Klock

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Klock - A clock with a K

A multifunction timing thingy, where some [but not necessary all] of the functions are useful.

The multifunction timing thingy is split into many Thingy-ma-bobs - Fuzzy Time, Countdown, Timer, Event, Reminder & Clipboard Monitor.

Kevin scott

Klock

A Help gubbins for the time thingy. A Clock with a K. Build 60.

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2.2.0.60



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Welcome

Welcome To Klock

Kevin scott

Klock

A Help gubbins for the time thingy. A Clock with a K. Build 60.

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About

About Klock

Klock - a clock with a k.

A multifunction timing thingy, where some [but not necessary all] of the things are useful.

The multifunction timing thingy is split into many things;

Fuzzy Time, Countdown, Timer, Event, Reminder & Clipboard Monitor.

Klock currently consists of over 6000 lines of Pascal[Lazarus] code. Klock serves as a vehicle by which I learn and tinker with programming. Previous versions of Klock have existed in VB.net, Python and Freebasic - and may again.

Fuzzy Time

Allows the current time to be displayed in a number of different formats.

Countdown

Implements a simple countdown timer [between 1 and 90 minutes].

The time for the countdown can be either entered directly of the up/down controls can be used. The timer can be paused during countdown and stopped before the end is reached. At the end of the countdown, either a sound can be played, a reminder displayed, a system command [system shut down or re-boot] or a external program can be run - or any combination of the four.

Timer

Implements a simple timer, with split time function. The timer can be stopped, paused and resumed. A split function allows for given time to be remembered.

Events

This enables for events to set up and notifications displayed to the user.

Today's date is default, but a future date can also be selected. A time can also be added to the reminder date. If no date is added, the reminder will fire at midnight. When the reminder is due either a sound can be played, a reminder displayed, a system command [system shut down or re-boot] or a external program can be run - or any combination of the four.

Note: Setting the time to 00:00, indicates midnight of the previous day so will not enable the set button. To set a reminder for midnight of today, disable the time and pick tomorrow's date. 00:00 indicates zero minutes into the present day.

Reminder

Implements a reminder option.

This enables for [recurring] Reminders to set up and reminders displayed to the user. A number of predefined events types are already set up.

The button bar contains three buttons -

help - will display a simple help screen, depending upon the tab being currently viewed [not yet implemented].

Close - Quits the application.

Hide - Switches the application to the system area.

When the program is running in the system area, the following options are available.

If hovered over, the current time will be displayed.

Right clicked on the icon will display a pop up menu.

This will allow the application to be restored, the application can be exited or e current time can be displayed.

If the application is in the task bar, any display messages

[i.e. a reminder becoming due] will be displayed in a notification window [as will errors etc.].

The status bar contains [after the time & date] the legend cns.

The c represents caps lock.

The n represents Num Lock.

The S represents Scroll Lock.

The letter will be upper case if the key is activated, otherwise lower case.

The application also contains a options screen [file / Options] which allows various options to be set. NB: If the option is checked to start on windows start up, it only operates for the current user.

Program partially tested on Windows 7 & 10 [both 32 & 64 bit].

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Getting Started

Klick on Klock.

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System requirements

System Requirements

Should just about work on any Microsoft Windows machine - if it can run the help, it should run Klock.

Klock has been tested on Windows 7, 10. [Does anybody use anything else, these days.]

Klock needs at least .NET 4.5, get from your favourite Microsoft site.

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Getting help

Getting Help

Press help [or press F1] to get this document.

Document also located in the application directory [both chm, html & pdf formats].

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Thingy-ma-bobs

There are separate thingy-ma-bobs for

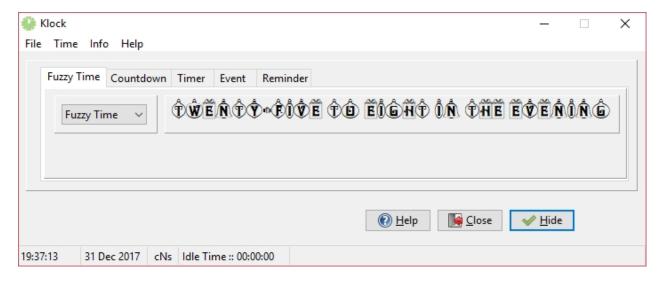
- Fuzzy Time
- Countdown

- Timer
- Events
- Reminder

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Fuzzy Time

Fuzzy Time



Allows the current time to be displayed in a number of different formats.

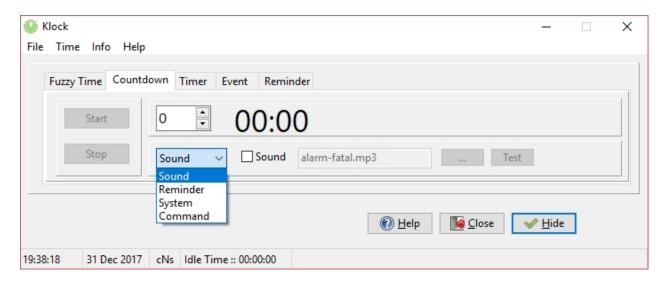
System idle time can also be displayed in the status bar - this is enabled in the time options screens.

See Status Bar for details on the status bar information.

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Countdown

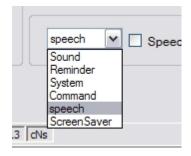
Countdown



Implements a simple countdown timer thingy [between 1 and 90 minutes].

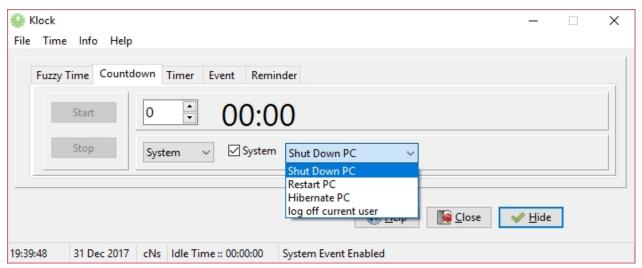
The time for the countdown can be either entered directly of the up/down controls can be used.

The timer can be paused during countdown and stopped before the end is reached.



At the end of the countdown, the following can be selected :-

- A Sound can be played.
- A Reminder can be displayed.
- A System command can be run [System Shut Down, System Re-Start, Log Off current user or the selectable GUI.
- A External Command can be run.

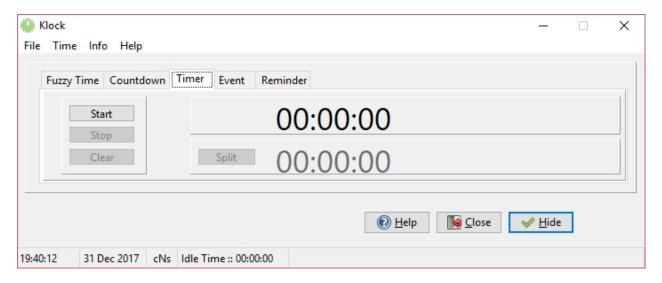


System command menu.

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Timer

Timer



Implements a simple timer thingy, with split time function.

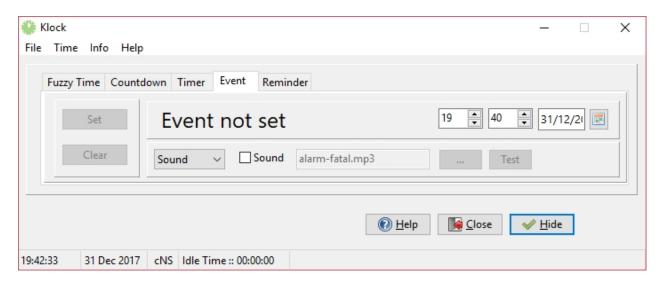
The timer can be stopped, paused and resumed.

A split function allows for a given time to be remembered.

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Events

Events

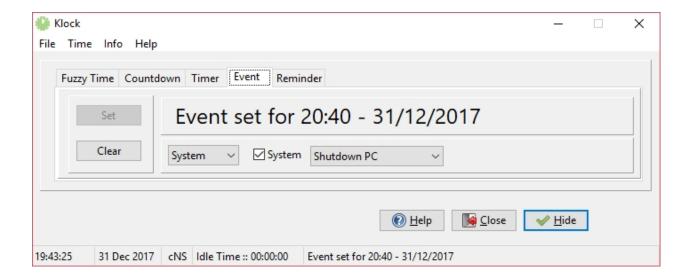


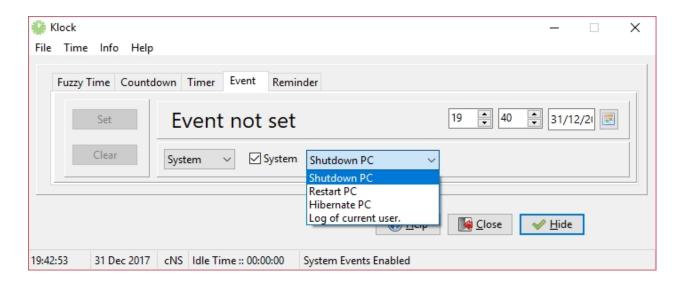
Implements a simple Events database thingy.

This enables for events to set up and notifications displayed to the user.

Today's date is default, but a future date can also be selected. A time can also be added to the reminder date. If no date is added, the reminder will fire at midnight. When the reminder is due either a sound can be played, a reminder displayed, a system command [system shut down or re-boot] or a external program can be run - or any combination of the four.

Note: Setting the time to 00:00, indicates midnight of the previous day so will not enable the set button. To set a reminder for midnight of today, disable the time and pick tomorrow's date. 00:00 indicates zero minutes into the present day.

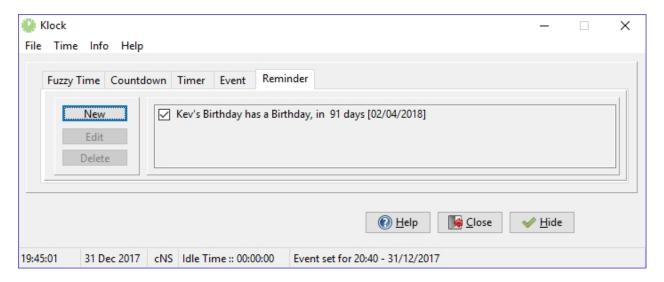




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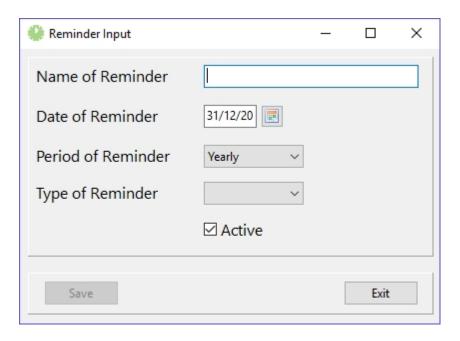
Reminder

Reminder



Implements a reminder option thingy.

This enables for [recurring] Reminders to set up and reminders displayed to the user. A number of predefined events types are already set up.



The Reminder add screen.

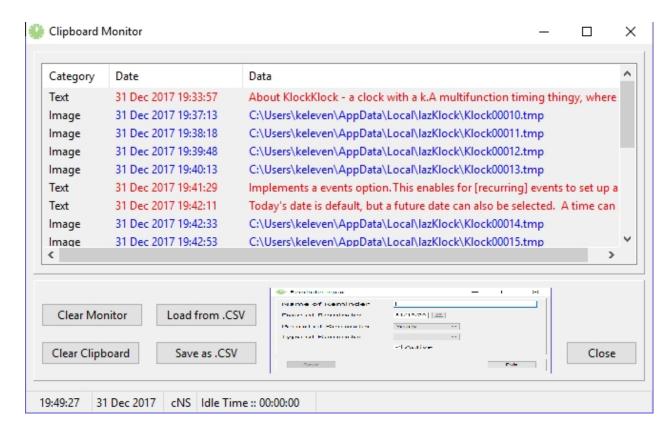
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Clipboard Monitor

Clipboard Monitor

Implements a simple Clipboard Monitor Thingy.

There is not a klock tab for the clipboard monitor, when enabled in options / Global, the below form will be displayed whenever anything is copied to the clipboard.



The Clipboard manager remembers all things copied to the clipboard, remembers the history of the clipboard.

The options are thus.

Clear Clipboard - clears the system clipboard.

Close - Closes the clipboard, but not stop the clipboard monitor. - Save the clipboard history to a file [Not yet implemented]. Save Load

- Loads the clipboard history from a file [Not yet implemented].

Once something has been copied back to the clipboard it can then be pasted into any open application.

Selecting a row with the mouse copied the data to the clipboard.

The clipboard history can be either save as CSV of Binary format, this is selected in user options. If saved as CSV format the file can be edited [amended] easily. In CSV format multiple commas should be okay but line endings could cause a problems. In Binary mode, the file can not be easily edited so should be more secure. Also, in Binary mode multiple commas and line ending are handled better.

NOTE: there seems to be an issue with saving images to the clipboard, the clipboard does not know where the image came from i.e. no file location. The means there is a problem retrieving the image form the clipboard history. One solution is to make a temporary copy of the image for late retrieval. The temporary image is saved in the user applications directory within the users data area. Also the image is saved in the .jpg format at the moment, will change when I can determine a way on detecting the format of the original image:-)

When Klock starts it scans all such tmp files and deletes all older then 10 days.

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Menu

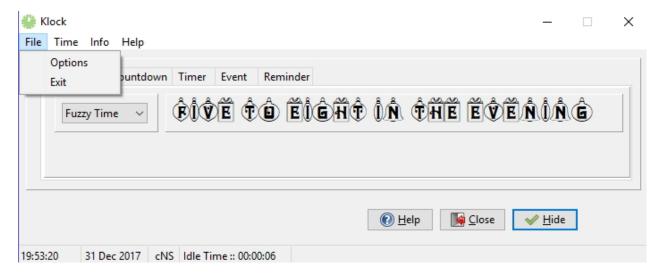
There are separate Menus for

- File
- Time
- Info
- Help

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File

<u>File</u>



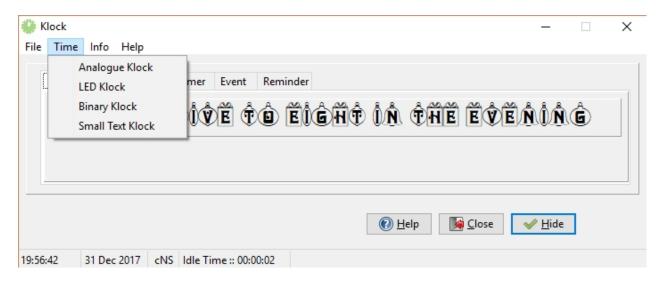
Allows selection of

- Exit exist Klock.
- Options loads the options screen.

