CS480 Senior Design Proposal

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Contents

Meeting time: 11/15/2014 Saturday 11:00

1 Goal:

Try to organize the outline, so that we can make sure we have a feasible/practical outline/plan for later on implement module by module.

2 QPushButton instead of original class design Pixel

functions that we are going to use:

- setCheckable(true);

- setAutoExclusive(false);

3 Keyboard key sets

3.1 keyset define

Keys	Functions
Ctrl	select multiple buttons
Shift	select buttons in the middle
Ctrl + c	copy frames selcted
Ctrl + v	paste frames selected

3.2 reading keyset reference

- http://qt-project.org/doc/qt-4.8/qml-keyevent.html

- http://qt-project.org/doc/qt-4.8/qkeysequence.html

```
QKeyEvent* ke;
QString modifier = QString::null;
if (ke->modifiers() & Qt::ShiftModifier)
    modifier += "Shift+";
```

```cpp
    if (ke->modifiers() & Qt::ControlModifier)
        modifier += "Ctrl+";
    if (ke->modifiers() & Qt::AltModifier)
        modifier += "Alt+";
    if (ke->modifiers() & Qt::MetaModifier)
        modifier += "Meta+";
    QString key = (QString)QKeySequence(ke->key());
    QKeySequence result(modifier + key);
```

- http://qtdocs.narod.ru/4.1.0/doc/html/qkeysequence.html

- http://stackoverflow.com/questions/12830788/handle-key-events-ctrltab-and-ctrlshifttab

```qml
Item {
    width: 100
    height: 100
    focus: true
    Keys.onPressed: {
        if(event.modifiers && Qt.ControlModifier) {
            if(event.key === Qt.Key_Tab) {
                console.log('forward')
                event.accepted = true;
            } else if(event.key === Qt.Key_Backtab) {
                console.log('backward')
                event.accepted = true;
            }
        }
    }
}
```

- http://stackoverflow.com/questions/17204142/capturing-modifier-keys-qt

```cpp
void MainWindow::wheelEvent( QWheelEvent *wheelEvent )
{
    if( wheelEvent->modifiers() & Qt::ShiftModifier )
    {
        // do something awesome
    }
    else if( wheelEvent->modifiers() & Qt::ControlModifier )
    {
        // do something even awesomer!
    }
}
```

- http://www.qtcentre.org/archive/index.php/t-28754.html

- python http://forums.opensuse.org/showthread.php/436964-How-to-catch-Shift-Ctrl-key-in-keyP

- http://linux.die.net/man/3/qkeysequence

- http://www.codeproject.com/Articles/7305/Keyboard-Events-Simulation-using-keybd-event-func

- http://forums.codeguru.com/showthread.php?447587-Detecting-if-Control-or-Shift-key-was-dow

- win32 http://www.codeproject.com/Articles/6819/SendKeys-in-C

- http://alleg.sourceforge.net/stabledocs/en/alleg006.html

4 myGridLayout for left-handside grid and preview

5 repository update history record

volunteer myself to do the record;