Minimum requirements

1. Menue item **Save settings**:

    - lets the user select a directory
    - saves settings of the interface into *.txt* and *.p*

2. Menue item **Load settings**:

    - lets the user select a file
    - reads the dictionary from the file and sets the interface to its values
    - does make clear that only *.p* files can be selected

3. Menue item **Convert to photon-HDF5**:

    - lets the user select a directory
    - warns if there are no measurement files that can be converted
    - shows *hdf info mask* again
    - when the *hdf info mask* is terminated without save, either convertion must be halted or just the original info file used (it is the second option at the moment)
    - correct rollover in both files
    - merge and sort timestamp arrays and write to a new file named *smALEX.hdf* in the same folder
    - all hdf info and also illumination period info must be saved

4. Menue item **Close** closes all open windows

5. **Browse** button lets the user select a directory, where the measurement folders will be located

6. The QLineEdit associated with **Browse**:

    - displays the chosen directory (it is read-only)
    - gives proper hint to the use of **Browse**

7. **Laserpower** sliders and boxes:

    - are tunable and interact with each other
    - laser power settings are actually transmitted to the AOTF

8. **Ratio** slider and boxes:

    - are tunable and interact with each other
    - ratio setting is actually displayed in the illumination pattern

9. The *silencing pulses* fit to the illumination pattern

10. **ALEX frequency** box lets the user change the frequency with that the illumination pattern will be repeated

11. **Measurement duration** box lets the user chose a duration between 1 and 300 seconds

12. **Measurement mode** radio buttons can be clicked and interact with each other

13. **Count rates** LCD panels show the counted rates during the measurement

14. **ProgressBar**:

    - in *Finite*: show the progress until measurement duration elapsed
    - in *Continuous*: show running thing (?)

15. **StatusBar** shows nice and helpful messages

16. **Start** button:

    - In *Finite*:
        - show the *hdf info mask*
        - save interface settings and hdf info in a folder named *sample+date+time*
        - start the measurement
        - show the data in the animation window
        - save the data in a *.hdf* file in the same folder
    - In *Continuous*:
        - start the measurement
        - show the data in the animation window

17. Stop button stops the measurement any time

18. Digital signals, *Analog signals* and *Counting* start synchronized

19. In *Finite* mode data is retrieved and saved precisley as long as the specified *Measurement duration*