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Time

Time



Allows selection of

- Analogue Klock display a Analogue Klock [Time & Date] in a separate window, the moving main Klock to the system tray.
- LED Klock displays aLED Klock in a separate window, moving the main Klock to the system tray.
- Binary Klock displays a Binary Klock in a separate window, moving the main Klock to the system tray.
- Small Text Klock display a Text Klock [Time] in a separate window, moving the main Klock to the system tray..

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Analogue Klock

Analogue Klock



Selecting the Analogue Klock option from the Time menu, display the above Analogue Klock.

Right clicking on the Analogue Klock, brings up a context menu.



This will allow the Analogue Klock to be exited to the main klock [main Klock is loaded], or the About screen can be loaded.

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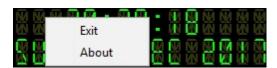
LED Klock

Analogue Klock



Selecting the LED Klock option from the Time menu, display the above LED Klock.

Right clicking on the LED Klock, brings up a context menu.



This will allow the LED Klock to be exited to the main klock [main Klock is loaded], or the About screen can be loaded.

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Binary Klock

Big Text Klock

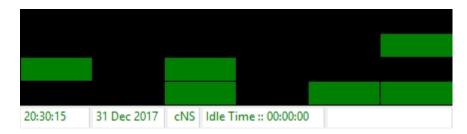
Selecting the Binary Klock option from the Time menu, display the above Binary Klock.

The Binary klock has two modes - BCD or True Binary. This is set in user options

Binary Coded Decimal - takes each two digit number [hours, minutes & seconds] and codes then as two binary string.

True Binary - takes each two digit number [hours, minutes & seconds]and codes then as a single binary string

BCD Klock

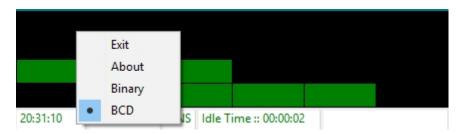


True Binary Klock



See Status Bar for details on the status bar information.

Right clicking on the Binary Klock, brings up a context menu.



This will allow the LED Klock to be exited to the main klock [main Klock is loaded], the About screen can be loaded or the Klock can be toggled between Binary and BCD displays.

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Small Text Klock

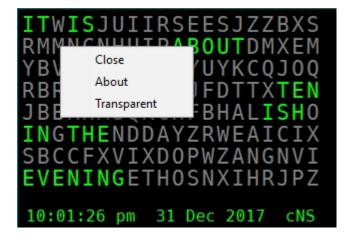
Small Text Klock

Selecting the Small Text Klock option from the Time menu, display the above Small Text Klock.



See Status Bar for details on the status bar information.

Right clicking on the Big text Klock, brings up a context menu.



This will allow the Small Text Klock to be exited to the main klock [main Klock is loaded], the About screen can be loaded or the Klock can be toggled between transparent or solid..

Clicking the transparent option.

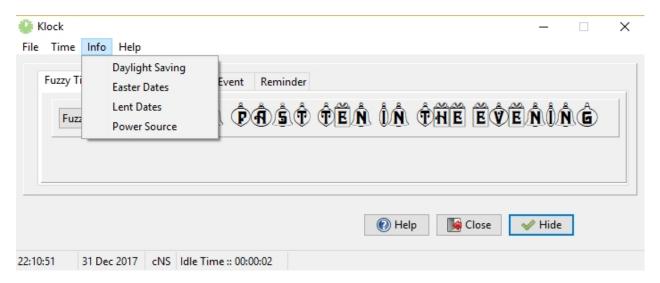
ITWISJUIIRSEESJZZBXS
RMMNCNFIVEABOUTDMXEM
PASTIJGQZROYUYKCQJOQ
RBRPAGFXHPUJFDTTXTEN
JBBRHMSQKCHFBHALISHO
INGTHENDDAYZRWEAICIX
SBCCFXVIXDOPWZANGNVI
EVENINGETHOSNXIHRJPZ

10:03:02 pm 31 Dec 2017 cNS

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Info

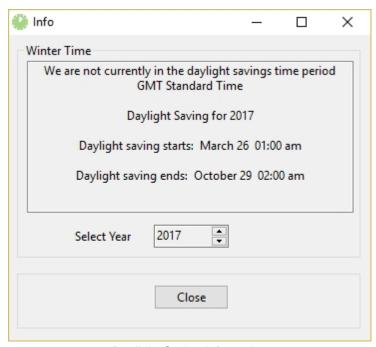
<u>Info</u>



This allows the selection of

- Daylight Saving
- Easter Dates
- Lent Dates
- Power Source

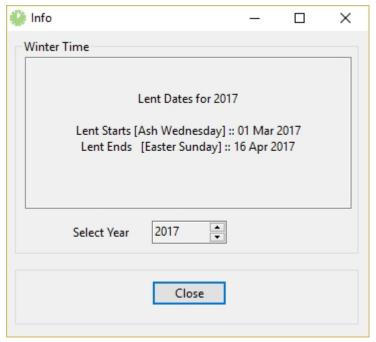
On Daylight Saving, Easter & Lent Dates the year can be changed. This allows the daylight saving, Easter and lent Dates to be displayed for any year.



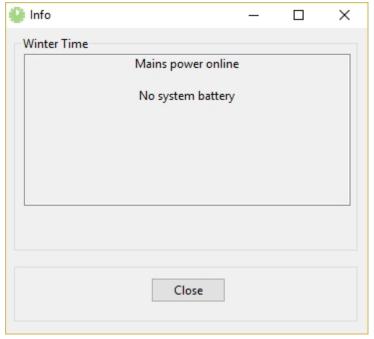
Daylight Saving Information



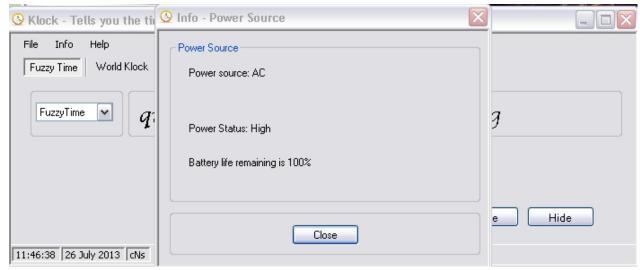
Easter Dates



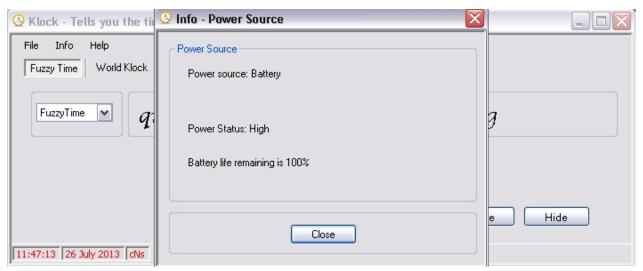
Lent Dates



Power Source information [PC running on mains]



Power Source Information [laptop running on mains]

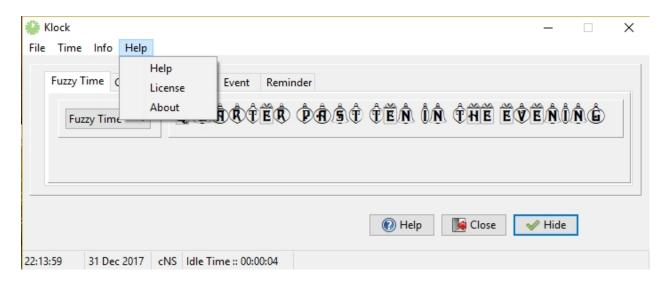


Power Source Information [laptop running on battery] note: red colour of time & date on main form.

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Help

Help



This allows the selection of

- Help Loads this Help document
- Licence loads the License information [GNU General Public License V3].
- About Loads About application information i.e. application version.

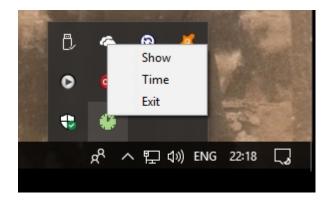


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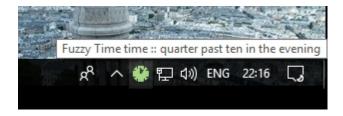
System Tray

System Tray

When the program is running in the system area, the following options are available.



If hovered over, the current time will be displayed. If two time formats are in use, only time one is used.



Right clicked on the icon will display a pop up menu.

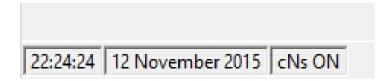
- Show Restore Klock
- Time Toggle the display of time
- Exit Close Klock.

If the application is in the task bar, any display messages [i.e. a reminder becoming due] will be displayed in a notification window [as will errors etc].

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Status bar

Status Bar



The status bar contains [after the time & date] the legend cns.

The c represents Caps lock.

The n represents Num Lock.

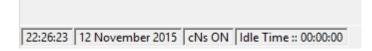
The S represents Scroll Lock.

The ON represents connected to the internet. A OFF would indicate disconnected from the internet. The letter will be upper case if the key is activated, otherwise lower case.

15:27:40 18 November 2015 cNs off

If the running PC [Laptop] is running on battery - the colour will turn to red.

If idles time is being displayed -



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Options

The application also contains a options screen [file / Options] which allows various options to be set.

Klock boasts over 90 options to customise klock.

There are separate options for

- Global
- Time
- Other Klocks
- Analogue Klock
- Logging

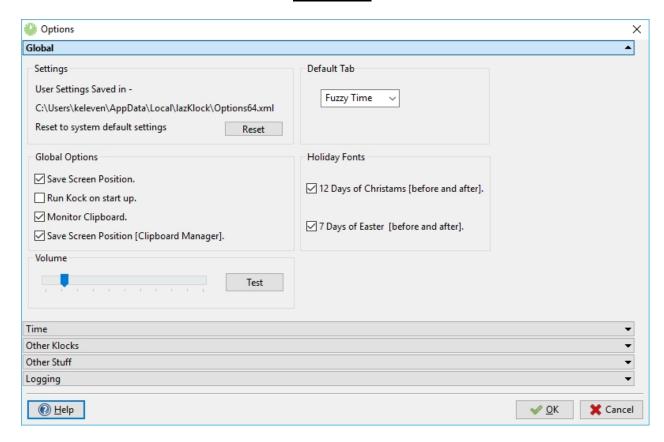
NB: If the option is checked to start on windows start up [in fact most user options], only operates for the current user.

If upgrading from a newer version of Klock the new options should be added to the existing options..

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Global

Global



The global options are as follows.

Settings

where the settings file reside - currently Options64.xml [or possibly Option32 for the 32 bit Klock. This can be re-set to the default settings for the application.

GlobalOptions

Allows klock to remember screen positions on exit.

Will run klock when windows first starts [current user only].

Allows Klock to start in a determined mode. Current modes are Klock, Analogue Klock, Small text Klock or Big text Klock.

Default Tab

Allows Klock to start with a pre-determine tab.

Holiday Fonts.

Allows Klock to use special fonts at certain time of the year.

Volume

The volume of the sound klock makes.

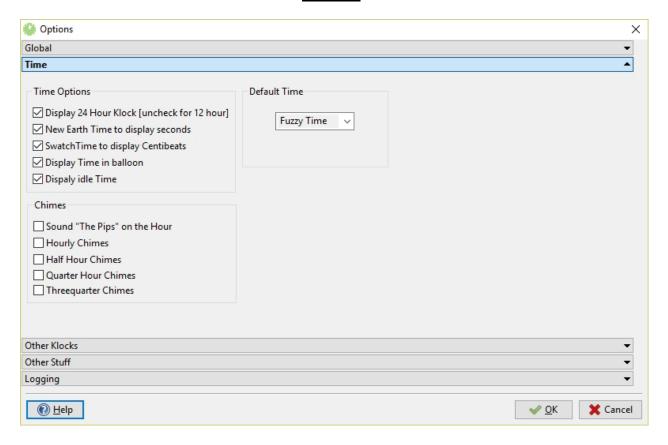
Pressing OK will save the new settings.

Pressing cancel will not save any changes.

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Time

<u>Time</u>



The Time options are as follows.

Settings

12 / 24 Hour

The time in the system tray, time display 1 or time display 2 can all be set to display the time in either 12 or 24 hour format.

NB :: does not affect some of the time formats i.e. Hex time.

The system idle time can be displayed in the status bar.

Chimes

Klock can either sound the "pips" or chimes on the hour.

If chimes are chosen, chimes can also be selected for the quarter and half hours.

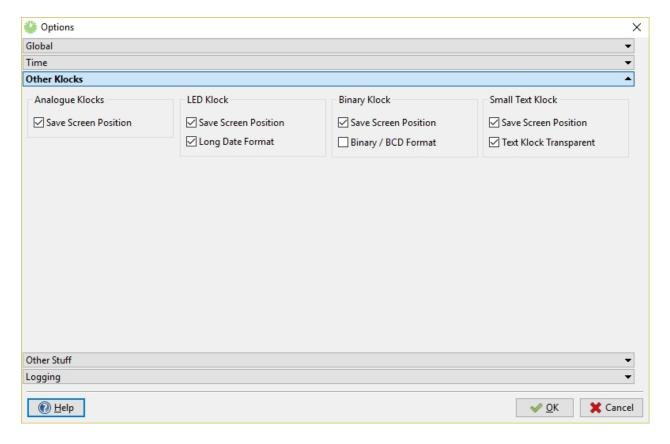
NB: can either have pips or chimes, not both.

