Team Savox - Project status and Overview

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Vision

- CEF Vision system is a camera system that is used mostly in vehicles
- The idea is to create a GUI which enables the user to create own configurations
- Configurations consist of
  - Inputs and outputs
  - Arrangement of different inputs, when scrolling through them from screen
    - For example
      - Current config: camera 1 -> camera 2 -> camera 3
      - New config: camera 2 -> camera 3 -> camera 1
  - Positioning of different inputs in quad display view
- In addition the implementation would also enable upgrading firmware to the equipment

Customer needs and user stories

- New display panel and switch firmware to provide new system configurations for end user
  - GUI should support offline designing of configurations so that end users can send complete configurations to the factory by email
  - Configuration tool should be scalable
  - Support for changing between existing inputs
  - Naming of inputs (cameras) and outputs (screens)
  - Main platform Windows → preferably implemented using Qt
  - Controlled via keyboard
  - Upgrading firmware through skeleton functions
- "As a technical support, I want to provide mechanism to upgrade display panel and switch software easily without detailed knowledge about provided files and system"
- "As a technical support, I want to see display positions so that I can get some indications visible to the screens" → existing display port assignment should be shown
- "As a technical support, I want that if device does not support uploaded configuration then configuration request should be sent to the factory so that customer can get required changes to the system" → mechanism to send required configuration by email

Project plan

- GUI configuration tool will be made with Qt
- Backend process, which feeds configuration to switch will be made with Python
- Mockup of configuration tool is made this weekend, which is then presented to customer in order to confirm right direction
- After that development of product will be started, focus on GUI tool

Thank you!