Patterns in Franca

2016-04-28 | 14:00

Johan Thelin
System Architect // Member of Eg HMI
Pelagicore

1

What?

- We need to agree on guidelines for Franca interfaces
- Topics:
    - Large lists
    - Naming
    - Request / signal flow
    - Optimistic behavior, default values
    - More…
- Should be driven by toolkit binding requirements

Why?

- Auto-generate proper, useable, interfaces from Franca IDL

Example: big lists

- ## Qt provides the QAbstractItemModel API

  - http://doc.qt.io/qt-5/qabstractitemmodel.html

- ## GENIVI needs to harmonize, e.g:

  - Radio stations: http://git.projects.genivi.org/?p=ivi-radio.git;a=blob;f=franca/Station.fidl;h=b0559cd7a2c1d05147edf95905ee22442d628a1e;hb=a297f8efb4e35a3a69db73a2476aa0f4ee8a30b2

  - Media manager: https://github.com/Luxoft/media-manager-interfaces/blob/master/fidl/org/genivi/MediaManager/Indexer.fidl

  - POIs: http://git.projects.genivi.org/?p=lbs/navigation.git;a=blob;f=api/franca/navigation/poiservice/POISearch.fidl;h=fc0fef554913a1fcf595b9c3180286f4dd141923;hb=HEAD

- Qt does camel case, lower case first character, all words written out:
  - someFunctionName
  - Not: SomeFctNm
  - Not: some_function_name

- Qt avoids prefixing for namespacing or type indication:
  - displayRole
  - Not: E_DISPLAYROLE
  - Not: nValue

- What other concepts does other abstractions do other toolkits have?
- Does anyone have these Franca guidelines?

- Pelagicore can contribute guidelines for Qt

- Find and solve caveats:
    - How do we handle compatibility for extended APIs (e.g. OEM-specific additions)