Pressing OK will save the new settings. Pressing cancel will not save any changes.

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Other Klocks

Text Klock



The Text Klock options are as follows.

Allows all the secondary Klocks to remember screen positions on exit.

The binary klock has two modes - BCD or true Binary.

BinarcyCoded Decimal - takes each two digit number [hours, minutes & seconds] and codes then as two binary string.

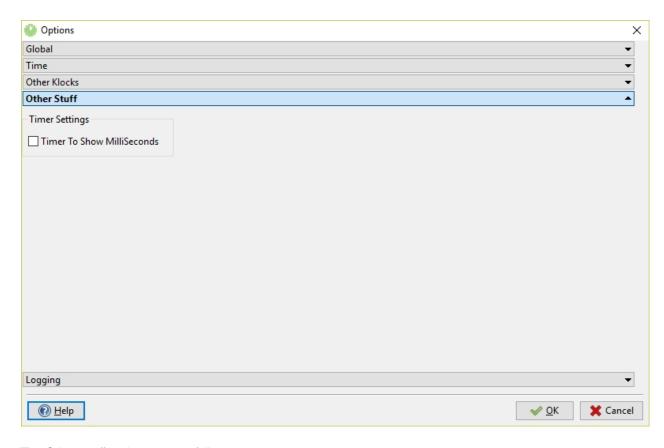
True Binary - takes each two digit number [hours, minutes & seconds]and codes then as a single binary string

Pressing OK will save the new settings. Pressing cancel will not save any changes.

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Other Stuff

Other Stuff



The Other stuff options are as follows.

Timer Settings.

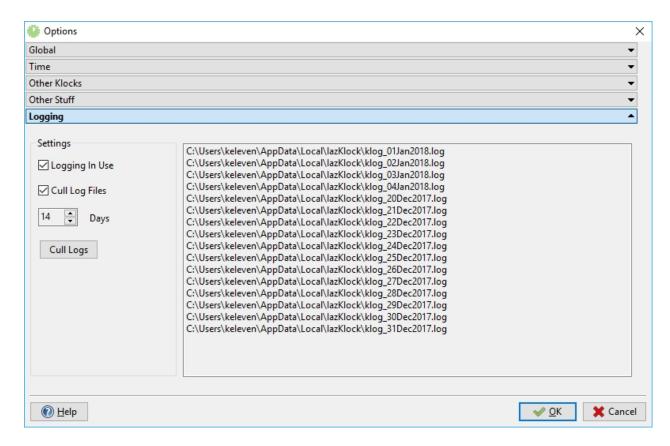
Time will show milliseconds.

Pressing OK will save the new settings. Pressing cancel will not save any changes.

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Logging

Logging



Certain errors and message can be logged to text file for further reading. This facility can be disabled. If enabled, the log files are displayed.

The number of days to keep the log files can be specified, default is 14. After this time, the Klock will delete the older log files.

A clean up of log files can be completed by clicking the button.

Clicking the entry for the log file, should log the log file into the default text editor.

```
File Edit View Window Help
klog_31Dec2017.log
         31Dec2017 104005 : Log Created
         31Dec2017 104005
                                     lazklock
         31Dec2017 104005
         31Dec2017 104005
                                     User : keleven
                                             : KELEVEN
          31Dec2017 104005
                                     PC
          31Dec2017 104005
                                     0S
                                               Microsoft Windows [Version 10.0.16299.125]
          31Dec2017 104005
                                      lazKlock Build
                                                              :: 58
          31Dec2017 104005
                                      lazKlock Version :: 2.1.4.58
                                     Built with 64 bit Lazarus Version :: 1.8.0.6
          31Dec2017
                        104005
                                     App Dir : C:\Program Files\keleven\lazKlock\
          31Dec2017
                        104005
          31Dec2017
                        104005
          31Dec2017
                        104005
                                      C:\Users\keleven\AppData\Local\lazKlock\fuzzytime_19Dec2017.log with age 11
          31Dec2017 104005
                                         \Users\keleven\AppData\Local\lazKlock\klog_15Dec2017.log with age 15 16 Dec 2017
          31Dec2017 104005
                                         \Users\keleven\AppData\Local\lazKlock\klog_16Dec2017.log with age 14
                                                                                                                                                16 Dec 2017
                                         \Users\keleven\AppData\Local\lazKlock\klog_17Dec2017.log with age 13
          31Dec2017 104005
                                                                                                                                               18 Dec 2017
                                        :\Users\keleven\AppData\Local\lazKlock\klog_17Dec2017.log with age 13
:\Users\keleven\AppData\Local\lazKlock\klog_18Dec2017.log with age 12
:\Users\keleven\AppData\Local\lazKlock\klog_18Dec2017.log with age 11
:\Users\keleven\AppData\Local\lazKlock\klog_19Dec2017.log with age 11
:\Users\keleven\AppData\Local\lazKlock\klog_20Dec2017.log with age 10
:\Users\keleven\AppData\Local\lazKlock\klog_21Dec2017.log with age 9
:\Users\keleven\AppData\Local\lazKlock\klog_22Dec2017.log with age 8
:\Users\keleven\AppData\Local\lazKlock\klog_23Dec2017.log with age 7
:\Users\keleven\AppData\Local\lazKlock\klog_25Dec2017.log with age 6
:\Users\keleven\AppData\Local\lazKlock\klog_25Dec2017.log with age 5
:\Users\keleven\AppData\Local\lazKlock\klog_25Dec2017.log with age 4
:\Users\keleven\AppData\Local\lazKlock\klog_26Dec2017.log with age 3
         31Dec2017 104005
                                                                                                                                                19 Dec 2017
          31Dec2017 104005
                                                                                                                                               19 Dec 2017
         31Dec2017 104005
                                                                                                                                               20 Dec 2017
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         31Dec2017 104005
         31Dec2017 104005
                                                                                                                                              23 Dec 2017
          31Dec2017 104005
                                                                                                                                              24 Dec 2017
         31Dec2017 104005
                                                                                                                                              25 Dec 2017
          31Dec2017 104005
                                                                                                                                              25 Dec 2017
         31Dec2017 104005
                                                                                                                                              27 Dec 2017
                                         \Users\keleven\AppData\Local\lazKlock\klog_27Dec2017.log with age 3
\Users\keleven\AppData\Local\lazKlock\klog_28Dec2017.log with age 2
          31Dec2017 104005
                                                                                                                                                  Dec 2017
                                                                                                                                              28 Dec 2017
         31Dec2017 104005
          31Dec2017 104005
                                         \Users\keleven\AppData\Local\lazKlock\klog_29Dec2017.log with age
                                                                                                                                              30
                                                                                                                                                  Dec
          31Dec2017 104005
                                         \Users\keleven\AppData\Local\lazKlock\klog_30Dec2017.log with age 0
                                                                                                                                              31 Dec 2017
          31Dec2017 104005
                                         \Users\keleven\AppData\Local\lazKlock\klog_31Dec2017.log with age
                                                                                                                                              31 Dec 2017
                                                                                                                                          17 Dec 2017
         31Dec2017 104005
                                         \Users\keleven\AppData\Local\lazKlock\Klock00000.tmp with age 13
                                         \Users\keleven\AppData\Local\lazKlock\Klock00001.tmp with age
         31Dec2017 104005
                                                                                                                                   12
                                                                                                                                          18 Dec 2017
                                        : Users\keleven\AppData\Local\lazklock\Klock000001.tmp with age 12
:\Users\keleven\AppData\Local\lazklock\Klock00002.tmp with age 11
:\Users\keleven\AppData\Local\lazklock\Klock00003.tmp with age 11
:\Users\keleven\AppData\Local\lazklock\Klock00004.tmp with age 10
:\Users\keleven\AppData\Local\lazklock\Klock00005.tmp with age 3
:\Users\keleven\AppData\Local\lazklock\Klock00006.tmp with age 3
:\Users\keleven\AppData\Local\lazklock\Klock00007.tmp with age 0
         31Dec2017 104005
                                                                                                                                         19 Dec 2017
         31Dec2017 104005
                                                                                                                                          19 Dec 2017
         31Dec2017 104005
                                                                                                                                        20 Dec 2017
         31Dec2017 104005
                                                                                                                                        27 Dec 2017
          31Dec2017 104005
                                                                                                                                        27 Dec 2017
          31Dec2017 104005
                                                                                                                                        30 Dec 2017
                                      C:\Users\keleven\AppData\Local\lazKlock\Klock00008.tmp with age 0
C:\Users\keleven\AppData\Local\lazKlock\Klock00009.tmp with age 0
          31Dec2017 104005
                                                                                                                                        30
                                                                                                                                             Dec
                                                                                                                                                  2017
         31Dec2017 104005
                                                                                                                                        30 Dec 2017
                                     Adding C:\Program Files\keleven\lazKlock\fonts\BarCode39.ttf
          31Dec2017
                        104005
          31Dec2017
                        104005
                                      Adding C:\Program Files\keleven\lazKlock\fonts\NancyBlackett.ttf
          31Dec2017
                        104005
                                      Adding C:\Program Files\keleven\lazKlock\fonts\BrailleLatin.ttf
          31Dec2017 104005
                                      Adding C:\Program Files\keleven\lazKlock\fonts\Semaphore.ttf
          31Dec2017 104005
                                      Adding C:\Program Files\keleven\lazKlock\fonts\Christmas.ttf
          31Dec2017 104005
                                      Adding C:\Program Files\keleven\lazKlock\fonts\Hack.ttf
         31Dec2017 104005
                                     FormOptions Create
         31Dec2017 104005
                                     FormAbout Create
         31Dec2017 104006
                                     FormHelp Create
                                     FormLicense Create
FormReminderInput Create
         31Dec2017 104006
         31Dec2017 104006
                                     FormAnalogue Klock Create formClipBoard Create
          31Dec2017 104006
          31Dec2017 104006
          31Dec2017 104006
                                     FormLEDKlock Klock Create
                                     FormBinaryKlock Klock Create
          31Dec2017
                        104006
                                     Binary Klock
formSmallTextKlock Klock Create
          31Dec2017
                        104006
          31Dec2017 104006
          31Dec2017 104006
                                     FormKlock Showing
         31Dec2017 104006
                                     FormKlock SetDefaults
```

Created with the Personal Edition of HelpNDoc: Free Kindle producer

History

Build 1

commit a3539dd01031498d3c25c9a5ca3a454e18748aa6 Author: Kevin Scott < lazKlock@keleven.co.uk> Date: Thu Sep 29 20:50:37 2016 +0100

Initial Import.

Most of the GUI structure is complete.

Countdown page complete.

```
.gitignore
                       33 ++
blue-letters/!.ico
                       | Bin 0 -> 119149 bytes
blue-letters/A.ico
                         | Bin 0 -> 133106 bytes
                          Bin 0 -> 130770 bytes
blue-letters/B.ico
blue-letters/C.ico
                          Bin 0 -> 136698 bytes
blue-letters/D.ico
                          Bin 0 -> 129097 bytes
blue-letters/Dot.ico
                         | Bin 0 -> 118524 bytes
blue-letters/E.ico
                         | Bin 0 -> 124688 bytes
blue-letters/F.ico
                        | Bin 0 -> 124147 bytes
                         | Bin 0 -> 135767 bytes
blue-letters/G.ico
blue-letters/H.ico
                         | Bin 0 -> 126025 bytes
blue-letters/l.ico
                        | Bin 0 -> 120077 bytes
blue-letters/J.ico
                        | Bin 0 -> 126758 bytes
                          Bin 0 -> 132202 bytes
blue-letters/K.ico
blue-letters/L.ico
                        | Bin 0 -> 123843 bytes
blue-letters/M.ico
                         | Bin 0 -> 132420 bytes
blue-letters/N.ico
                         | Bin 0 -> 128936 bytes
blue-letters/O.ico
                         Bin 0 -> 135070 bytes
blue-letters/P.ico
                          Bin 0 -> 127568 bytes
blue-letters/Q.ico
                          Bin 0 -> 138504 bytes
blue-letters/Question.ico
                           | Bin 0 -> 122752 bytes
blue-letters/R.ico
                          Bin 0 -> 131815 bytes
blue-letters/S.ico
                         | Bin 0 -> 138950 bytes
blue-letters/T.ico
                        | Bin 0 -> 123861 bytes
blue-letters/U.ico
                         | Bin 0 -> 126431 bytes
blue-letters/V.ico
                         | Bin 0 -> 133394 bytes
                          Bin 0 -> 137393 bytes
blue-letters/W.ico
blue-letters/Xico
                        | Bin 0 -> 133641 bytes
blue-letters/Y.ico
                         | Bin 0 -> 130920 bytes
blue-letters/Z.ico
                        | Bin 0 -> 129292 bytes
blue-letters/readme.txt
                           | 26 ++
blue-letters/sA.ico
                         | Bin 0 -> 894 bytes
blue-letters/sB.ico
                         | Bin 0 -> 894 bytes
blue-letters/sC.ico
                          Bin 0 -> 894 bytes
                          Bin 0 -> 894 bytes
blue-letters/sD.ico
info.txt
                     | 15 +
klock.ico
                       | Bin 0 -> 3262 bytes
klock.lpi
                      | 268 ++++++++++++
klock.lpr
                      | 22 ++
random/random1.ico
                            | Bin 0 -> 151787 bytes
random/random10.ico
                             | Bin 0 -> 161228 bytes
random/random11.ico
                             Bin 0 -> 179933 bytes
                              Bin 0 -> 173332 bytes
random/random12.ico
random/random2.ico
                             Bin 0 -> 161370 bytes
random/random3.ico
                             Bin 0 -> 154710 bytes
random/random4.ico
                             Bin 0 -> 176679 bytes
random/random5.ico
                             Bin 0 -> 132648 bytes
random/random6.ico
                             Bin 0 -> 149826 bytes
random/random7.ico
                             Bin 0 -> 155776 bytes
random/random8.ico
                             Bin 0 -> 156516 bytes
random/random9.ico
                             Bin 0 -> 151106 bytes
```

```
random/readme.txt
                          | 17 ++
sounds/alarm-fatal.wav
                            Bin 0 -> 1359604 bytes
sounds/chimes.wav
                           | Bin 0 -> 55776 bytes
sounds/chord.wav
                          | Bin 0 -> 97016 bytes
sounds/ding.wav
                         | Bin 0 -> 80856 bytes
                         | Bin 0 -> 119384 bytes
sounds/notify.wav
sounds/recycle.wav
                          | Bin 0 -> 25434 bytes
sounds/ringin.wav
                         | Bin 0 -> 10026 bytes
sounds/ringout.wav
                          | Bin 0 -> 5212 bytes
sounds/start.wav
                         | Bin 0 -> 1192 bytes
sounds/tada.wav
                         | Bin 0 -> 171100 bytes
uabout.lfm
                       | 204 ++++++++++
uabout.pas
                       | 62 ++++
uhelp.lfm
                      | 159 ++++++++
uhelp.pas
                       | 68 ++++
uklock.lfm
                       | 376 ++++++++++++++++++
uklock.pas
                       | 295 ++++++++++++++
                       | 42 +++
uoptions.lfm
uoptions.pas
                        | 47 +++
71 files changed, 2308 insertions(+)
```

Build 2

commit dc39233aeaa2191988890a6964d7d721e78d3bf0

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 20:56:56 2016 +0100

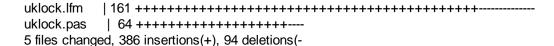
Nearly completed timer page - just an issue with the pause/resume.

