AI INNOVATIONS IN DYSLEXIA SUPPORT
Dyslexia
The quick brown fox, jumped over the lazy dog.
DYSLEXIA COMPENSATING

The solution

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>0</td>
<td>The</td>
</tr>
<tr>
<td>4</td>
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<tr>
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<td>brown</td>
</tr>
<tr>
<td>16</td>
<td>fox</td>
</tr>
<tr>
<td>20</td>
<td>jumped</td>
</tr>
<tr>
<td>27</td>
<td>over</td>
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<tr>
<td>32</td>
<td>the</td>
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<tr>
<td>36</td>
<td>lazy</td>
</tr>
<tr>
<td>41</td>
<td>dog</td>
</tr>
</tbody>
</table>
DYSLEXIA COMPENSATING

Next step
OUTCOMES

Processing

Complexity

Introduction

CORTLEX | Allkind
IS IT FIXED NOW?

Unified solution

Personal toolset
CONCLUSIONS

AI for stakeholders

Expected impact of AI
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
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

Time to highlight (ms)

- Classic
- NLP
- Classic 6x
- NLP 6x

- Classic: 30, NLP: 48, Classic 6x: 179, NLP 6x: 179

Cortlex | Allkind
RESULTS

Time to reading sentence (ms)

- Classic
- NLP
RESULTS

Time to reading next sentence (ms)

- Classic
- NLP
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