

Northern Suburbs Linux SIG Report February 2020

David Hatton

The evening started with Nick Vespo's traditional wide ranging Linux News.

Nick played a selection from the CES2020 keynote address by Ginni Rometty, president and CEO of IBM, which touched on the use of Deep Data with some interesting examples of developing technology.

Topics briefly covered were ..

- an AI sensor chip on your fingernail looking for early signs of Parkinsons Disease.
- A diabetes manager that forecasts sugar levels 4 hours in advance.
- Global - and local - weather forecasting with models and observations to give predictions every hour, using data from sensors on smartphones and aircraft and many other sources.

A quick internet search will locate the video of the keynote address - and although in typical CES fashion there is, shall we say, abundant enthusiasm for various companies represented on stage, the substance is none the less impressive.

The other presentation for the night was from David Hatton, and was a brief introductory foray into the world of bash shell scripting, with the aim of both writing a couple of very simple scripts and demonstrating that yes, you can have GUI interactions when using the command line.

But why a command line GUI ? They can simplify your coding while adding convenient functionality - think selecting a file for further actions - or make running a command line utility by another user not familiar with such a task a simple "point and click" exercise.

David started with the traditional "Hello World!" minimal script, showed how to set the script to run, and demonstrated that it worked.

```
#!/bin/bash
#
# Hello World script for the bash shell.
#
# Authour: David Hatton   Date: 15 Feb 2020
# _____

echo "Hello World!"
```

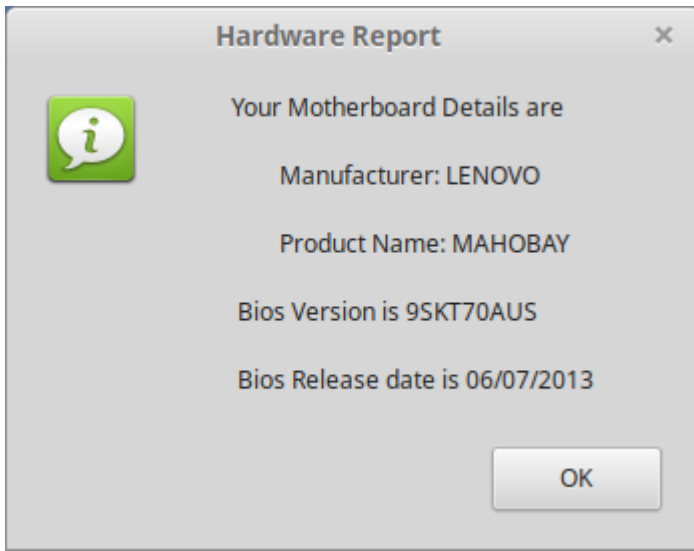
Screenshot of our "Hello World!" script

A brief introduction to dmidecode followed, which is a system utility designed to extract numerous details of hardware items on the currently running device. Selected dmidecode values were then used to construct another short script and the zenity utility was also added in to create a GUI display of that information. The script created is shown below ...

```
#!/bin/bash
#
# uses dmidecode to get specific bios info.
# Authour: David Hatton   Date: 15 Feb 2020
#
MANUFACT=$(sudo dmidecode -t baseboard | grep Manufacturer: )
NAME=$(sudo dmidecode -t baseboard | grep "Product Name:" )
BIOSVERSION=$(sudo dmidecode -s bios-version)
BIOSRELDATE=$(sudo dmidecode -s bios-release-date )

zenity --info --text="Your Motherboard Details are ..\n\n $MANUFACT
\n\n $NAME \n\n Bios Version is $BIOSVERSION \n\n Bios Release date
is $BIOSRELDATE" --title="Hardware Report" --width=250 2>
/dev/null
```

When this script is run, the following display is shown on the desktop ...



David finished up by demonstrating how the script could be set up to be a menu choice in the start menu.