Changed icon to clock.ico

Changed message to popup notification.

```
blue-letters/!.ico
                     | Bin 119149 -> 0 bytes
blue-letters/A.ico
                        Bin 133106 -> 0 bytes
blue-letters/B.ico
                        Bin 130770 -> 0 bytes
blue-letters/C.ico
                        Bin 136698 -> 0 bytes
blue-letters/D.ico
                        Bin 129097 -> 0 bytes
blue-letters/Dot.ico
                       | Bin 118524 -> 0 bytes
blue-letters/E.ico
                        Bin 124688 -> 0 bytes
blue-letters/F.ico
                        Bin 124147 -> 0 bytes
blue-letters/G.ico
                        Bin 135767 -> 0 bytes
blue-letters/H.ico
                        Bin 126025 -> 0 bytes
blue-letters/l.ico
                     | Bin 120077 -> 0 bytes
blue-letters/J.ico
                       Bin 126758 -> 0 bytes
blue-letters/K.ico
                        Bin 132202 -> 0 bytes
blue-letters/L.ico
                      | Bin 123843 -> 0 bytes
blue-letters/M.ico
                       | Bin 132420 -> 0 bytes
blue-letters/N.ico
                        Bin 128936 -> 0 bytes
blue-letters/O.ico
                        Bin 135070 -> 0 bytes
blue-letters/P.ico
                        Bin 127568 -> 0 bytes
blue-letters/Q.ico
                        Bin 138504 -> 0 bytes
blue-letters/Question.ico | Bin 122752 -> 0 bytes
blue-letters/R.ico
                        Bin 131815 -> 0 bytes
blue-letters/S.ico
                        Bin 138950 -> 0 bytes
blue-letters/T.ico
                      | Bin 123861 -> 0 bytes
blue-letters/U.ico
                        Bin 126431 -> 0 bytes
blue-letters/V.ico
                        Bin 133394 -> 0 bytes
blue-letters/W.ico
                       | Bin 137393 -> 0 bytes
blue-letters/Xico
                      | Bin 133641 -> 0 bytes
```

```
blue-letters/Y.ico
                 | Bin 130920 -> 0 bytes
blue-letters/Z.ico
                 | Bin 129292 -> 0 bytes
blue-letters/readme.txt | 26 -
blue-letters/sA.ico
                 | Bin 894 -> 0 bytes
blue-letters/sB.ico
                 | Bin 894 -> 0 bytes
                 | Bin 894 -> 0 bytes
blue-letters/sC.ico
blue-letters/sD.ico
                 | Bin 894 -> 0 bytes
clock.ico
                | Bin 0 -> 67646 bytes
              | 10 +-
info.txt
klock.ico
               | Bin 3262 -> 67646 bytes
               | 129 ++-
klock.lpi
random/random1.ico
                   | Bin 151787 -> 0 bytes
random/random10.ico
                    | Bin 161228 -> 0 bytes
random/random11.ico
                     Bin 179933 -> 0 bytes
random/random12.ico
                    | Bin 173332 -> 0 bytes
random/random2.ico
                     Bin 161370 -> 0 bytes
random/random3.ico
                     Bin 154710 -> 0 bytes
random/random4.ico
                     Bin 176679 -> 0 bytes
random/random5.ico
                     Bin 132648 -> 0 bytes
random/random6.ico
                   | Bin 149826 -> 0 bytes
random/random7.ico
                     Bin 155776 -> 0 bytes
random/random8.ico
                     Bin 156516 -> 0 bytes
random/random9.ico
                   | Bin 151106 -> 0 bytes
random/readme.txt
                   | 17 -
uabout.lfm
                  30 +-
uabout.pas
                | 2+-
uhelp.lfm
                  6 +-
uhelp.pas
                  2 +-
uklock.lfm
                | 92 +-
uklock.pas
57 files changed, 2361 insertions(+), 221 deletions(-)
Build 3
commit d16134c3bd9b03fee717a13f51b75ca79be2ed4d
Author: Kevin Scott <lazKlock@keleven.co.uk>
Date: Thu Sep 29 21:12:48 2016 +0100
Timer page completed.
Reminder page started.
3 files changed, 163 insertions(+), 56 deletions(-
Build 4
commit 2bb295ab57abacd842d99879a21a46feeec62d8c
Author: Kevin Scott <lazKlock@keleven.co.uk>
Date: Thu Sep 29 21:15:59 2016 +0100
Fuzzy time page completed.
Still working on reminder page.
klock.lpi
         klock.lpr
         1 2 +-
```



Build 5

commit 012c8dcaa5ef6569b178c9263e8553b0208f46aa

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 21:22:06 2016 +0100

All four pages [fuzzy, countdown, time & reminder] are all complete.

Added logic to change status bar on page change.

Tidied up code.

Build 6

commit 04bbd3f4d9c7fbff3d493f570177b9c422f8fbbd Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 21:26:21 2016 +0100

All four pages now work - maybe an issue with reminders.

Added option record, that is passed between option form and the main form. Added first option - colour of the main labels.

```
history.txt
         | 37 ++++++++++
klock.iss
          | 54 +++++++++++++++
klock.lpi
         | 2+-
klock.lpr
uabout.lfm
          | 4+-
uhelp.lfm
          | 4+-
uklock.lfm
          | 59 +++++++++
uklock.pas
          | 38 +++++++++--
          | 69 +++++++++++++
uoptions.lfm
           uoptions.pas
uoptionsrecord.pas | 32 ++++++++
11 files changed, 399 insertions(+), 123 deletions(-
```

Build 7

commit 3a979b66d0e3fad03dfb79aef2b207025db3784f Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 21:29:35 2016 +0100

Added NET & UNIX time to fuzzypage. Added extra buttons to the radio group.

```
info.txt
         | 6+--
klock.lpi
         | 2+-
klock.lpr
          | 2 +-
uabout.pas
ufuzzytime.pas | 66 ++++++++++++++
uhelp.lfm
         | 4+-
          | 5+-
uhelp.pas
uklock.lfm
          | 30 ++++++
uklock.pas
          | 35 ++++++
uoptions.lfm | 4 +-
uoptions.pas | 2 +-
11 files changed, 191 insertions(+), 125 deletions(-)
Build 8
commit fd88525ca99a09df732c03859b5e963c91c4679f
Author: Kevin Scott < lazKlock@keleven.co.uk>
Date: Thu Sep 29 21:32:24 2016 +0100
Corrected bugs in fuzzytime & net time.
Added UTC time.
klock.iss
          | 4 +-
klock.lpi
         | 140 ++++++++++++++++++++++++++++++
uabout.lfm
         | 4+-
ufuzzytime.pas | 19 +++++--
uhelp.lfm
         | 4 +-
uklock.lfm
          | 11 ++---
          | 4++
uklock.pas
uoptions.lfm | 4 +-
8 files changed, 104 insertions(+), 86 deletions(-)
Build 9
commit 2aad4c41fb6f0410f6ff7f69c952e660a5c96f2d
Author: Kevin Scott <lazKlock@keleven.co.uk>
Date: Thu Sep 29 21:35:59 2016 +0100
Changed the way to select the time format from a radio group to a combo box.
Added Swatch time.
info.txt
        | 6+--
klock.lpi
         uabout.pas
          | 2 +-
ufuzzytime.pas | 42 +++++++++++++
uhelp.pas
         | 2+-
uklock.lfm
         | 37 +++++
uklock.pas | 22 +++++
uoptions.lfm | 4 +-
uoptions.pas | 2 +-
10 files changed, 164 insertions(+), 123 deletions(-
Build 10
commit 53193a6c8825b941b4b2d9648e40eb1552d8a87b
Author: Kevin Scott <lazKlock@keleven.co.uk>
Date: Thu Sep 29 21:38:26 2016 +0100
```

Changed the data input on the reminder page from spin edits [one for hours and one for minutes] to a floating spin edit to handle both hours and minutes. Still working on the logic to make it work in 24 hours and 60 minutes.

Also added a date picker to the reminder page.

```
info.txt
      | 6+--
      klock.lpi
uabout.lfm
       | 28 +++++
uabout.pas
       | 2+-
ufuzzytime.pas | 21 ++++++
uhelp.lfm
      | 4+-
uhelp.pas
       | 2+-
uklock.lfm
       | 73 +++++++++++
9 files changed, 218 insertions(+), 178 deletions(-)
```

Build 11

commit e1da1e2a4a2bdb103668b2bab9a084b2bb8df54d

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 21:42:20 2016 +0100

More work done on the reminder page.

Finally decided to use two normal spin edits for the hours and mins.

Not too pretty, but simple and it works.

Also added a date picker and added the date into the reminder logic.

Added a clear button to the reminder page, to cancel the running reminder.

Build 12

commit 00b786ab517dc5c7833ace39a7cb35187d9fa811

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 21:59:53 2016 +0100

Tidied up the code for the radio group - select time.

```
info.txt | 6 +++---
klock.lpi | 20 ++++++++-----
uabout.pas | 2 +-
uhelp.pas | 2 +-
uklock.pas | 48 +++++++++++------------------
5 files changed, 29 insertions(+), 49 deletions(-)
```

Build 13

commit 9cdc03d6cb236ae91a3b997d203371a6849910a6

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 22:02:36 2016 +0100

Reduced the height of most of the components, to make the overall application more sleek - I think it looks better.

Added a new form for the license [same as the help form], hangs off the help menu. Help & Licence forms now load their text from text files.

Build 14

commit daaa17da01956208064528a5eaad527547f31994

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 22:06:24 2016 +0100

Added split time button to time page.

Removed the function ItoS, which converted integer to two digit strings and use internal format functions instead.

Build 15

commit f69334f878d9b7451b21fb5811aaa45203ea1a8d Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 22:25:08 2016 +0100

Added try..except clause to all file operations.

Another attempt to fix noon bug in fuzzytime.

```
uhelp.pas | 14 ++++++--
uklock.lfm | 16 +++++---
ulicense.lfm | 6 ++--
ulicense.pas | 14 +++++--
uoptions.lfm | 9 +++--
12 files changed, 134 insertions(+), 87 deletions(-)
```

Build 16

commit b2a0dc26bb2192179201688d36afd76500aedb9f

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 22:27:24 2016 +0100

Recompiled to check for Lazarus 0.9.30.4

```
history.txt | 12 ++++++++++
info.txt | 8 ++++---
klock.iss | 8 ++++---
klock.lpi | 10 +++++---
uabout.lfm | 26 +++++++++++---
uabout.pas | 2 +-
uhelp.lfm | 2 +-
uhelp.pas | 2 +-
ulicense.lfm | 2 +-
ulicense.pas | 2 +-
10 files changed, 43 insertions(+), 31 deletions(-)
```

Build 17

commit 7d528975e17fb50a1b14fc38e5a585c25bcd2a38

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 22:28:56 2016 +0100

Licence window made read only - thanks Zach.

Reminders can now not be set in the past - thanks Zach.

Start of code for saving options in a .ini file.

Build 18

commit eb8bb66d933973ec2915c68f5be9a78ac921a6c1

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 22:38:52 2016 +0100

Further work completed on the .ini file

Extended the GUI on the options screen.

Build 19

commit 6258d4478adef926ad45e166503e3a9e47b46bb4

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 22:41:08 2016 +0100

Further work on the ini file stuff.

Timer can now run either second / milli seconds.

Default page control can now be set.

Both saved to ini file.

Build 20

commit d6208a7f77b04de861eac0154dc886be990c34b4

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 22:43:24 2016 +0100

All modules now load version info from options record.

Build 21

commit 9f04e9dd7a8ad1106d10310a6f9933d40b297faa

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 22:46:44 2016 +0100

Added unit uOptionsUtils.pas, which contains the functions StringToFont & FontToString - enables font information to be saved to the ini file.

Added code to save and load fonts from the ini file - to be tested.

Build 22

commit d74e9710c48371a8e92a440c372b15ae673e6119

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 22:50:15 2016 +0100

Further work on font options.

Removal of colour buttons in the options screen. The colour can be changed in the font page, so making these buttons redundant.

Build 23

commit 2f4a695fc917e80fa463ee1726e62eb95c253ac0

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 23:01:23 2016 +0100

Removed colour buttons, duplicated in font dialogue screen.

Finished font stuff.

