## Internationalizing W3C's Speech Synthesis Markup Language Workshop III

--Raxit Sheth raxitsheth2000@yahoo.co.in

### Important...!!!

• Don't worry if you are not familiar with some languages/script,

»Except English

If you think your neighbour is not understanding. Stop me...!!!

```
<speak version="1.0" xml:lang="en-US">
 This is in English. 
भारत में इंटरनेशनल इंस्टीट्यूट ऑफ
 इन्फार्मेशन टेक्नोलाँजी (आई.आई.आई.टी)
 और भरीगस सॉफ्टवेयर द्वारा संय्कृत रूप
 से आयोजित की जाएगी।
 This is in English End.... 
</speak>
```

# Don't you think I should provide content in alternate lang. also???

#### Demo...!!!

- many vendors supporting US-English but not Hindi.
- What should be the Behavior of SSML Engine when Encounters non-supported language or language content?

# Behaviour of SSML Engine for Non-Supported Languages.

- Stop the document/tag processing
- Skip the Content in Non-Supported Languages
- Forcefully Render -- Junk Contain.
- Take intelligent decision and ignore xml:lang in case of mismatch.
- ???

#### **SSML** 1.1

- SSML engine must document the expected Behavior. (for lang)
- Some more constraint selection Algo. (voice)
- Some may want constraint, some may not.

# SSML Application Developer is not in Control, But the platform is

# Nice to have error reporting/handling mechanism in SSML

Not only for mixed lang

### Possibilities for following

- <alt> -- one of W3C's Accessibility Guideline
- <log>...
- <skipTag><skipContent>
- <stopOn\*Error> --

ReportError—Someone can Handle by language Translation/other means

- <tryBestOn\*Error>
- ???

• <error="source.HI.language.NotSupported" action="skipTag"/>

<error="\*.NotSupported"</li>action="skipContent"/>

These are Not complete Syntax
Is it like Tag Bloat...??? Focus on Idea, Tag
and other syntax we can work on if
everyone agrees.

#### Some More Rules...

- These are inherited down to the document hierarchy, (except <alt>,<log>)
- inner attributes override outer attributes

#### One more...!!!

#### error and <catch>

- Add a <catch> tag to SSML. Define a family of events that go from less specific to more specific.
- Like: error.\*
- error.unsupported.\*
- error.unsupported.language.\*
- error.unsupported.language.hi-IN
- error.badfetch.http.\*
- error.badfetch.http.404

- If an event is thrown and catch is not present, define what the default behaviour of the SSML engine will be.
- - If an event is caught, one or more <action>'s can be taken within the <catch>
- o <action> <exit namelist="\_event \_message"/> </action>: Abort the rest of the synthesis.
- o <action><abort scope="..."/></action>: Aborts playback with a scope.
- This could be document, paragraph sentence, word, implicit paragraph (where the engine determines paragraph boundary, rather than an explicit boundary through markup), implicit sentence (similar to implicit paragraph).
  - Once <catch> finishes executing, processing resumes.

#### Points to Consider...

# 1.3 Document Generation, Applications and Contexts (ssml 1.1)

Reuse/Easy to use & Understand. Ssml dev

- Compatible with ssml 1.0
- Vendors: implement able.
- Fit for Next Voice/Multimodal platform

• Error handling for Language support is just an example, Same concepts can be applied to <voice> and Other features,

<error="female.voice.NotSupported" action="tryBest"/>

# Aapplication Developer knows more about features/functionalities of SSML processor and can Provide "Better User Experience"

Optimize the use of resource, by better interaction

Without more Vendor Lock-in

## Questions...

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### Thank You...