



Quarterly Programmatic Report
NVDA & eSpeak

February 2014
to
May 2014

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Progress in the past Quarter

NVDA Development

- One main focus of the NVDA project is to make NVDA more usable to the screen reader users. In this quest, new features are being added and the apps that are not so very functional with NVDA are being made accessible to an extent that a visually impaired can work with those apps independently. Excel is one of those apps. In the past quarter, major work started on the accessibility of the Excel charts. There are around 73 types of charts of various categories. Usually a screen reader does not detect the presence of charts on a sheet. Now, with the help of python code, the team has made it possible to approach the charts on a sheet. One can now shift to various charts on a sheet. The info about the attributes of a chart can also be read. The focus can be shifted back to a sheet. But as suggested earlier, this is a major piece of work and the team has to try out different approaches to make the Excel charts completely accessible. As there are around 73 types of charts, it again needs significant research and trial work to be done around each excel chart. This work may continue for some more time before this feature can be made available to the main code branch of NVDA: Refer to ticket #1987.
- There was an issue faced in the Indian local test builds by the beta testers of India. The beta testers were informing that they are getting a lot of beep sounds unnecessarily while using the local test builds given to them for their feedback. This issue was dealt with and corrections were made so that the beta testers stopped getting such beep sounds. As this was a local issue reported on local builds, no ticket was filed but work was done to sort out this issue.
- BRLTTY with NVDA — a local Braille display driver is being developed that will work with NVDA. This will help reduce the cost of Braille display significantly. At present the Braille displays are not affordable by a large number of vision impaired population. But this particular feature will lower the cost to the reach of those who need to work with Braille displays. Not only the visually impaired, many persons with multiple disabilities such as blind with hearing disability will also be able to use computers through this low-cost Braille display driver.

eSpeak Support

Some major milestones have been reached in the eSpeak part of the project. We are near to closing our work on Gujarati and Bengali and have addressed significant comments for telugu and Punjabi which we hope to close in the coming quarter.

Some of the work done on these languages are given as sample for reference.

Gujarati

- Five vowel sounds with nasal were newly created for testing purpose.
- Resolved the problem with *Choti ee* plus nasal sound. For example: કિંજલ, બિંદુ, સિંધુ, કિંતુ.
- Resolved the problem with *Badi ee* plus nasal sound. For example: ઈંદ્રીય, સીંદુર, સીંચાય, સીંગલ, લીંબુ, લીંબડો, વીંધ્યાચલ, રીંગ, પીંગળ, ટીંચર, ચીંતા.

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- Based on the feedback received, jha (ଢ଼ 0A9D) is changed because it was told that it should sound like za (୞ 0A9C + 0ABC).
- Number 89 has been improved according to the feedback received.
- According to the Gujarati code chart 0ab3 is lla but we received feedback which said that it is adda. The technical support assumes this is the mistake done by Unicode code chart, so the team changed the lla for testing purposes.
- Phoneme [ra] [ୠ] has been improved because at the end of a word it sounded wrongly.
- [Va] [ୡ], when it comes at the end of the word with *matra* was sounding wrong. It has been resolved.
- Our tester in Gujarati has informed us that with the above two bugs the basic support to Gujarati will be complete and we can then look forward to closing Gujarati soon with its basic support phase.

Bengali

- Some old character/symbols are added that are available in ancient scripts in Bengali. They are considered important for persons involved in studies of the History of Bengali.
- Exception word pronunciation revisions have been done for these words: মবার, অমলকান্তি, আসনতলে, ইমনকল্যান, কচকচি, খরখরে, খিড়কি, গজগজ, ছটপট, টনটনে, ছালবাকল, ফুলশয্যা, পাগলা, মর্যাদা, আন্না, দেখছি, , দরকার, একটি , চারটি , খেলবো , খেলা , অথচ, and দুঃখ.
- List of new Joint words: অমরসঙ্গী, চুপচাপ, আকাশবানী, আমপাতা, কাজকর্ম , সবারকম , দিনরাত , আমরাই, দেবদেবী, বিদঘুটে

Also

- Added phoneme rules for<group.ব>
- Redefined phoneme rules for < .group য়>
- Redefined phoneme rules for < .group এ>
- Redefined phoneme rules for < .group অ>
- Phoneme modification done for .group য

We are looking forward to closure of Bengali soon. We have requested our testers in India and in Bangladesh to help us test Bengali vigorously.

Hindi

- Modified phoneme /a~/
- Improved pronunciation of words like 5, साँच, जाँच etc

Oriya

- Modified translation for the number 1 to 100
- Our tester for Oriya is from Orissa. He has received a small training session to do the audio recording of the misspelled words/pronunciation. This will help us provide the basic support to its best. He will also be testing MS Windows in-built Oriya keyboard and give us feedback.
- After the training session, the tester in Oriya has given us his feedback in Oriya pronunciations. The work is in progress to include his feedback in the language.

Telugu

- Our tester in Telugu is providing us with the test reports to help us understand the problems in basic support to Telugu.
- This month we gave a short training to him to do the recording of the mispronounced Telugu words and problems in the language.