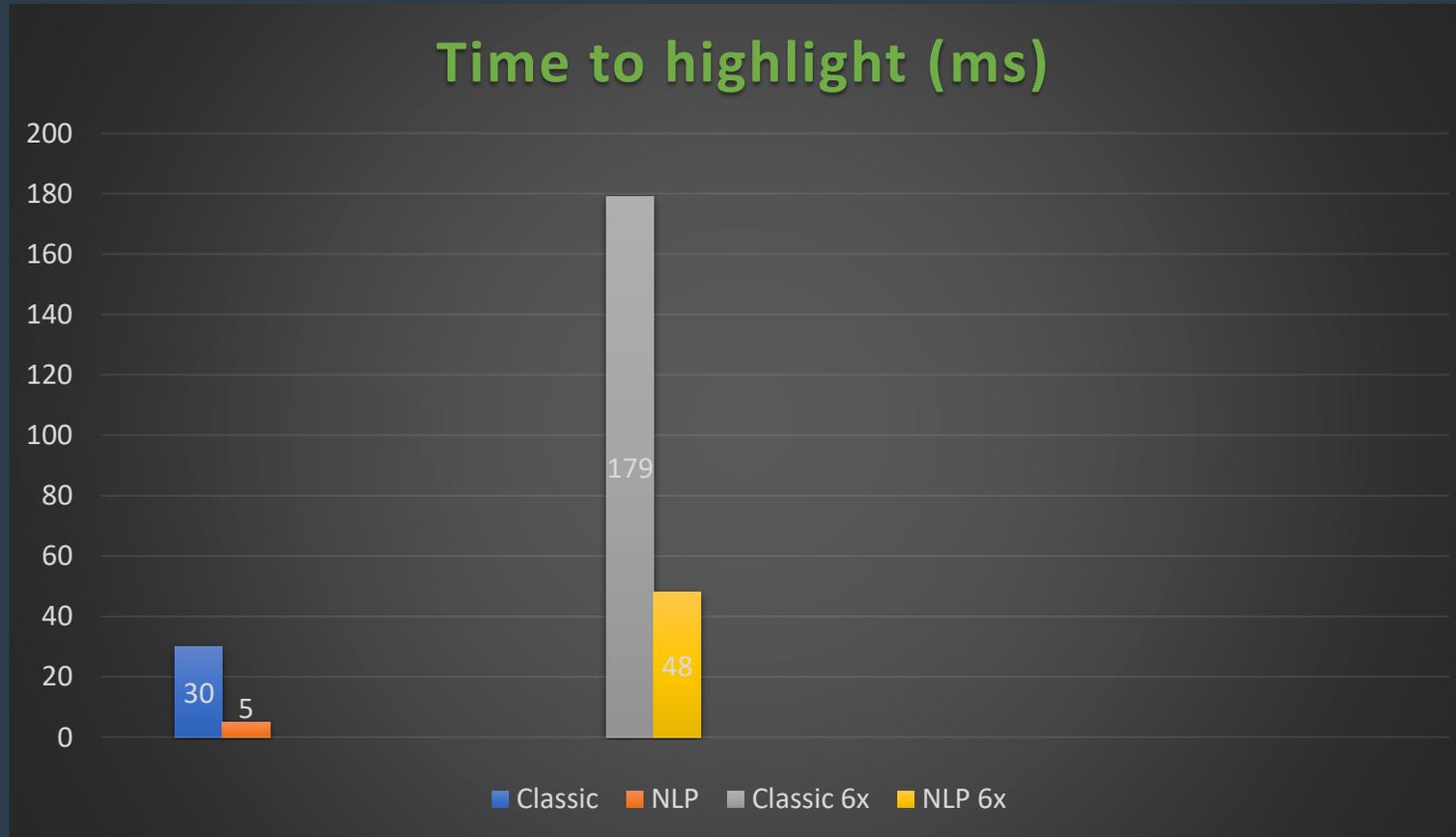
Easy for a human, quite hard for a machine

