

Hello World Application on Symbian Platform

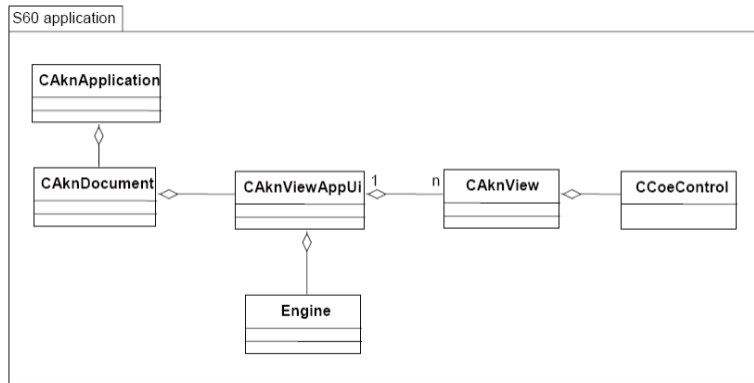


Application Types

- Generic Application
 - Console based application
 - Dynamically Linked Library
 - Static Library
- S60 application
 - GUI application
 - GUI application with UI designer
 - Open C Console application



Application Architecture



Hello World Application

- A "hello world" program can be a useful sanity test to make sure that a language's compiler, development environment, and run-time environment are correctly installed.
- Open Carbide IDE
- File->New-> Symbian OS Project -> S60
- Select GUI application with UI Design
- Create Project(Hello World) and Set Settings
- Build Application
 - Go to Project Explorer window right click your own project name.
 - From the popup menu select the *Build Project* option.
- Run application
- The output can be observed in the emulator.



Project Folders

- Includes
- Data
 - Contain resource files
- Inc
 - Contains .h files
- Src
 - Contains .cpp files
- Gfx
 - Contain graphics i.e images, icons
- Group
 - Contain .bld and .mmp files
- Sis



Resource Files

- Resource Files are Used to Define:
 - User Interface Components
 - Visible Text

File Name	Description
AppName.rss	Application's Resource Script
AppName_reg.rss	Application's Registration Information
AppName.rls or AppName.loc	Application's Localizable Strings
AppName.rsg	Generated Header Containing Symbolic Resource IDs
AppName.hrh	Enumerated Constants for Application's Commands
AppName.rsc	Generated Compiled Resource File

Project Specification File (MMP)

TARGET	MyApp.exe	USERINCLUDE	..\inc
TARGETTYPE	exe	SYSTEMINCLUDE	\epoc32\include
UID	0x0100039CE	LIBRARY	euser.lib
0xE3AA6613		LIBRARY	apparc.lib
SOURCEPATH	..\src	LIBRARY	cone.lib
SOURCE	MyApplication.cpp	LIBRARY	eikcore.lib
SOURCE	MyAppView.cpp	LIBRARY	avkon.lib
SOURCE	MyAppUi.cpp		
SOURCE	MyDocument.cpp	LANG	01
		VENDORID	0
SOURCEPATH	..\data	SECUREID	0xEA7408AF
START RESOURCE	My.rss	CAPABILITY	ReadUserData
HEADER			
TARGETPATH	resource\apps	START BITMAP	MyApp.mbm
END //RESOURCE		HEADER	
START RESOURCE	My_reg.rss	TARGETPATH	\Resources\Apps
TARGETPATH	\private\10003a3f\apps	SOURCEPATH	..\images
END //RESOURCE		SOURCE	c24 image1.bmp
		SOURCE	c8 images2.bmp
		END	



Project Build File(.bld)

- a component definition file that lists the project files
- made up of a number of sections, with headers
 - prj_platforms
 - prj_exports
 - prj_testexports
 - prj_mmpfiles.

```
// Files to be exported
prj_exports
myheader1.h
myheader2.h

// Project files
prj_mmpfiles
myprj1.mmp
myprj2.mmp

// Files to be exported for test purposes
prj_testexports
mytestheader1.h

// Project files for test programs
prj_testmmpfiles
mytest1.mmp
mytest2.mmp
```

Src Folder Files

- HelloWorldApplication.cpp
 - sets up the application UID, creates the document class, and provides the simple functions that the framework needs to start the application.
- HelloWorldDocument.cpp
 - store a pointer to your engine
 - store the state of the application into a file if you wanted to make it persistent between the times you call it.
- HelloWorldAppUi.cpp
 - have the menu callbacks
- HelloWorldAppView.cpp
 - Application view contains the drawing functions of the application.
 - if you want to do keyboard-based interaction, the event handling happens here
- HelloWorld.pan
 - creates one panic code for this applications (panics are used during development to show something went wrong, and why)
- HelloWorld.hrh
 - enumerates the user-commands for the menu (in this case only one, ECMD1)



Execution & Debugging

- To run Symbian application
 - Go to Project Explorer window right click your own project name
 - Select Run As
 - Run Symbian Application on Emulator
- To Debug Symbian application
 - Go to Project Explorer window right click your own project name
 - Select Debug As
 - Run Symbian Application on Emulator



Application Interface

- Open HelloWorldContacn.uidesign
- Bottom left corner contains optionsMenu
 - Add menu item by clicking this optionsMenu
- Right side of Window contains Toolbox
- -> Editors -> RichText Editor
- Drag Editor and Drop on Window.

