Digital signage is very common and something that one sees almost everyday, it is used to display any kind of information at many different places. Today most signage systems consists of a regular computer (running Microsoft Windows), a screen and a licensed software. This means that content displayed has to go through the specific and proprietary pipeline for the software that the display is running, which differs a lot between systems.

This is about to change, as web browsers, HTML and javascript becomes more and more powerful (WebGL, CSS3 animations etc). A computer running a modern web browser, displaying modern web content, is basically a digital signage player. Which will remove the need for large, complex and expensive software. As well as make any person that knows web programming someone that can create content, for digital signage.

Thesis description
The project consists of using a small computer (x86/x64), to run a Linux-based operating system, that should be as barebone as possible, but able to run a modern web browser showing (GPU) accelerated content (e.g. WebGL). Adding ways of communicating with the system controlling the content that should be displayed in the browser. As well as adding functionality such as heartbeat, status reports. The system should be as robust as possible, as it is intended to run 24 hours, seven days a week, without any problems.

This project requires knowledge in web programming, some insight in how web browsers work, familiarity of Linux, shell scripts, as well as programming skills in general.

Preferred starting date
Q1 2015

Extent
1-2 persons, 30 credits

Keywords
Linux, Digital Signage, HTML, Javascript, Programming

About us
Effektfabriken is located in Norrköping, we work with digital signage, software development (web, smartphone and tablet apps, etc) and video.
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