

## **NVDA Development**

One main focus of 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 this quarter, we began working on the accessibility of 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. However, as suggested earlier, this is a major piece of work and the team has to try out different approaches to make the Excel charts accessible completely. As there are around 73 types of charts, it again needs to a big amount of R and D about each excel chart. This work may continue for some more time before this feature could be made available to 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 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. However, work was done to sort out this issue.

## **eSpeak**

### **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 History of Bengali.

### **Oriya**

The tester in Oriya language gave the audio files in his reports. These audio files are the correct pronunciations of the Oriya numbers and alphabets. The changes have been made accordingly and the recorded audio files of these changes have been sent to the Oriya tester. Once he approves these changes, the appropriate implementations will be made in the eSpeak build for the Indian languages.

### **Hindi**

A detailed testing of the Hindi keyboard layout was carried out. The issues were listed and sent to the technical team for corrections.

### **Marathi**

Work has begun on adding and improving the basic support to Marathi.

## **Other activities**

Some issues are observed that are with respect to some symbols. A detailed test process is being followed to find out if the problem is universal with all the languages. Once the root of the problem will be found out it will be easier to rectify the problem. It is observed that the full stop and question mark are not differentiated while reading. The work of sorting this issue has begun this month.