SOLUTION

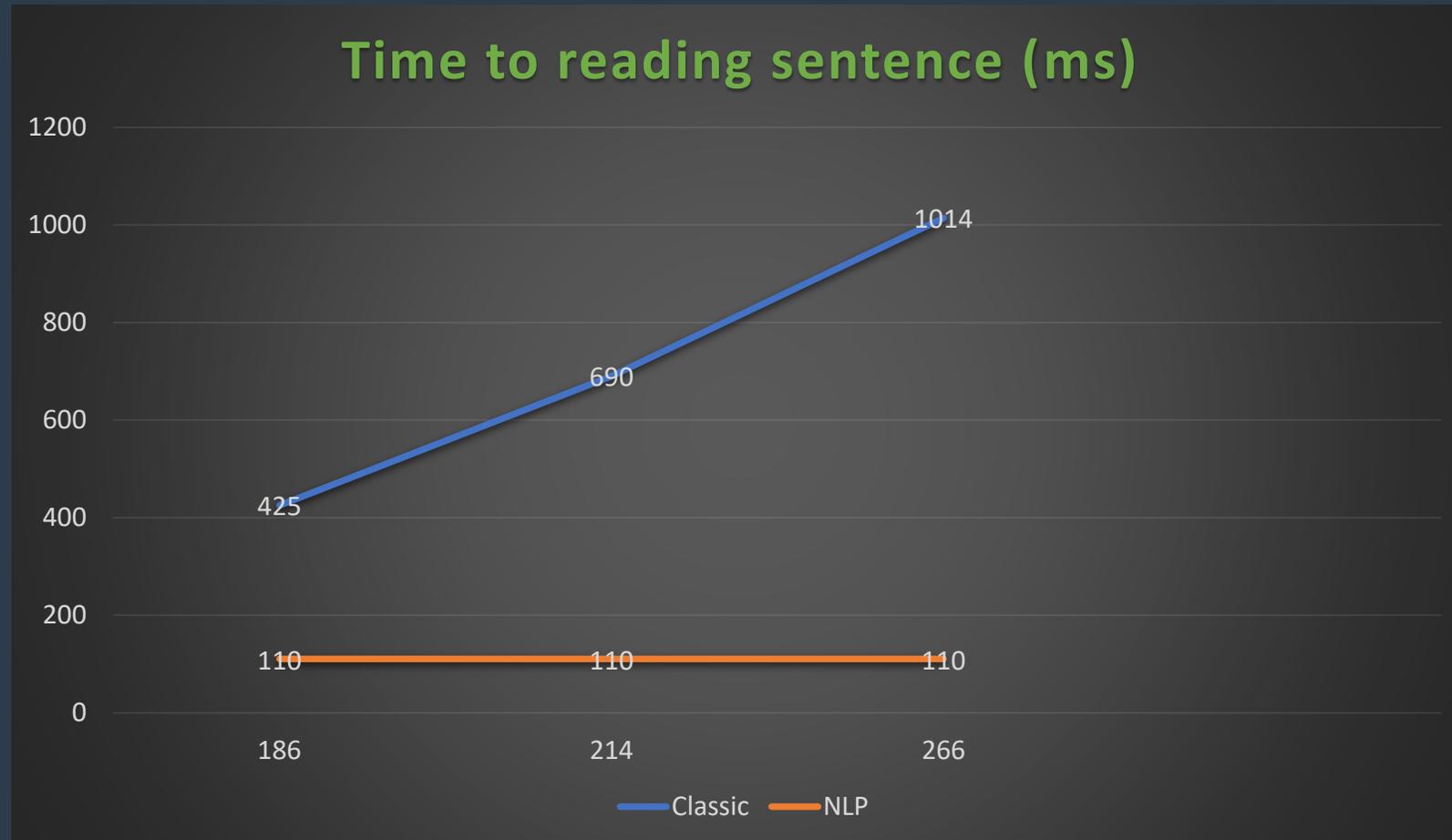
Natural Language Processing to the rescue

- NLP based system creates a text map
- Text map allows quick retrieval of words and their positions
- Browser based solution makes it cheap to operate
- Lightweight so users don't have to download lots of data

