Developing User Experiences on GDP - hands-on session requirements

Introduction

There will be **two** hands-on Developing UIs on GDP sessions!

- The first session will have 20 RaspberryPi boards, each connected to a touchscreen. These will be provided by Genivi.
- The second session will have 15 Renesas-Porter boards each connected to a touchscreen. These will be provided by Renesas.
- SD Card images to boot the development boards will be provided by ICS. The SD card images will be made available beforehand but there is no need for the participants to download them.
- Participants will pair up, two persons per development board using one laptop to connect to the development board. A second laptop per pair is optional. All laptops will be provided by the participants and must have the minimum capabilities described below.
- Laptops and development boards will be connected with a short (1.5ft max) CAT-5 Ethernet cable. These will be provided by Genivi?
- The class will be held using VirtualBox guest OS running Ubuntu-14.04-LTS. VirtualBox installers, extension packs and guest OS will be provided by ICS.
- VirtualBox guest OS will be made available beforehand. Participants will be encouraged to install VirtualBox and the guest OS before the session. However time will be allotted in the session to do so.
- ICS will setup a dedicated area in the coffee or break area outside the sessions and help participants get setup on Tuesday afternoon and Wednesday morning for 90 mins each.

Minimum Laptop requirements:

- CPU: Intel Core-I5, AMD equivalent, or better processor.
- 4G of RAM
- 15G of free disk space
- Ethernet Card slot! (Be aware that most Tablet/Laptop hybrids do not have this and thus will not work)
- USB-2 slot

OS requirements:

- Windows 7, 8 or 10 - 64bit
- MacOS-10.7 or newer
- Ubuntu 14.04 64bit
  must have Exfat file system support installed

Windows users must be able to attain admin privileges on their computer. Windows users must be able and willing, at their own expense, to disable all corporate security software, firewalls, as well as virus checkers for the time of the class.
Other Linux versions will likely work, however due to a lack of time we are not able to support them. Exfat support is required. If your Linux can run VirtualBox, then you should be okay here.

Not supported are: Atom processors, Google Chromebooks, Tablets of any kind as well as Tablet/Laptop Hybrids. If your laptop does not have an Ethernet adapter then bring a USB to Ethernet adapter. Wifi networking is not supported and will not work.

ICS will make available a minimum of 8 USB drives with VirtualBox installers, SD-card images and the VirtualBox guest OS. All USB drives will be formatted with Exfat under MacOSX to ensure maximum compatibility.

ICS will make available 20 SD cards with GDP images for RaspberryPi and 15 SD card images for Renesas-Porter. The images will be pre-configured to static ip-addresses and otherwise enhanced with all necessary development software, specifically Qt target libraries.

During the class ICS will assist participants in connecting development laptops with the development boards.

Room settings and configuration

- 40 x free power sockets for participants laptops + 20 x free power for the development boards + 20 x free power for touch screens.
- 20 x desk and chair sitting configuration
- 2 x video projectors for presenter
- 1 x microphone with audio amplification for presenter
- 1 x Internet access via Ethernet connection for presenter (and power)
- 2 x dedicated table for target systems (power and ethernet)

Optional room arrangements

- Wifi Internet access with all participants
- 20 x additional desk+chair for paired participation

Skills

Participants are expected to have:

- General Windows knowledge to perform common tasks such as copying files and starting virtual machines using VirtualBox
- General knowledge of
  - A high-level programming language (C++, Java, C#) and general Object Oriented software development
  - GNU/Linux environment

    - Presentation material will be provided on the day of the training to simplify the participants ability to follow-on.
- General interest in middleware and GUI front-end automotive development
- Be able to follow instructions - closely :-)
- Good humor and patience :-)