Will save screen position if desired.

```
| 12 ++--
info.txt
klock.ini
          | 22 ++++---
klock.iss
           | 7++-
klock.lpi
          | 117 ++++++++++++
           | 4+-
uhelp.lfm
           | 47 ++++++
uklock.lfm
uklock.pas
            | 53 ++++++
uoptions.lfm
           | 164 +++++++++++++++++
            | 179 ++++++++++++++
uoptions.pas
uoptionutils.pas | 15 +----
10 files changed, 255 insertions(+), 365 deletions(-)
```

Build 24

commit 0d76e07735779d51ae2e12853badf8d9ca57a8d5

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Sep 29 23:04:34 2016 +0100

Added option for net time to count in 1 or 15 seconds.

[15 seconds net time = i second real time]

Added option for Swatch time to display centibeats.

Added option for default time display.

Changed both default time & tab to be drop down lists.

Added option for countdown to trigger sound, event command or pop up message. event is a system event i.e. PC shut down or reboot. command is the ability to run an external application.

```
| 14 ++--
info.txt
klock.ini
     | 11 ++-
klock.lpi
     | 146 +++++++++++++
uabout.lfm
     | 35 ++++---
     | 1+
uabout.pas
ufuzzytime.pas | 28 +++++--
uhelp.pas
     | 1+
uklock.lfm
     uklock.pas
      ulicense.pas | 1+
12 files changed, 757 insertions(+), 279 deletions(-)
```

Build 25

commit 35b26cb97e749407f6b120ca4c0bcc4c853e4a2e

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 21:34:21 2016 +0100

Over 1000 lines of meaningless code :0)

Renamed UOptionsUtils.pas to UKlockUtils.pas - a more general utils unit. Moved doSystemEvent & doComand procedures into this unit.

Corrected several bugs with the countdown event procedures.

Change AProcess.CommandLine [depreciated] to AProcess.Executable & Aprocess.Parameters.

Corrected bug; screen would reset to saved screen co-ordinates, even though the screen saved not clicked in options. Now checks option when resets main form.

Options; changed around the NET time and Swatch time to be a common checkbox list, instead of two check boxes.

Finally got around to the case statement, converted most nested IF statements.

Added Julian Time - needs checking.

```
| 2 +-
help.txt
info.txt
                        | 8 +-
                        | 10 +-
klock.ini
                        | 141 ++++----
klock.lpi
                        | 2 +-
klock.lpr
ufuzzytime.pas
                           | 108 +++----
uklock.lfm
                         | 228 +++++++++
uklock.pas
                          | 551 ++++++++++++++++++++++
uoptionutils.pas => uklockutils.pas | 101 +++++-
uoptions.lfm
                          | 128 +++--
                          | 39 ++-
uoptions.pas
11 files changed, 842 insertions(+), 476 deletions(-)
```

Build 26

```
commit 730fffd5076edbf3267f54ae52616ca06a94a043
Author: Kevin Scott <lazKlock@keleven.co.uk>
Date: Fri Sep 30 21:50:20 2016 +0100
Added Julian time.
Added Decimal Time.
Added Hexadecimal Time.
Added Binary Time.
info.txt
klock.lpi
         uklock.lfm | 41 ++++++
uoptions.lfm | 42 ++++++
uoptions.pas | 2 +-
6 files changed, 222 insertions(+), 131 deletions(-)
Build 27
commit 82242ff21bab25c4919463bdde34d3f8c335f4d2
Author: Kevin Scott <lazKlock@keleven.co.uk>
Date: Fri Sep 30 21:55:00 2016 +0100
Bug with the ini file, could not create in Windows 7. Not enough permissions, I think.
Use GetAppConfigDir, it retrieves the correct place to store the ini file.
Store in something like c:\Users\user\AppData\local\kloc\ in Windows 7.
And c:\D&S\usr\Local Settings\Application Data|Klock\ on Windows XP.
info.txt
       | 6 ++--
klock.ini | 4 +--
klock.iss | 7 +++--
klock.lpi | 32 ++++++++
uoptions.pas | 8 ++++--
6 files changed, 126 insertions(+), 24 deletions(-)
Build 28
commit 1c4daa3d9c873b3bf2feea83630b46e4e9ef2ee3
Author: Kevin Scott <lazKlock@keleven.co.uk>
Date: Fri Sep 30 21:58:57 2016 +0100
Removed local Klock.ini, not now needed - will create on start up.
Problem with the screen position of main form after options screen closed
  - Corrected [thanks Zach].
         | 10 ++--
info.txt
         | 25 -----
klock.ini
         klock.lpi
ufuzzytime.pas | 18 +++----
         | 83 +++++++++++++++
uklock.lfm
uklock.pas
          | 25 +++++++
uoptions.lfm | 36 +++++
uoptions.pas | 2 +-
8 files changed, 185 insertions(+), 160 deletions(-)
```

Build 29

commit 8453f000a73e627323eef4c51971a9cce65e09d3

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:03:36 2016 +0100

Corrected bug; Setting the date on the reminder did not enable the set button - the time needed changing as well - [thanks Zach].

Build 30

commit 0e1fc4257b6bdde90a8282545b24531a7e3ea83a

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:08:30 2016 +0100

Added tray icon to klock.

Added button, that hides the main form to a tray icon.

Added pop-up menu to tray icon, that gives the following options -

- 1 Show main form.
- 2 Show current selected time as a pop-up notification.
- 3 Exit Klock.

Changed the way the pop-up notification is called. Now uses a global array to hold different messages from time, countdown and reminder.

Added some new comments to procedures [which where their all the time ;o)]

Build 31

commit 1d6bf1d7c014e3575f62223afeb9729d5bcfbeb8 Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:14:03 2016 +0100

Recompiled to check for lazarus 1.0 RC1 [although showing 0.9.31 in about box].

Also turned off generate debugging info GDN in linking options.

This creates a lot smaller executable.

Build 32

commit f73c566840d177dadc0dc09013bab2422c7ab883

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:17:23 2016 +0100

Recompiled to check for Lazarus 1.0 RC2 [now showing 1.0.1.2 in about box].

Tidied up the logic that checks that a reminder has been set in the future date.

If a system shut down is chosen in reminder or countdown and the application is being displayed in the system tray, switch to normal mode - allows the abort button to be selected.

Added a display to the status bar that indicates the status of the cap, numlock & scroll lock [in real time].

Build 33

commit 03c22837daa680df290ed247314cca7b33ce18a3

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:22:17 2016 +0100

Ran source through a spell checker - many changes.

Changed reminder tab to event tab.

Changed all existing references of reminder to event.

This is to allow a new reminder tab, which will remind on birthdays, anniversaries etc.

Added new reminder tab.

Added new form to add reminders.

Added logic to save reminders to csv file.

Added logic to load csv file and display date on reminder tab.

There is a bug with lcl, the pop-up notifier timeout does not seem to work.

Added a timer, that will kill the notifier after ten seconds.

```
kReminder.txt
            | 16 ++
klock.lpi
           | 201 +++++++
klock.lpr
           | 3+-
ufuzzytime.pas | 2 +-
          | 6+-
uhelp.lfm
uhelp.pas
            | 2 +-
uklock.lfm
            | 227 ++++++++++
uklock.pas
            uklockutils.pas | 252 +++++++++++++
            | 6+-
ulicense.lfm
            | 55 +++---
uoptions.lfm
            | 115 +++++
uoptions.pas
ureminderinput.lfm | 193 ++++++++++++++
ureminderinput.pas | 175 +++++++++++++
14 files changed, 1256 insertions(+), 554 deletions(-)
```

Build 34

commit 0a457f25b2170992c563062f8a5ee4d8084ba82f

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:57:59 2016 +0100

Converted SVN repository to GIT. Uploaded this to GitHub.

Recompiled to check for Lazarus 1.6 [showing 1.6.0.4 in about box].

Build 35

Recompiled to check for Lazarus 1.8.0.4.

Added VI backup files to .gitignore.

Amended klock.iss [inno setup script] to either install 32 or 64 bit executable, depending on target machine.

Increased version number of 35 in uOptions.pas.

Tidied up history.txt

Build 36 [1.0.0.36]

commit c607cfc8110893a99bc89120532a1f1f34c6955c

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 7 22:36:38 2017 +0100

Renamed all form files from uxxx.pas to formxxx.pas. i.e. uKlock.pas -> formKlock.pas.

So, all source files that contain GUI elements will start with form.

All none GUI source files will start with u - a unit file.

Currently 2968 lines of source code. 1549 statements 14.6% comments

```
uabout.lfm => formAbout.lfm
                                    | 38 +++----
uabout.pas => formAbout.pas
                                     | 4 +-
uhelp.lfm => formHelp.lfm
                                 | 2+-
                                    | 4+-
uhelp.pas => formHelp.pas
uklock.lfm => formKlock.lfm
                                    | 0
uklock.pas => formKlock.pas
                                     | 20 ++--
ulicense.lfm => formLicense.lfm
                                     | 2 +-
                                     | 4 +-
uoptions.lfm => formOptions.lfm
                                      | 2+-
uoptions.pas => formOptions.pas
ulicense.pas => formlicense.pas
ureminderinput.lfm => formreminderinput.lfm | 39 +++----
ureminderinput.pas => formreminderinput.pas | 2 +-
                             | 168 +++++++++
klock.lpi
klock.lpr
                             | 4 +-
                              | 4+
klock.xml
                                | 2+-
ufuzzytime.pas
uklockutils.pas
                                | 2 +-
```

Build 37 [2.0.0.37]

commit 3d7a9e43522baac7af8adea345307b107d33a228

Author: Kevin Scott keleven.co.uk Date: Mon Oct 16 22:15:32 2017 +0100

Added config file for SourceMonitor.

Added uOptions.pas, an options record that uses XML files. Hopefully this will replace the existing .ini file based options.

Amended all references in formKlock.pas that used the old .ini options to use the new .xml options record.

NOTE :: formOptions has not been touched yet and still point to the old style options records - this will be stripped out next.

Currently 3450 lines of source code. 1802 statements 15.5% comments

formKlock.lfm | 6+-| 57 +formKlock.pas formOptions.Ifm | 2+formreminderinput.lfm | 6 +history.txt | 1364 +++++++++++++++++++++ | 8+klock.iss klock.lpi | 141 +++--| 3+klock.lpr lazKlock.smproj | Bin 0 -> 10684 bytes powered_by_lazarus.png | Bin 0 -> 15189 bytes | 467 ++++++++++++ uoptions.pas 11 files changed, 1310 insertions(+), 744 deletions(-)

Build 38 [2.0.0.38]

commit c35513fb5200d949b4d7a01cb63240000e00073b

Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Wed Oct 18 22:18:09 2017 +0100

Amended formLicence, formHelp & formAbout to use new user Options.

Added to formAbout disk size and free space for all disks on the system

Added to formAbout system and application up time.

Added to formAbout to display if compile to either 32 or 64 bit.

Added to formAboout powered by Lazarus logo.

Tidied up formAbout.

Amended klock.iss to use lazKlock instead of Klock - should that be lazKlock.iss.

reloaded licence.txt from web site.

Currently 3567 lines of source code. 1856 statements 16.0% comment

```
GNU GENERAL PUBLIC LICENSE.txt | 880 ++++++++
formAbout.Ifm
               | 652 ++++++++++++++++++++++++++++
formAbout.pas
                      | 114 +++++
formHelp.lfm
                     | 47 ++-
formHelp.pas
                     | 24 +-
                      | 44 ++-
formKlock.pas
formLicense.lfm
                      | 64 ++-
formlicense.pas
                      | 13 +-
history.txt
                    | 35 +-
                    | 4+-
klock.iss
                   | 160 ++++----
klock.lpi
lazKlock.smproj
                      | Bin 10684 -> 21721 bytes
12 files changed, 1166 insertions(+), 871 deletions(-)
```

Build 39 [2.0.0.39]

commit b9e05ca031036a4a64abf128859f401e10fab5f2 Author: Kevin Scott <lazKlock@keleven.co.uk> Date: Thu Oct 19 21:21:15 2017 +0100

Removed all references to the old .ini in formOptions, fromKlock & ufuzzyTime.

Also removed all non-visual components from formOptions.

We now build the new options screen.

```
Currently
3112 lines of source code.
1615 statements
16.4% comment
           | Bin 67646 -> 0 bytes
clock.ico
formAbout.pas | 2 +-
formKlock.pas | 21 +--
formOptions.Ifm | 319 +-----
formOptions.pas | 465 +-----
formlicense.pas | 2 +-
history.txt | 36 +++++
           | 10 +-
klock.iss
klock.lpi
           | 153 +++++++
lazKlock.smproj | Bin 21721 -> 32884 bytes
ufuzzytime.pas | 12 +-
uoptions.pas | 11 ++
12 files changed, 149 insertions(+), 882 deletions(-)
```

Build 40 [2.0.0.40]

commit 98eeea8d6afdab62fc0bfc23bd0cc52fbc703883

Author: Kevin Scott <github@keleven.co.uk> Date: Fri Oct 27 21:40:30 2017 +0100

Started building the new options screens - using an accordion.

Although all options are written to the xml file has strings, amended the Options class so that all options are presented to lazKlock has native type i..e. Integers and Boolean. The conversions are not his within the options class and not the main program.

Changed the logic in formOptions, when the options form loads a backup options record is created and this is amended, it is only copied to the main options records if OK is clicked.

If cancel is click the amendments are discarded.

Added the logic to uKlockUtils to amend the registry for starting the app with windows.

Removed self from variable references in uFuzztTime - not sure why they where there.

```
Currently
3338 lines of source code.
1738 statements
17.4% comment
formKlock.lfm
           | 17 ++--
formKlock.pas
            | 57 +++++
formOptions.pas
            history.txt
          | 31 ++++++
klock.lpi
          | 203 ++++++++++++++++++++++
          | 5+-
klock.lpr
lazKlock.smproj | Bin 32884 -> 41764 bytes
ufuzzytime.pas | 38 ++++---
uklockutils.pas | 42 ++++++
options.pas
          | 178 ++++++++++++++++++++++
uoptionsrecord.pas | 32 -----
12 files changed, 762 insertions(+), 266 deletions(-)
```

Build 41 [2.0.0.41]

commit 57332b6a2300cb489eee6d399318876c9519575e

Author: Kevin Scott <github@keleven.co.uk> Date: Mon Oct 30 22:14:19 2017 +0000

Added a separate form to house an Analogue Klock - frmAnalogueKlock.pas.