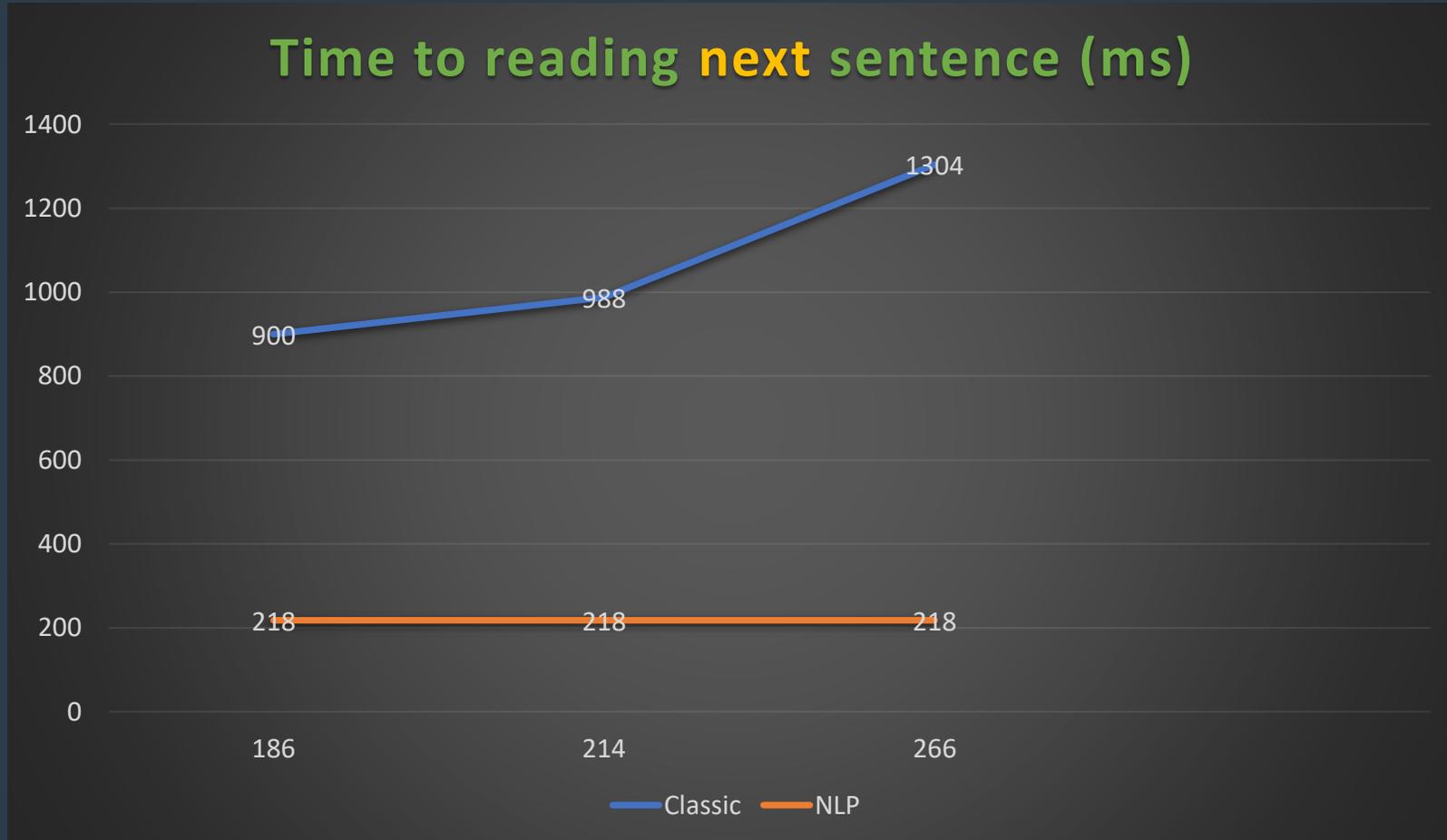
RESULTS



RESULTS



RESULTS



WEB2SPEECH

Results

Fast & efficient navigation in websites

- Also usable in the UI

Faster responses provide better reading comprehension

The Future

- Add Language detection
- Text complexity evaluation
- Sentiment Analysis

NLP system can be plugged into our other applications

CONCLUSION

AI is of immediate benefit to our users

- Faster, more efficient applications
- More possibilities

AI is of immediate benefit to us

- Happy users
- Better focus on user's needs

THANK YOU

