Monitoring screen

Raspberry into full screen browser kiosk

Inspired by: https://die-antwort.eu/techblog/2017-12-setup-raspberry-pi-for-kiosk-mode/

sudo apt-get update

sudo apt-get upgrade

sudo apt-get install --no-install-recommends xserver-xorg x11-xserver-utils xinit openbox chromium-browser

mkdir /home/pi/browser_rotate

Copy the files clean setfocus and web into the directory browser_rotate

• add at the end of the file /boot/config.txt

```
disable_overscan=0
framebuffer_width=1920
framebuffer_height=1080
framebuffer_depth=32
framebuffer_ignore_alpha=1
hdmi_pixel_encoding=1
hdmi_group=2
```

• edit the /etc/rc.local

```
#!/bin/sh -e
# rc.local
# This script is executed at the end of each multiuser runlevel.
# Make sure that the script will "exit 0" on success or any other
# value on error.
# In order to enable or disable this script just change the execution
# bits.
# By default this script does nothing.
# Print the IP address
_IP=$(hostname -I) || true
if [ "$_IP" ]; then
printf "My IP address is %s\n" "$_IP"
# Wait for the TV-screen to be turned on...
while ! $( tvservice --dumpedid /tmp/edid | fgrep -qv 'Nothing written!' ); do
bHadToWaitForScreen=true;
printf "===> Screen is not connected, off or in an unknown mode, waiting for it to become available...\n"
sleep 10;
done;
printf "===> Screen is on, extracting preferred mode...\n"
_DEPTH=32;
eval $( edidparser /tmp/edid | fgrep 'preferred mode' | tail -1 | sed -Ene 's/^.+(DMT|CEA) \(([0-9]+)\) ([0-9]+)x([0-9]+)[pi]?
@.+/_GROUP=\1;_MODE=\2;_XRES=\3;_YRES=\4;/p');
printf "===> Resetting screen to preferred mode: %s-%d (%dx%dx%d)...\n" $_GROUP $_MODE $_XRES $_YRES $_DEPTH
tvservice --explicit="$_GROUP $_MODE"
sleep 1;
echo $_XRES $_YRES $_XRES $_YRES $_DEPTH
printf "===> Resetting frame-buffer to %dx%dx%d...\n" $_XRES $_YRES $_DEPTH
fbset --all --geometry $_XRES $_YRES $_YRES $_DEPTH -left 0 -right 0 -upper 0 -lower 0;
sleep 1;
service lightdm restart
exit 0
```

• Edit file /home/pi/.config/lxsessin/LXDE/autostart

```
# These things are run when an Openbox X Session is started.
# You may place a similar script in $HOME/.config/openbox/autostart
# to run user-specific things.
# If you want to use GNOME config tools...
#if test -x /usr/lib/arm-linux-gnueabihf/gnome-settings-daemon >/dev/null; then
# /usr/lib/arm-linux-gnueabihf/gnome-settings-daemon &
#elif which gnome-settings-daemon >/dev/null 2>&1; then
# gnome-settings-daemon &
# If you want to use XFCE config tools...
#xfce-mcs-manager &
# Disable any form of screen saver / screen blanking / power management
xset s noblank
xset -dpms
# Allow quitting the X server with CTRL-ATL-Backspace
setxkbmap -option terminate:ctrl_alt_bksp
# Start Chromium in kiosk mode
sed -i 's/"exited_cleanly":false/"exited_cleanly":true/' ~/.config/chromium/'Local State'
sed -i 's/"exited_cleanly":false/"exited_cleanly":true/; s/"exit_type":"[^"]\+"/"exit_type":"Normal"/
~/.config/chromium/Default/Preferences
/usr/bin/python /home/pi/browser_rotate/web
```

sudo reboot