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Subject: Using an Array to switch displayed image  
Posted by [Zaroz](#) on Fri, 04 Nov 2016 07:55:39 GMT  
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What I am trying to do, overall, is build an application launcher program, (similar to PStart [at pegtop(dot)net] with the ability to display a referenced icon/image(from column values) based off of the selected item in the array. I started off by using the AddressBookXML2 example as a template, but I have no idea how to add an image display that changes based off of the selected array item.

Here is the full code that I currently have figured out:

```
#include <CtrlLib/CtrlLib.h>
#include <Report/Report.h>

using namespace Upp;

#define LAYOUTFILE <AddressBookXML2/AddressBook.lay>
#include <CtrlCore/lay.h>

#define TAG_PATHLIST "AddressBook"
#define TAG_ITEM "person"
#define TAG_NAME "name"
#define TAG_EXEPATH "surname"
#define TAG_ICONPATH "address"
#define TAG_IMAGEPATH "email"

class AddressBook : public WithAddressBookLayout<TopWindow> {
  WithModifyLayout<ParentCtrl> modify;
  WithSearchLayout<ParentCtrl> search;
  FileSel fs;
  String filename;

  void SetupSearch();
  void Add();
  void Change();
  void Search();
  void Open();
  void Save();
  void SaveAs();
  void Print();
  void Quit();
  void FileMenu(Bar& bar);
  void MainMenu(Bar& bar);

  typedef AddressBook CLASSNAME;

public:
```

```

void Serialize(Stream& s);

AddressBook();
};

AddressBook::AddressBook()
{
    CtrlLayout(*this, "Address book");
    CtrlLayout(modify);
    CtrlLayout(search);
    tab.Add(modify, "Modify");
    tab.Add(search, "Search");
    ActiveFocus(search.name);
    search.oname = true;
    search.oname <<= search.osurname <<= search.oaddress
        <<= search.oemail <<= THISBACK(SetupSearch);
    array.AddColumn(TAG_NAME, "Name");
    array.AddColumn(TAG_EXEPATH, "Exe");
    array.AddColumn(TAG_ICONPATH, "Icon");
    array.AddColumn(TAG_IMAGEPATH, "Image");
    modify.add <<= THISBACK(Add);
    modify.change <<= THISBACK(Change);
    search.search <<= THISBACK(Search);
    SetupSearch();
    fs.AllFileType();
    menu.Set(THISBACK(MainMenu));
}

void AddressBook::FileMenu(Bar& bar)
{
    bar.Add("Open..", CtrlImg::open(), THISBACK(Open));
    bar.Add("Save", CtrlImg::save(), THISBACK(Save));
    bar.Add("Save as..", CtrlImg::save_as(), THISBACK(SaveAs));
    bar.Separator();
    bar.Add("Print", CtrlImg::print(), THISBACK(Print));
    bar.Separator();
    bar.Add("Quit", THISBACK(Quit));
}

void AddressBook::MainMenu(Bar& bar)
{
    bar.Add("File", THISBACK(FileMenu));
}

void AddressBook::SetupSearch()
{
    search.name.Enable(search.oname);
    search.surname.Enable(search.osurname);
}

```

```

search.address.Enable(search.oaddress);
search.email.Enable(search.oemail);
}

```

```

void AddressBook::Add()
{
array.Add(~modify.name, ~modify.surname, ~modify.address, ~modify.email);
array.GoEnd();
modify.name <<= modify.surname <<= modify.address <<= modify.email <<= Null;
ActiveFocus(modify.name);
}

```

```

void AddressBook::Change()
{
if(array.IsCursor()) {
array.Set(0, ~modify.name);
array.Set(1, ~modify.surname);
array.Set(2, ~modify.address);
array.Set(3, ~modify.email);
}
}

```

```

bool Contains(const String& text, const String& substr)
{
for(const char *s = text; s <= text.End() - substr.GetLength(); s++)
if(strncmp(s, substr, substr.GetLength()) == 0)
return true;
return false;
}

```

```

void AddressBook::Search()
{
if(!array.GetCount()) return;
bool sc = true;
array.ClearSelection();
for(int i = 0; i < array.GetCount(); i++) {
if((!search.ename || Contains(array.Get(i, 0), ~search.name)) &&
(!search.esurname || Contains(array.Get(i, 1), ~search.surname)) &&
(!search.eaddress || Contains(array.Get(i, 2), ~search.address)) &&
(!search.email || Contains(array.Get(i, 3), ~search.email))) {
array.Select(i);
if(sc) {
array.SetCursor(i);
array.CenterCursor();
sc = false;
};
}
}
}

```

```

}

void AddressBook::Open()
{
if(!fs.ExecuteOpen()) return;
filename = fs;
array.Clear();
try {
String d = LoadFile(filename);
XmlNode n = ParseXML(d);
if(n.GetCount()==0 || n[0].GetTag() != TAG_PATHLIST)
throw XmlError("No AddressBook tag");
const XmlNode &ab = n[0];
for(int i = 0; i < ab.GetCount(); i++) {
const XmlNode &person = ab[i];
if(person.IsTag(TAG_ITEM))
array.Add(person[TAG_NAME].GatherText(),
person[TAG_EXEPATH].GatherText(),
person[TAG_ICONPATH].GatherText(),
person[TAG_IMAGEPATH].GatherText());
}
}
catch(XmlError &e) {
Exclamation("Error reading the input file:&1" + e);
}
}

void AddressBook::Save()
{
if(IsEmpty(filename)) {
SaveAs();
return;
}
XmlNode n;
XmlNode &ab = n.Add(TAG_PATHLIST);
for(int i=0; i < array.GetCount(); i++) {
XmlNode &person = ab.Add(TAG_ITEM);
person.Add(TAG_NAME).Add().CreateText(array.Get(i, TAG_NAME));
person.Add(TAG_EXEPATH).Add().CreateText(array.Get(i, TAG_EXEPATH));
person.Add(TAG_ICONPATH).Add().CreateText(array.Get(i, TAG_ICONPATH));
person.Add(TAG_IMAGEPATH).Add().CreateText(array.Get(i, TAG_IMAGEPATH));
}
if(!SaveFile(filename, AsXML(n)))
Exclamation("Error saving the file!");
}

void AddressBook::SaveAs()
{

```

```

if(!fs.ExecuteSaveAs()) return;
filename = fs;
Save();
}

void AddressBook::Print()
{
String qtf;
qtf = "{{1:1:1:1 Name:: Surname:: Address:: Email";
for(int i = 0; i < array.GetCount(); i++)
for(int q = 0; q < 4; q++)
qtf << ":: " << DeQtf((String)array.Get(i, q));
Report report;
report << qtf;
Perform(report);
}

void AddressBook::Quit()
{
Break();
}

void AddressBook::Serialize(Stream& s)
{
int version = 0;
s / version;
s % search.ename % search.osurname % search.oaddress % search.oemail;
s % fs;
SetupSearch();
}

GUI_APP_MAIN
{
AddressBook ab;
LoadFromFile(ab);
ab.Run();
StoreToFile(ab);
}

```

I don't have the modify menu changed yet for file browsing, as I am mainly trying to get the icon/image display portion figured out.

When all is said and done, I would like the GUI to look something like this(minus the search tab at the top) with the displayed Image and Icon in the empty space in the lower right:

Any help is appreciated, just be warned that I have little experience with program coding (aside from html and batch, which is what I normally do), so please use layman's terms .

## File Attachments

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1) [Capture.JPG](#), downloaded 630 times