Made this form transparent, just leaving the form.

Added logic to make this draggable, with just the Klock visible.

Added User Options to remember the Analogue Klock screen position.

Added to main Klock to display the idle time.

Added percent Time to FuzzyTime.

```
formKlock.lfm
             | 19 ++++-
formKlock.pas
             | 48 +++++++
             | 13 +--
formOptions.Ifm
formanalogueklock.lfm | 78 ++++++++++++++
history.txt
           | 45 ++++++++
klock.lpi
           | 3+-
klock.lpr
lazKlock.smproj
             | Bin 41764 -> 51298 bytes
ufuzzytime.pas
             | 21 ++++-
uoptions.pas
            | 61 ++++++++++
11 files changed, 549 insertions(+), 117 deletions(-)
```

Build 42 [2.0.0.42]

commit 7b3781a898da3a2f69387a5eca5eae372c198112

Author: Kevin Scott <github@keleven.co.uk> Date: Mon Nov 6 13:39:29 2017 +0000

The shutdown command seems to have changed in windows 10.

Parameters are now preceded with a / and not a -.

Also, having problems passing parameter's with spaces, removed for now.

Corrected bug where if no action was selected, an index out of bounds could be created.

Build 43 [2.0.0.43]

commit 92d89f0d1125dd1f4aa33a102f38c94de928ef13

Author: Kevin Scott <github@keleven.co.uk> Date: Mon Nov 6 15:03:59 2017 +0000

Passed all source files through a spell checker - mainly for comments.

Passed all source through JEDI source checker.

Bumped up a minor version point.

```
Currently
3693 lines of source code.
1874 statements
16.7% comment
```

```
formAbout.pas
               | 53 ++-
formHelp.pas
              | 12 +-
formKlock.pas
               formOptions.Ifm
               | 2 +-
               | 53 ++-
formOptions.pas
formanalogueklock.pas | 76 ++--
               | 12 +-
formlicense.pas
formreminderinput.pas | 73 ++--
          | 6+-
help.txt
klock.lpi
            | 139 ++++----
            | 25 +-
klock.lpr
ufuzzytime.pas
               | 333 ++++++
uklockutils.pas
              | 115 +++---
uoptions.pas
              14 files changed, 1451 insertions(+), 1360 deletions(-)
```

Build 44 [2.0.1.44]

commit d0ffe89eb2885a8226c87d2b274fe099ce0684cc

Author: Kevin Scott <github@keleven.co.uk> Date: Fri Nov 10 20:15:11 2017 +0000

Added time displayed as barcode, Semaphore, Nancy Blackett Semaphore & Braille. Theses are achieved my font substitution.

Added a new unit uFont.pas - to load custom fonts.

Added logic to formKlock to use new fonts when required.

Added two new directories fonts & sounds.

Added a number of mp3 files to play the hourly chimes and The pips.

Currently

ufuzzytime.pas

Amended to procedure doPlaySound in uKlockUtils.pas to play all sound files and not just .wav files. Also, made this procedure more robust. Also added to this unit to play the hourly chimes.

Added user options for sound volume, sound the pips on the hour or hourly chimes. Also added the option for the analogue klock to save screen position.

```
4080 lines of source code.
2120 statements
16.4% comment
fonts/BarCode39.ttf
                        | Bin 0 -> 22492 bytes
fonts/BrailleLatin.ttf
                      | Bin 0 -> 30204 bytes
fonts/Hack-Regular.ttf
                        | Bin 0 -> 394336 bytes
                         | Bin 0 -> 41836 bytes
fonts/NancyBlackett.ttf
fonts/Semaphore.ttf
                         | Bin 0 -> 12344 bytes
formKlock.lfm
                       | 12 ++-
formKlock.pas
                        | 240 ++++++++++++++++++++
                        | 158 +++++++++++++++++++++++
formOptions.Ifm
formOptions.pas
                        | 116 ++++++++++++++++
formanalogueklock.pas
                           | 1+
history.txt
                     | 56 +++++++
klock.iss
                     | 2 +-
klock.lpi
                     | 229 ++++++++++++++++
klock.lpr
                     | 2+-
                        4 -
klock.xml
lazKlock.smproj
                        | Bin 51298 -> 61875 bytes
sounds/alarm-fatal.mp3
                          | Bin 0 -> 311378 bytes
sounds/alarm-fatal.wav
                          | Bin 1359604 -> 0 bytes
sounds/chimes.wav
                          | Bin 55776 -> 0 bytes
sounds/chord.wav
                         | Bin 97016 -> 0 bytes
sounds/ding.wav
                        | Bin 80856 -> 0 bytes
sounds/eight.mp3
                         | Bin 0 -> 979530 bytes
sounds/eleven.mp3
                          | Bin 0 -> 1162381 bytes
sounds/five.mp3
                        | Bin 0 -> 801223 bytes
sounds/four.mp3
                        | Bin 0 -> 739385 bytes
sounds/halfchime.mp3
                           | Bin 0 -> 319514 bytes
sounds/nine.mp3
                         | Bin 0 -> 1040899 bytes
sounds/notify.wav
                        | Bin 119384 -> 0 bytes
sounds/one.mp3
                         | Bin 0 -> 559035 bytes
sounds/quarterchime.mp3
                            | Bin 0 -> 241462 bytes
sounds/recycle.wav
                         | Bin 25434 -> 0 bytes
sounds/ringin.wav
                        | Bin 10026 -> 0 bytes
                         | Bin 5212 -> 0 bytes
sounds/ringout.wav
sounds/seven.mp3
                          | Bin 0 -> 919940 bytes
sounds/six.mp3
                         | Bin 0 -> 862013 bytes
sounds/start.wav
                        | Bin 1192 -> 0 bytes
sounds/tada.wav
                         | Bin 171100 -> 0 bytes
                         | Bin 0 -> 1101951 bytes
sounds/ten.mp3
                          | Bin 0 -> 40874 bytes
sounds/thepips.mp3
sounds/three.mp3
                         | Bin 0 -> 679164 bytes
sounds/threequarterchime.mp3 | Bin 0 -> 383064 bytes
sounds/twelve.mp3
                          | Bin 0 -> 1223752 bytes
sounds/two.mp3
                         | Bin 0 -> 620614 bytes
ufonts.pas
                      | 69 ++++++++++
```

| 43 +++----

Build 45 [2.0.1.45]

commit a9296bca47a258c567d6d096bca416709e943c63

Author: Kevin Scott <github@keleven.co.uk> Date: Tue Nov 14 14:57:13 2017 +0000

Added the ability for Klock to write Info and Debug information to log files. Logging can be enabled / disabled by a user options. Also the ability to delete log files older then a certain age. This is also specified by user options.

An extra tab was added to the options form for the logging options, the log files are also displayed here.

Added a new unit, uLoggingUtils. The unit contains the helper routines to read and delete log files.

Started to sprinkle debug entries all over.

Cleaned up the calling process for the chimes.

Added doubleTime to uFuzzyTime.

Added a new unit, uOptionsUtils. This unit contains helper routines to read and write XML entries.

Changed the Klock icon.

```
Currently
4303 lines of source code.
2199 statements
16.7% comment
```

```
formKlock.lfm
                  | 5994 +++++++++++++
formKlock.pas
                  | 78 +-
formOptions.Ifm
                   | 105 +-
                   | 58 +-
formOptions.pas
formanalogueklock.pas | 1 +
history.txt
                | 82 +-
klock.ico
                | Bin 67646 -> 0 bytes
               | 212 +-
klock.lpi
                9 +-
klock.lpr
lazKlock.smproj
                   | Bin 61875 -> 73456 bytes
                  | Bin 0 -> 67646 bytes
time-13-128.ico
                  | 41 +-
ufuzzytime.pas
uklockutils.pas
                  | 44 +-
uloggerutils.pas
                  | 90 +
uoptions.pas
                  | 374 ++-
uoptionsutils.pas
                 | 99 +
16 files changed, 2749 insertions(+), 4438 deletions(-)
```

Build 46 [2.0.1.46]

commit 2a0201bd0094f867199523c53545e03695adb89f

Author: Kevin Scott <github@keleven.co.uk> Date: Mon Nov 20 14:11:16 2017 +0000

Added formCipboard and uformClipboardUtils which implements a clipboard manager.

Added various options for the clipboard manages to formOptions and uOptions.

```
| 18 ++--
README.md
         | 1 -
formKlock.lfm
         | 13 ++-
formKlock.pas
formOptions.Ifm
          | 50 ++++----
formOptions.pas
          | 15 +++
formanalogueklock.lfm | 8 +-
formanalogueklock.pas | 3 +-
formclipboard.pas
          | 43 ++++---
help.txt
       | 55 +++++++
history.txt
klock.ico
        | Bin 0 -> 67646 bytes
klock.iss
         | 5+-
klock.lpi
         | 5+-
klock.lpr
lazKlock.smproj | Bin 73456 -> 100949 bytes
uoptions.pas
       | 26 ++++-
18 files changed, 966 insertions(+), 180 deletions(-)
```

Looks like I have messed up and corrupted the sources somewhere along the line. It would compile but would error when loading with Access Violation.

What ever I did, I could not see what I had done wrong. The happened at both 32 & 64 bit. It did happen at the same time as I had tried a new couple of components, maybe I had mixed up the 32 and 64 bit things. Or, more probably, trying to access an object that had not been initialised. I gave up.

Lazarus then released the final V1.8 - So I decided to try and fix it.

The first build that would compile and run was build 41. So branch V2.1 starts for there.

I will try apply the changes gradually and see if I can spot the erorr[s].

Build 47 [2.1.1.47]

commit 6cd165f08dbdf1636c5e595ab623e35d89a5efb4

Author: Kevin Scott <github@keleven.co.uk> Date: Tue Dec 12 21:22:21 2017 +0000

[This is a duplication of build 42]

The shutdown command seems to have changed in windows 10.

Parameters are now preceded with a / and not a -.

Also, having problems passing parameter's with spaces, removed for now.

Corrected bug where if no action was selected, an index out of bounds could be created.

Currently
3611 lines of source code.
1851 statements
17.2% comment

formAbout.pas | 2 +formKlock.lfm | 2 +-

Build 48 [2.1.2.48]

commit e6d03bec376307cbf63b324ea64f181d8a03867b

Author: Kevin Scott <github@keleven.co.uk> Date: Wed Dec 13 10:00:24 2017 +0000

[This is a duplication of build 43]

Passed all source files through a spell checker - mainly for comments.

Passed all source through JEDI source checker.

Bumped up a minor version point.

Currently 3703 lines of source code. 1863 statements 16.7% comment

Build 49 [2.1.3.49]

commit f7b1216f1f682f9a2f28593dffbda45ca84521d0 Author: Kevin Scott <github@keleven.co.uk> Date: Wed Dec 13 20:12:19 2017 +0000

[This is a NEARLY duplication of build 43]

Added time displayed as barcode, Semaphore, Nancy Blackett Semaphore &

Braille. Theses are achieved my font substitution.

Added a new unit uFont.pas - to load custom fonts.

Added logic to formKlock to use new fonts when required.

Added two new directories fonts & sounds.

Added a number of mp3 files to play the hourly chimes and The pips.

Amended to procedure doPlaySound in uKlockUtils.pas to play all sound files and not just .wav files. Also, made this procedure more robust. Also added to this unit to play the hourly chimes.

Added user options for sound volume, sound the pips on the hour or hourly chimes. Also added the option for the analogue klock to save screen position.

Currently

4077 lines of source code.

2113 statements 16.4% comment

```
fonts/BarCode39.ttf
                        | Bin 0 -> 22492 bytes
fonts/BrailleLatin.ttf
                       | Bin 0 -> 30204 bytes
fonts/Hack-Regular.ttf
                         | Bin 0 -> 394336 bytes
fonts/NancyBlackett.ttf
                         | Bin 0 -> 41836 bytes
fonts/Semaphore.ttf
                         | Bin 0 -> 12344 bytes
formHelp.pas
                        | 12 +-
formKlock.lfm
                       1 7 +-
formKlock.pas
                        | 284 ++++++++++++++++++++++++
formOptions.Ifm
                        139 ++++++++++++++
                        | 125 ++++++++++++++
formOptions.pas
                           | 29 ++---
formanalogueklock.pas
history.txt
                     | 53 ++++++
klock.iss
                     | 6+-
klock.lpi
                     195 +++++++++++++
klock.lpr
                     | 2+-
                        | Bin 61799 -> 83961 bytes
lazKlock.smproj
sounds/alarm-fatal.mp3
                          | Bin 0 -> 311378 bytes
sounds/alarm-fatal.wav
                          | Bin 1359604 -> 0 bytes
sounds/chimes.wav
                          | Bin 55776 -> 0 bytes
sounds/chord.wav
                         | Bin 97016 -> 0 bytes
                        | Bin 80856 -> 0 bytes
sounds/ding.wav
sounds/eight.mp3
                         | Bin 0 -> 979530 bytes
sounds/eleven.mp3
                          | Bin 0 -> 1162381 bytes
sounds/five.mp3
                        | Bin 0 -> 801223 bytes
sounds/four.mp3
                        | Bin 0 -> 739385 bytes
sounds/halfchime.mp3
                           | Bin 0 -> 319514 bytes
sounds/nine.mp3
                          | Bin 0 -> 1040899 bytes
sounds/notify.wav
                        | Bin 119384 -> 0 bytes
sounds/one.mp3
                         | Bin 0 -> 559035 bytes
sounds/quarterchime.mp3
                            | Bin 0 -> 241462 bytes
sounds/recycle.wav
                         | Bin 25434 -> 0 bytes
sounds/ringin.wav
                        | Bin 10026 -> 0 bytes
                         | Bin 5212 -> 0 bytes
sounds/ringout.wav
                          | Bin 0 -> 919940 bytes
sounds/seven.mp3
sounds/six.mp3
                         | Bin 0 -> 862013 bytes
sounds/start.wav
                        | Bin 1192 -> 0 bytes
sounds/tada.wav
                         | Bin 171100 -> 0 bytes
sounds/ten.mp3
                         | Bin 0 -> 1101951 bytes
                          | Bin 0 -> 40874 bytes
sounds/thepips.mp3
                         | Bin 0 -> 679164 bytes
sounds/three.mp3
sounds/threequarterchime.mp3 | Bin 0 -> 383064 bytes
sounds/twelve.mp3
                         | Bin 0 -> 1223752 bytes
sounds/two.mp3
                         | Bin 0 -> 620614 bytes
ufonts.pas
                      | 78 +++++++++
                        | 42 +++----
ufuzzytime.pas
uklockutils.pas
                       156 ++++++++++++++++
uoptions.pas
                       | 90 +++++++++
47 files changed, 895 insertions(+), 323 deletions(-)
```

Build 50 [2.1.3.50]

commit ce387521eca09467d8a50d3617c9b0d79254acd5

Author: Kevin Scott <github@keleven.co.uk> Date: Wed Dec 13 22:06:13 2017 +0000

[This is a part duplication of build 45 - mainly the options stuff.] Cleaned up the calling process for the chimes.

