Archived:Displaying date in different formats using TTime

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Overview

This code snippet shows how to use the class `TTime` to format date strings. The class `TTime` is used to store date and time and has the method `FormatL()` to format date and time into a user-defined format. The Avkon UI library also offers some predefined formatting strings that can be used in the application by reading strings from the Avkon resource file.

This snippet can be self-signed.

MMP file

The following libraries are required:

```
LIBRARY avkon.lib   //Avkon resources
LIBRARY euser.lib   //TTime, HBufC
LIBRARY eikcore.lib //InfoWinL, CEikonEnv
LIBRARY cone.lib    //CCoeEnv
```

Header file

```
#ifndef __FORMATEXAMPLEAPPUI_H__
#define __FORMATEXAMPLEAPPUI_H__

//...

class CFormatExampleAppUi : public CAknAppUi
    {
//...
private:
    enum TDateType
            {
            EDateShort=0,
            EDateShortZero,
            EDateUsual,
            EDateUsualZero,
            EDateWithoutYear,
            EDateWithoutYearZero,
            EDateTypeCount
            };

    /**
     * From CEikAppUi, HandleCommandL.
     * Takes care of command handling.
     * @param aCommand Command to be handled.
     */
    void HandleCommandL(TInt aCommand);

    void showDateFormattingL(TTime aTime, TDateType aFormatType);

//...
    };

#endif // __FORMATEXAMPLEAPPUI_H__
```

Source file

```
#include <avkon.rsg>

void CFormatExampleAppUi::HandleCommandL(TInt aCommand)
    {
    switch (aCommand)
        {
        case EEikCmdExit:
        case EAknSoftkeyExit:
            Exit();
            break;

        //*** Shows how to use user defined date formatting ***
        case ECommand1:
            {
            TTime now;
            now.HomeTime();    // get current date and time
```


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```
            TBuf<50> dateString;

            // print date in numeric form with leading zeros, using default
            // date ordering (European) and default date separator characters
            // format: dd/mm/yyyy
            _LIT(KOwnDateFormat,"%D%M%Y%/0%1%/1%2%/2%3%/3");
            now.FormatL(dateString,KOwnDateFormat);

            CEikonEnv::Static()->InfoWinL(_L("Own Date Format:"), dateString);

            }
            break;

        //*** Shows how to use Avkon predefined date formatting ***
        case ECommand2:
            {
            TTime now;
            now.HomeTime();    // get current date and time

            //loop through predefined Avkon date formats
            for (TInt i=0; i<EDateTypeCount; i++)
                {
                showDateFormattingL(now, (TDateType)i);
                }

            }
            break;
//...

        default:
            //Panic(EFormatExampleUi);
            break;
        }
    }


/* This method shows the given date in different formats with InfoWin dialog.
Supported format types from avkon.rsg:
#define R_QTN_DATE_SHORT 0x8cc00db
#define R_QTN_DATE_SHORT_WITH_ZERO 0x8cc00dc
#define R_QTN_DATE_USUAL 0x8cc00dd
#define R_QTN_DATE_USUAL_WITH_ZERO 0x8cc00de
#define R_QTN_DATE_WITHOUT_YEAR 0x8cc00df
#define R_QTN_DATE_WITHOUT_YEAR_WITH_ZERO 0x8cc00e0
*/

void CFormatExampleAppUi::showDateFormattingL(TTime aTime, TDateType aFormatType)
    {
     HBufC* dateFormatString = NULL;
     TBuf<50> dateString;

    // read format string from Avkon resources by given format type
    switch (aFormatType)
        {
        case EDateShort:
            dateFormatString = CEikonEnv::Static()->
            AllocReadResourceLC(R_QTN_DATE_SHORT);
            break;
        case EDateShortZero:
            dateFormatString = CEikonEnv::Static()->
            AllocReadResourceLC(R_QTN_DATE_SHORT_WITH_ZERO);
            break;
        case EDateUsual:
            dateFormatString = CEikonEnv::Static()->
            AllocReadResourceLC(R_QTN_DATE_USUAL);
            break;
        case EDateUsualZero:
            dateFormatString = CEikonEnv::Static()->
            AllocReadResourceLC(R_QTN_DATE_USUAL_WITH_ZERO);
            break;
        case EDateWithoutYear:
            dateFormatString = CEikonEnv::Static()->
            AllocReadResourceLC(R_QTN_DATE_WITHOUT_YEAR);
            break;
        case EDateWithoutYearZero:
            dateFormatString = CEikonEnv::Static()->
            AllocReadResourceLC (R_QTN_DATE_WITHOUT_YEAR_WITH_ZERO);
            break;
        default:
            dateFormatString = CEikonEnv::Static()->
            AllocReadResourceLC (R_QTN_DATE_SHORT);
        }

    // format the date string
    aTime.FormatL(dateString, *dateFormatString);
    CleanupStack::PopAndDestroy();  // dateFormatString

    //show the date with a dialog
    CEikonEnv::Static()->InfoWinL(_L("Date:"), dateString);
    }
```

Postconditions

The current date is displayed with dialogs using the user-defined date format and predefined Avkon library date formats.

See also

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