Magnet Controller App.

**Specification / Requirements**

* Similar to previous version of application with increased functionality for different machine modes and machine areas;
* One click Switch on / off magnets
* Load / Save (D)Burts with polarity, apply to all, qauds or correctors
* Degauss magnets
* Plus monitor magnet PSU sate, SI and RI plus individual switching on/off magnets
* Handle one machine mode / area per instance, selectable on start-up

**Design**

* Python Magnet Controller module
* Controller Class: handles all the objects, signals / slots, EPICS interface
* QT GUI, QT designer used to build:
* **magnet widget:** combination of widgets to monitor / control and individual magnet
* **Startup view:** choose machine mode and area
* **Main View:** panel that display chosen magnet settings /
* **Bespoke file load / save windows (actually by hand)**

**Issues / notes**

Handling radio buttons in QT seems like cancer

QT layout management is even more cancer (compared to other tools I’ve used, wx, root)