Added doubleTime to uFuzzyTime.

Added a new unit, uOptionsUtils. This unit contains helper routines to read and write XML entries.

Changed the Klock icon.

```
Currently
4051 lines of source code.
2051 statements
16.9% comment
formAbout.pas | 4 +-
formKlock.pas
              | 15 +-
formOptions.lfm |
                 4 +-
formOptions.pas | 7 +-
history.txt
           | 57 +-
klock.ico
            | Bin 67646 -> 67646 bytes
            | 6+-
klock.iss
klock.lpi
            | 172 +-
klock.lpr
           | 2+-
lazKlock.smproj | Bin 83961 -> 96029 bytes
time-13-128.ico | Bin 0 -> 67646 bytes
ufuzzytime.pas | 38 +-
uklockutils.pas | 39 +-
uoptions.pas
             | 285 +-
uoptionsutils.pas | 100 +
16 files changed, 5059 insertions(+), 5034 deletions(-)
```

Build 51 [2.1.3.51]

commit 22135ab71701bcf61cedef606c118d34eae6ab28

Author: Kevin Scott <github@keleven.co.uk> Date: Sat Dec 16 18:56:37 2017 +0000

[This is a part duplication of build 45 - mainly the options stuff.] Added the ability for Klock to write Info and Debug information to log files. Logging can be enabled / disabled by a user options. Also the ability to delete log files older then a certain age. This is also specified by user options.

An extra tab was added to the options form for the logging options, the log files are also displayed here.

Added a new unit, uLogging.pas. The unit contains the helper routines to read and delete log files.

Started to sprinkle debug entries all over.

I started to get the Access Violation again, especially in the 32 bit application. This seemed to be either the logging not being thread safe and a problem in loading the fonts. I changed the method that loads the faults and stopped using TEvent and wrote a simple logging class of my own that just appends to a text file. [The logging class resides in uLogging.pas]

All seems to be okay.

Added a routine that retrieves the version of Windows, this is displayed in the About form and the header of the log file.

Also removed the option to install the sources from the inno installer, they can download them from GitHub.

```
Currently
4402 lines of source code.
2228 statements
17.2% comment
formAbout.Ifm
                 | 41 +++++
formAbout.pas
                 | 44 ++-----
formHelp.pas
                 12+
formKlock.pas
                 160 +++++++++++++++
formLicense.lfm
                 | 2 +-
formOptions.Ifm
                 | 78 ++++++++++++++
formOptions.pas
                  | 55 ++++++++++++
formanalogueklock.pas |
                      3+
formlicense.pas
                 | 2+
formreminderinput.lfm | 2 +-
formreminderinput.pas | 7++
history.txt
              | 73 +++++++++++++++
klock.lpi
              | 192 ++++++++++++++++++++++
              | 2 +-
klock.lpr
lazKlock.smproj
                 | Bin 96029 -> 108871 bytes
               | 98 ++++++++++++++++
ufonts.pas
uklockutils.pas
                | 97 +++++++++++++++++++++
ulogging.pas
                93 +++++++++
uoptions.pas
                | 3-
uoptionsutils.pas
20 files changed, 805 insertions(+), 304 deletions(-)
Build 52 [2.1.3.52]
commit 955ef8502453ccbc89da6a283ef28ff39acb7f7a
Author: Kevin Scott < github@keleven.co.uk>
Date: Sun Dec 17 21:37:49 2017 +0000
[This is a NEARLY duplication of build 46]
Added formCipboard and uformClipboardUtils which implements a clipboard manager.
Added various options for the clipboard manages to formOptions and uOptions.
Currently
4946 lines of source code.
2517 statements
16.6% comment
formAbout.lfm
                 | 41 +++++
                 | 44 ++---
formAbout.pas
formHelp.pas
                 | 2+
formKlock.pas
                 160 ++++++++++++++
formLicense.lfm
                 1 2 +-
formOptions.Ifm
                 | 78 +++++++++++++++
formOptions.pas
                  | 55 ++++++++++++
formanalogueklock.pas | 3 +
formlicense.pas
                 | 2+
formreminderinput.lfm | 2 +-
formreminderinput.pas | 7 ++
history.txt
              | 73 +++++++++++++++
klock.lpi
              | 192 ++++++++++++++++++++
klock.lpr
              | 2 +-
                 | Bin 96029 -> 108871 bytes
lazKlock.smproj
ufonts.pas
               | 98 +++++++++++++++++++
```

Build 53 [2.1.4.53]

commit a8fcda0f1df54159f605d1241fbcdec9aed1f45b

Author: Kevin Scott <github@keleven.co.uk> Date: Mon Dec 18 13:04:20 2017 +0000

Added an info screen it display information about Easter & lent dates, Power Source and Daylight Saving. These are called from an Info menu from the main Klock screen. ulnfoUtils was added and this contains the routins which do the heavy lifting.

Added Time in words, Morse time and Roman Numerals Time to uFuzzyTime.

Added Application directory to formAbout and log file header.

```
Currently
5514 lines of source code.
2903 statements
15.8% comment
formAbout.lfm | 43 +++++
formAbout.pas | 2 +
formKlock.lfm | 25 ++++-
formKlock.pas | 67 ++++++++++
formOptions.lfm | 4 +-
history.txt | 28 +++++
     | 2+-
klock.iss
klock.lpi
     | 3+-
klock.lpr
uklockutils.pas | 1+
14 files changed, 920 insertions(+), 167 deletions(-)
```

Build 54 [2.1.4.54]

commit d4c4e3ef6602799b13f2e93f662ee9d86002df5a

Author: Kevin Scott <github@keleven.co.uk> Date: Wed Dec 20 20:10:32 2017 +0000

Added a Christmas font and an option to automatically use this font for the 12 day of christmas - 12 days before and 12 days after.

Other holiday fonts will be added when found.

formAbout - Removed info labels and added a listbox to display Klock about stuff.

formKlock - Tidied up the setting of main timer interval when using NET time.

- Added logic to use Christmas font.
- First attempt at auto sizing main fuzzy time label depending upon size.

formOptions - Added checkbox for Christmas font.

formClipboard - Added the start of culling tmp files.

formInfo - Removed info labels and added a listbox to display Info stuff.

uFonts - Added loading and removal of Christmas font.

uFuzzyTime - Added logic for fuzzyTime to write out it's own debug log.
- Corrected bug[s] in fuzzyTime.

uKlockUtils - Added getTextWidth & isChristams helper functions.

```
Currently
5654 lines of source code.
2984 statements
15.7% comment
```

```
fonts/Christmas.ttf | Bin 0 -> 57012 bytes
formAbout.lfm
                  | 79 +-
                  | 38 +-
formAbout.pas
formKlock.lfm
                  | 166 ++--
                  | 47 +-
formKlock.pas
formOptions.Ifm
                  | 36 +-
                   | 15 +-
formOptions.pas
formanalogueklock.pas | 7 -
formclipboard.lfm | 5 +
                  | 26 +-
formclipboard.pas
              | 70 +-
forminfo.lfm
forminfo.pas
                 | 58 +-
history.txt
               | 2243 +++++++++++++++++++++
               | 2+-
klock.iss
               | 228 ++---
klock.lpi
lazKlock.smproj
                  | Bin 123852 -> 140380 bytes
                | 6+-
ufonts.pas
                 | 51 +-
ufuzzytime.pas
uinfoutils.pas
                | 13 +-
                 | 35 +-
uklockutils.pas
uoptions.pas
                    6+
21 files changed, 1636 insertions(+), 1495 deletions(-)
```

Build 55 [2.1.4.55]

commit 3721a3e5d078a2ae0c14b5cb17fc7370ed747d51

Author: Kevin Scott <github@keleven.co.uk> Date: Thu Dec 21 14:12:46 2017 +0000

Added a LED Klock, this hangs off the Time menu on the main Klock. Added formLEDKlock to the project.

formKlock - Added menu item to call the LED Klock.

formOptionss - Added options for LED Klock [save screen position]. uOptions - Added above options.

uFuzzyTime - Added Flow Time and Metric Time.

```
Currently
5917 lines of source code.
3091 statements
15.8% comment
formKlock.lfm
                 | 8+-
formKlock.pas
                  | 42 ++++---
formOptions.Ifm
                  | 43 +++++--
                  | 29 ++++--
formOptions.pas
formanalogueklock.lfm | 6 +-
formanalogueklock.pas | 12 +--
formclipboard.lfm
                 | 5+
                  | 23 +++--
formclipboard.pas
                  | 45 +++++++
formledklock.lfm
                  | 146 ++++++++++++++++++++++++
formledklock.pas
history.txt
               | 49 +++++++
                | 2+-
klock.iss
klock.lpi
               | 258 +++++++++++++++++++++++
               | 3+-
klock.lpr
lazKlock.smproj
                  | Bin 140380 -> 174874 bytes
ufuzzytime.pas
                  | 51 +++++++
uoptions.pas
                 | 34 ++++++
17 files changed, 592 insertions(+), 164 deletions(-)
Build 56 [2.1.4.56]
commit 16b49360bd2f6cb5c60385c86662c27817c0829d
Author: Kevin Scott < github@keleven.co.uk>
Date: Tue Dec 26 22:14:24 2017 +0000
Added a Binary Klock, this hangs off the Time menu on the main Klock.
Added formBinaryKlock to the project.
The Klock can display time in either Binary or BCD format.
formKlock - Added menu item to call the Binary Klock.
formOptions - Added options for LED Klock [Use long date format].
       - Added options for Binary Klock [save screen position].
       - Added options for Binary Klock [Binary/BCD format].
uOptions - Added above options.
formAnalogueKlock - Changed method of moving [draggiing] the klock,
            it now mirrors the LED Klock.
formLEDKlock - Added use long date option.
        - Fixed a bug in screen save logic.
Currently
6514 lines of source code.
3437 statements
15.4% comment
                  | 6+-
formAbout.pas
                  | 8+-
formKlock.lfm
formKlock.pas
                   | 10 +-
formOptions.Ifm
                   | 42 ++++-
formOptions.pas
                   | 54 ++++--
formanalogueklock.lfm | 16 +-
formanalogueklock.pas | 81 +++++----
```

```
| 16 +-
formledklock.lfm
                  | 24 ++-
formledklock.pas
history.txt
              | 71 +++++--
klock.iss
                | 2 +-
klock.lpi
               | 296 +++++++
               | 4+-
klock.lpr
lazKlock.smproj
                  | Bin 174874 -> 193883 bytes
                 | 16 +-
uklockutils.pas
                 | 60 +++++
uoptions.pas
                | 2+-
uoptionsutils.pas
19 files changed, 1108 insertions(+), 321 deletions(-)
Build 57 [2.1.4.57]
commit 0c32a35cbb44ae3e11875382adb185a32ec9f074
Author: Kevin Scott < github@keleven.co.uk>
Date: Thu Dec 28 13:47:14 2017 +0000
  Developing Small Text Klock.
fonts/{Hack-Regular.ttf => Hack.ttf} | Bin
formKlock.lfm
                          | 8+-
formKlock.pas
                             8 +-
formOptions.Ifm
                           | 31 +-
formOptions.pas
                           | 22 +-
formledklock.lfm
                             4 +-
formsmalltextklock.lfm
                            | 58 ++
formsmalltextklock.pas
                             | 25 +
history.txt
klock.lpi
                         214 +++++--
klock.lpr
                           3 +-
ufonts.pas
                           2 +-
uklockutils.pas
                          | 11 +-
uoptions.pas
                            45 +-
14 files changed, 1411 insertions(+), 53 deletions(-)
Build 58 [2.1.4.58]
commit 8c72e195366d5433a2a37e10d3122f7113a1d94b
Author: Kevin Scott < github@keleven.co.uk>
Date: Fri Dec 29 22:51:21 2017 +0000
Added a Small Text Klock, this hangs off the Time menu on the main Klock.
Added formSmallTextKlock to the project.
The Klock can either have a transparent or solid background.
formKlock - Added menu item to call the Binary Klock.
formOptions - Added options for Binary Klock [save screen position].
       - Added options for Binary Klock [Transparent background].
uOptions - Added above options.
Renamed hack-Regular.ttf to Hack.ttf.
uFonts - Added loading of hack.ttf.
Currently
7636 lines of source code.
4140 statements
```

14.1% comment

Build 58 [2.1.4.58]

commit 76c6308ba019b6fcab6df701040e99fb393f91a2

Author: Kevin Scott <github@keleven.co.uk> Date: Mon Jan 1 20:08:48 2018 +0000

Added A [proper] help file in .chm, .pdf and .html format.

This was created using HelpNDoc V5, a help.hdn file has been added to the source. A new sub directory called help was vreated to hold all the files.

The old style formHelp has beed deleted from the project.

