

Use CAKnEnumeratedTextPopupSettingItem dynamically at runtime

In an article -- "[Create Dynamic Settings Pages](#)", there is a section describing how to "[Adding Enumerated Text Item](#)". See it for details.

In this article, I will introduce another way -- creating a CAKnEnumeratedTextPopupSettingItem-derived class to use dynamic data at runtime.

An important note: "Setting Item Lis 6" panic will occur when no match found in the EnumeratedTextArray, not zero-based. To demonstrate this, I will use 1,2,10 for the enumeration values, different from those(0,1,10) in the above article. We will see how to fix it also.

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Create test data

First we need some test data, and then load the test data when calling CompleteConstructionL() function.

```
void CMyTextPopupSettingItem::LoadTestDataL()
{
    _LIT(KFirst, "first (1)");
    _LIT(KSecond, "second (2)");
    _LIT(KThird, "third (10)");

    // Get the value array
    CArrayPtr<CAKnEnumeratedText>* texts = this->EnumeratedTextArray();
    CArrayPtr<HBufC>* popTextArr = this->PoppedUpTextArray();
    // Empty it
    if (texts && popTextArr)
    {
        texts->ResetAndDestroy();
        texts->AppendL(new CAKnEnumeratedText(1, KFirst().AllocL()));
        texts->AppendL(new CAKnEnumeratedText(2, KSecond().AllocL()));
        texts->AppendL(new CAKnEnumeratedText(10, KThird().AllocL()));
        popTextArr->ResetAndDestroy();
        popTextArr->AppendL(KFirst().AllocL());
        popTextArr->AppendL(KSecond().AllocL());
        popTextArr->AppendL(KThird().AllocL());
    }
}

void CMyTextPopupSettingItem::CompleteConstructionL()
{
    CAKnEnumeratedTextPopupSettingItem::CompleteConstructionL();
    LoadTestDataL(); // overwrite the resource definitions.
}
```

Check target value

We must check whether the target value, `iValue`, is in the loaded array or not. If not, it definitely causes a panic -- "Setting Item Lis 6". In that case, we will choose the first item as the default one. See below:

```
void CMyTextPopupSettingItem::LoadL()
{
    CArrayPtr<CAKnEnumeratedText>* texts = this->EnumeratedTextArray();
    TInt selectedIndex = this->IndexFromValue(iValue);
    if (selectedIndex < 0) // no match found.
    {
        if (texts->Count() > 0)
        {
            // choose the first item as default one.
            CAKnEnumeratedText* item = texts->At(0);
            // reset external value to the default one.
            this->SetExternalValue(item->EnumerationValue());
        }
    }
    CAKnEnumeratedTextPopupSettingItem::LoadL();
}
```

constructor, etc

The constructor of `CMyTextPopupSettingItem`:

```
CMyTextPopupSettingItem::CMyTextPopupSettingItem( TInt aIdentifier, TInt& aValue )
: CAKnEnumeratedTextPopupSettingItem(aIdentifier, aValue), iValue(aValue)
{
}
}
```

The implementation of `CreateAndExecuteSettingPageL`:

```
void CMyTextPopupSettingItem::CreateAndExecuteSettingPageL()
{
    CAKnSettingPage* dlg = CreateSettingPageL();

    SetSettingPage( dlg );
    SettingPage() ->SetSettingPageObserver(this);

    SettingPage() ->SetSettingTextL(SettingName());

    SettingPage() ->ExecuteLD(CAKnSettingPage::EUpdateWhenChanged);
    SetSettingPage(0);
}
```

The header file

```
class CMyTextPopupSettingItem : public CAKnEnumeratedTextPopupSettingItem
{
public: // Constructor
    CMyTextPopupSettingItem( TInt aIdentifier, TInt& aValue );
    void LoadL();
}
```

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```
protected: // Functions from base classes
    void CreateAndExecuteSettingPageL();
    void CompleteConstructionL();

private: // custom methods
    void LoadTestDataL();

private:
    TInt iValue;
};
```

Use CMyTextPopupSettingItem

In the CreateSettingItemL method of your Setting List container, add some code like this:

```
case EMyAppItemTest:
{
//    iData = 1; // here you can specify the default value to test the class we have just creat
//    iData = 0; // This will cause a panic if no fixes in LoadL function.
    settingItem = new (ELeave) CMyTextPopupSettingItem(aIdentifier, iData);
    break;
}
```

See also

- [Setting Item List panics](#)
- [Create Dynamic Settings Pages](#)