The new style help [.chm] is now loaded from both the help button on the main form, the help menu and the help button on the options screen.

```
Currently
7600 lines of source code.
4116 statements
14.2% comment
```

```
README.md
                                        | 14 +-
formHelp.lfm
                                     | 185 --
formHelp.pas
                                      | 72 -
formKlock.pas
                                         17 +-
formOptions.Ifm
                                         5 +-
formOptions.pas
                                         18 +-
help.txt
                                   | 42 +-
help/Klock.chm
                                       | Bin 0 -> 864090 bytes
                                      | Bin 0 -> 4115286 bytes
help/Klock.pdf
help/html/About.html
                                        | 338 ++++
help/html/AnalogueKlock.html
                                           | 282 +++
help/html/BinaryKlock.html
                                          | 290 +++
help/html/ClipboardMonitor.html
                                           | 285 +++
help/html/Countdown.html
                                          | 292 +++
help/html/Credits.html
                                        | 298 +++
help/html/Events.html
                                        | 278 +++
help/html/Events1.html
                                         | 268 +++
help/html/ExtraKlock.html
                                          | 284 +++
help/html/File.html
                                      | 278 +++
help/html/FuzzyTime.html
                                            278 +++
help/html/GettingStarted.html
                                          | 269 +++
help/html/Gettinghelp.html
                                         | 272 +++
help/html/Global.html
                                        | 294 +++
                                       | 282 +++
help/html/Help.html
help/html/History.html
                                        | 2075 +++++++++++++++
help/html/Info.html
                                      | 298 +++
help/html/Introduction.html
                                        | 296 +++
                                        | 296 +++
help/html/Klock.html
help/html/LEDKlock.html
                                          | 283 +++
                                        | 749 ++++++
help/html/License.html
```

```
help/html/Logging.html
                                           274 +++
help/html/Menu.html
                                           277 +++
help/html/Options.html
                                           284 +++
help/html/OtherKlocks.html
                                            | 279 +++
help/html/OtherStuff.html
                                          | 282 +++
help/html/Reminder.html
                                           | 279 +++
help/html/SmallTextKlock.html
                                             | 284 +++
help/html/Statusbar.html
                                            289 +++
help/html/SystemTray.html
                                            | 289 +++
help/html/Systemrequirements.html
                                               | 273 +++
help/html/Thingymabobs.html
                                               278 +++
help/html/Time.html
                                         | 290 +++
help/html/Time1.html
                                         | 278 +++
help/html/Timer.html
                                          277 +++
help/html/Welcome.html
                                             289 +++
help/html/WorldKlock.html
                                             276 +++
help/html/_keywords.json
                                              1+
help/html/_toc.json
                                           1 +
help/html/_translations.js
                                            11 +
help/html/css/effects.min.css
                                               5+
help/html/css/hnd.content.css
                                            | 183 ++
help/html/css/layout.min.css
                                               5+
                                              5+
help/html/css/print.min.css
help/html/css/theme-dark-blue.min.css
                                                   5+
help/html/css/theme-dark-green.min.css
                                                   5+
help/html/css/theme-dark-orange.min.css
                                                    5+
help/html/css/theme-dark-purple.min.css
                                                   5+
help/html/css/theme-light-blue.min.css
                                                  5 + 
                                                  5+
help/html/css/theme-light-green.min.css
help/html/css/theme-light-orange.min.css
                                                   5+
help/html/css/theme-light-purple.min.css
                                                  5 + 
help/html/js/app.min.js
                                            6+
help/html/js/hndsd.min.js
                                             1+
                                             6+
help/html/js/hndse.min.js
.../bootstrap-3.3.6/css/bootstrap-theme.min.css
.../vendors/bootstrap-3.3.6/css/bootstrap.min.css
                                                     5+
.../css/ie10-viewport-bug-workaround.css
                                                  15+
.../fonts/glyphicons-halflings-regular.eot
                                              Bin 0 -> 20127 bytes
.../fonts/glyphicons-halflings-regular.svg
                                            | 288 +++
.../fonts/glyphicons-halflings-regular.ttf
                                           | Bin 0 -> 45404 bytes
.../fonts/glyphicons-halflings-regular.woff
                                            | Bin 0 -> 23424 bytes
.../fonts/glyphicons-halflings-regular.woff2
                                              Bin 0 -> 18028 bytes
.../vendors/bootstrap-3.3.6/js/bootstrap.min.js
                                                  7 +
.../js/ie10-viewport-bug-workaround.js
                                               23 +
help/html/vendors/fastclick-1.0.6/fastclick.min.js |
help/html/vendors/headroom-0.9.3/headroom.min.js
                                                      7 +
.../vendors/headroom-0.9.3/jquery.headroom.min.js
                                                      7 +
help/html/vendors/helpndoc-5/icons/0.png
                                                | Bin 0 -> 291 bytes
help/html/vendors/helpndoc-5/icons/1.png
                                                 Bin 0 -> 266 bytes
help/html/vendors/helpndoc-5/icons/10.png
                                                  Bin 0 -> 244 bytes
                                                  Bin 0 -> 262 bytes
help/html/vendors/helpndoc-5/icons/11.png
help/html/vendors/helpndoc-5/icons/12.png
                                                  Bin 0 -> 328 bytes
help/html/vendors/helpndoc-5/icons/13.png
                                                  Bin 0 -> 327 bytes
help/html/vendors/helpndoc-5/icons/14.png
                                                  Bin 0 -> 343 bytes
help/html/vendors/helpndoc-5/icons/15.png
                                                  Bin 0 -> 344 bytes
help/html/vendors/helpndoc-5/icons/16.png
                                                  Bin 0 -> 261 bytes
help/html/vendors/helpndoc-5/icons/17.png
                                                  Bin 0 -> 277 bytes
help/html/vendors/helpndoc-5/icons/18.png
                                                  Bin 0 -> 250 bytes
                                                  Bin 0 -> 275 bytes
help/html/vendors/helpndoc-5/icons/19.png
help/html/vendors/helpndoc-5/icons/2.png
                                                 Bin 0 -> 332 bytes
```

```
help/html/vendors/helpndoc-5/icons/20.png
                                                   Bin 0 -> 249 bytes
help/html/vendors/helpndoc-5/icons/21.png
                                                   Bin 0 -> 276 bytes
help/html/vendors/helpndoc-5/icons/22.png
                                                   Bin 0 -> 299 bytes
help/html/vendors/helpndoc-5/icons/23.png
                                                  Bin 0 -> 293 bytes
help/html/vendors/helpndoc-5/icons/24.png
                                                   Bin 0 -> 286 bytes
                                                   Bin 0 -> 313 bytes
help/html/vendors/helpndoc-5/icons/25.png
help/html/vendors/helpndoc-5/icons/26.png
                                                   Bin 0 -> 296 bytes
help/html/vendors/helpndoc-5/icons/27.png
                                                   Bin 0 -> 304 bytes
help/html/vendors/helpndoc-5/icons/28.png
                                                   Bin 0 -> 309 bytes
help/html/vendors/helpndoc-5/icons/29.png
                                                  Bin 0 -> 329 bytes
help/html/vendors/helpndoc-5/icons/3.png
                                                  Bin 0 -> 283 bytes
help/html/vendors/helpndoc-5/icons/30.png
                                                  Bin 0 -> 338 bytes
help/html/vendors/helpndoc-5/icons/31.png
                                                   Bin 0 -> 363 bytes
help/html/vendors/helpndoc-5/icons/32.png
                                                   Bin 0 -> 288 bytes
help/html/vendors/helpndoc-5/icons/33.png
                                                   Bin 0 -> 310 bytes
help/html/vendors/helpndoc-5/icons/34.png
                                                   Bin 0 -> 256 bytes
help/html/vendors/helpndoc-5/icons/35.png
                                                  Bin 0 -> 294 bytes
help/html/vendors/helpndoc-5/icons/36.png
                                                  Bin 0 -> 314 bytes
help/html/vendors/helpndoc-5/icons/37.png
                                                  Bin 0 -> 304 bytes
help/html/vendors/helpndoc-5/icons/38.png
                                                   Bin 0 -> 285 bytes
help/html/vendors/helpndoc-5/icons/39.png
                                                  Bin 0 -> 319 bytes
help/html/vendors/helpndoc-5/icons/4.png
                                                  Bin 0 -> 211 bytes
                                                  Bin 0 -> 320 bytes
help/html/vendors/helpndoc-5/icons/40.png
help/html/vendors/helpndoc-5/icons/41.png
                                                  Bin 0 -> 335 bytes
help/html/vendors/helpndoc-5/icons/5.png
                                                  Bin 0 -> 255 bytes
help/html/vendors/helpndoc-5/icons/6.png
                                                  Bin 0 -> 229 bytes
help/html/vendors/helpndoc-5/icons/7.png
                                                  Bin 0 -> 273 bytes
help/html/vendors/helpndoc-5/icons/8.png
                                                  Bin 0 -> 242 bytes
help/html/vendors/helpndoc-5/icons/9.png
                                                  Bin 0 -> 266 bytes
help/html/vendors/html5shiv-3.7.2/html5shiv.min.js |
                                                     4+
help/html/vendors/jquery-1.11.3/jquery.min.js
                                                   6+
help/html/vendors/jstree-3.3.2/jstree.min.js
                                                  6+
.../jstree-3.3.2/themes/default-dark/32px.png
                                                 Bin 0 -> 1562 bytes
.../jstree-3.3.2/themes/default-dark/40px.png
                                                 Bin 0 -> 5717 bytes
.../jstree-3.3.2/themes/default-dark/style.css
                                               | 1112 ++++++++
.../jstree-3.3.2/themes/default-dark/style.min.css |
                                                   1+
.../jstree-3.3.2/themes/default-dark/throbber.gif | Bin 0 -> 1720 bytes
.../vendors/jstree-3.3.2/themes/default/32px.png
                                                 | Bin 0 -> 3121 bytes
.../vendors/jstree-3.3.2/themes/default/40px.png
                                                | Bin 0 -> 1880 bytes
.../vendors/jstree-3.3.2/themes/default/style.css | 1068 +++++++++
.../jstree-3.3.2/themes/default/style.min.css
                                                  1+
.../jstree-3.3.2/themes/default/throbber.gif
                                             | Bin 0 -> 1720 bytes
help/html/vendors/markjs-8.8.3/jquery.mark.min.js
                                                     7 +
help/html/vendors/respond-1.4.2/respond.min.js
help/html/vendors/uri-1.18.9/uri.min.js
                                             | 114 ++
help/klock.hnd
                                        | Bin 0 -> 49463296 bytes
history.txt
                                       69 +-
klock.iss
                                        20 +-
klock.lpi
                                      206 +-
klock.lpr
                                        3 +-
lazKlock.smproj
                                          Bin 193883 -> 215570 bytes
uklockutils.pas
                                          28 +-
                                          13 +-
uoptions.pas
143 files changed, 16008 insertions(+), 423 deletions(-)
```

Build 59 [2.2.0.59]

commit a0ad6ae5e5e9530dd159b19ad3010dc5c7b597e5 Author: Kevin Scott <github@keleven.co.uk> Date: Wed Jan 3 15:06:05 2018 +0000

Changes to history.txt and lazKlock.smproj hanging over from last commit.

Also, did some git admin. Since the master branch was currupt and all the recent work had been done in branch V2.1, it was time to clean up. This was achieved with the following.

git branch -m master master-old # rename master on local git push -f origin :master # delete master on remote git push origin master-old # create master-old on remote

git checkout -b master V2.1 # create a new local master on top of seotweaks

git push origin master # create master on remote

I now have a current and good master and a working copy at V2.1.

I also deleted branches v1 and v2. I will delete branches master-old and v2.1 when happy is all is okay.

This also becomes V2.2 ans will vreate a working branch of v2.

Build 60 [2.2.0.60]

Added easter font and option to use this font at the easter weekend.

formOptions - Added logic to cull [delete] log files over a certain age.

This can be configures in options.

formClipboard - Added logic to cull [delete] tmp files over a certain age.

The age is currentl hard coded to be 10 days..

formBinaryKlock - changed the status bar for a panel.

This can have the background colour changed without leaving ugly lines as the status bar does.

Currently 7742 lines of source code. 4185 statements 14.6% comment

Created with the Personal Edition of HelpNDoc: Full-featured multi-format Help generator

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Some devices are designed to deny users access to install or run modified versions of the software inside them, although

the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the

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where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those

products. If such problems arise substantially in other domains, we stand ready to extend this provision to those

domains in future versions of the GPL, as needed to protect the freedom of users.

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that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that

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"based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily

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Propagation includes copying, distribution (with or without modification), making available to the public, and in some

countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction

with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and

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warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this

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a menu, a prominent item in the list meets this criterion.

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The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means

any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body,

or, in the case of interfaces specified for a particular programming language, one that is widely used among developers

working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in

the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to

enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is

available to the public in source code form. A "Major Component", in this context, means a major essential component

(kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a

compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and

(for an executable work) run the object code and to modify the work, including scripts to control those activities.

However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs

which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding

Source includes interface definition files associated with source files for the work, and the source code for shared

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communication or control flow between those subprograms and other parts of the work.

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You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the

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accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

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accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or

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medium customarily used for software interchange, for a price no more than your reasonable cost of physically

performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source.

This alternative is allowed only occasionally and non commercially, and only if you received the object code with

such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent

access to the Corresponding Source in the same way through the same place at no further charge. You need not

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code is a network server, the Corresponding Source may be on a different server (operated by you or a third party)

that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying

where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain

obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and

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A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library,

need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used

for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling.

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determining whether a product is a consumer product, doubtful cases shall be resolved in favour of coverage. For a

particular product received by a particular user, "normally used" refers to a typical or common use of that class of

product, regardless of the status of the particular user or of the way in which the particular user actually uses, or

expects or is expected to use, the product. A product is a consumer product regardless of whether the product has

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the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information

required to install and execute modified versions of a covered work in that User Product from a modified version of its

Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code

is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the

conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to

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Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not

apply if neither you nor any third party retains the ability to install modified object code on the User Product (for

example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support

service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product

in which it has been modified or installed. Access to a network may be denied when the modification itself materially

and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format

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