

Name: Dergousoff, Kristen; Knowles, Dylan

NSID: kkd115, dlk077

Project: WinMerge

Change Number: 2

Date: 04/03/2012

Group Number: Danger Twins

About Box: Add Group Information

1. Change Request:

Add information about your group in the “About box” of the application. You should add your team name, the names and e-mails of the developers in your group and a brief description of your team. The window should not be made significantly larger, so you’ll have to add the capability to scroll or similar feature.

2. Concept Location:

Table 1. The list of all the classes visited during concept location.

#	File name	Tool used	Located?	Comments
1	Src\editlib\chcondlg.cpp	In Microsoft Visual Studio, we used the “Find in Files” tool (Ctrl-F) and searched for “About”	No	[UNCHANGED] We had to see what was inside CHCONDLG – we simply couldn’t resist a name that enticingly enigmatic. Plus it had the text “About box” inside, which was the main reason we looked.
2	Src>AboutDlg.h	Again, we used “Find in Files”	Yes	[CHANGED] Saw the “AboutDlg” name and investigated, but as this was a .h file it didn’t contain code that we were looking for; later, we found out that we indeed needed to modify this file . From this file, it is apparent that variable names in the program are convoluted and confusing.
3	Src>AboutDlg.cpp	Looked through the results of “Find in Files” from the above step.	Yes	[CHANGED] Initially, we weren’t sure how to add our changes to this class. Later, it was discovered that we needed to add a control and a field to show our information.
4	Src\resource.h	“Find in Files”	Yes	[CHANGED] Looked at some constants found in AboutDlg.cpp and tried to understand what the code was

				<p>doing and how we could manipulate it. Looked online to find help/information in a variety of locations.</p> <p>We later found that we need to add an ID here (more accurately, the GUI builder in Visual Studio would add it, but the file is changed nevertheless).</p>
5	Src\Merge.rc	“Find in Files” for a mysterious constant in resource.h	Yes	[CHANGED] We found out that we needed to add lines here to add our information to the about box. We realized that we need to edit this, resource.h, AboutDlg.cpp, and AboutDlg.h to add our information after looking at this file.

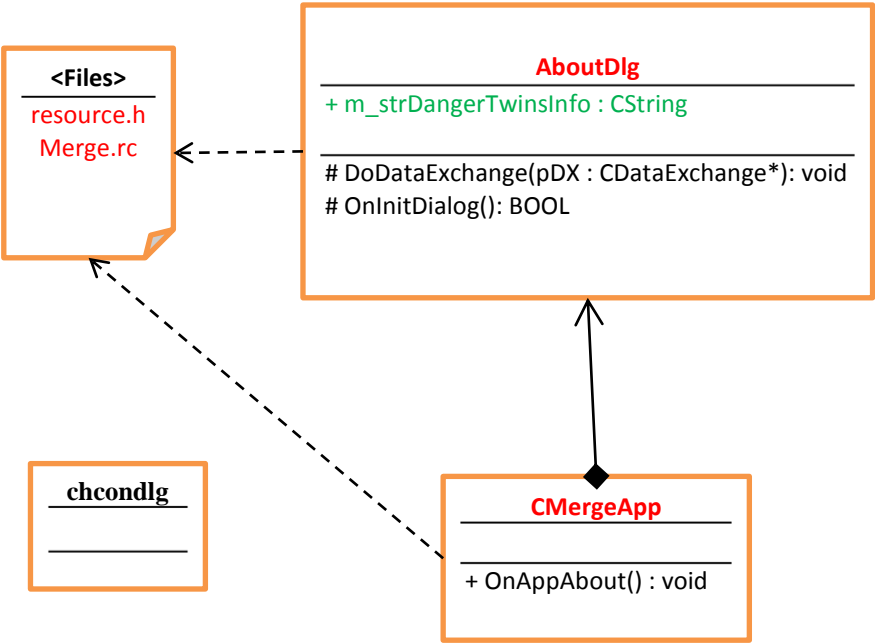
3. Impact Analysis:

Table 2. The list of all the classes visited during impact analysis.

#	Class name	Tool used	Impacted?	Comments
1	AboutDlg	“Find in Files”	Yes	Concept Location.
2	CMergeApp	“Find in Files” used to find references of AboutDlg	No	This class uses an instance of AboutDlg but it doesn’t see any of the internal changes. Changes won’t affect this class.

4. Learning process:

This diagram contains only the methods / variables / etc. relevant to the change. Fields that we feel need to be added to accommodate the change have been highlighted in green.



5. Description of the implementation:

(This is a pseudo-implementation; we could not get the project to compile. Again, additions that we feel need to be made are in green.)

AboutDlg needs to have a field added that contains our information. This information needs to be passed to the CDataExchange instance in the DoDataExchange method so that it appears in the dialog box shown by Windows:

<AboutDlg.h>

```
CStatic      m_ctlCompany;  
CStaticLink  m_ctlWWW;  
CString      m_strVersion;  
CString      m_strDangerTwinsInfo;  
CString      m_strPrivateBuild;  
...
```

<AboutDlg.cpp>

```
void CAboutDlg::DoDataExchange(CDataExchange* pDX)  
{  
    ...  
    DDX_Text(pDX, IDC_DANGERTWINS_INFO, m_strDangerTwinsInfo);  
    DDX_Text(pDX, IDC_VERSION, m_strVersion);  
    DDX_Text(pDX, IDC_PRIVATEBUILD, m_strPrivateBuild);  
    ...  
}  
  
BOOL CAboutDlg::OnInitDialog()  
{  
    ...  
    m_strDangerTwinsInfo = "Danger Twins\nDylan Knowles, Kristen  
Dergousoff\ndylanknowles@usask.ca, kkd115@mail.usask.ca\nDangerously good  
coders.";  
    ...  
}
```

“resource.h” needs an ID to be added for the new text field that we are adding to the dialog box. Apparently, C++ cannot touch the text field without an ID for it:

```
...  
#define IDC_COMPARE_QUICKC_LIMIT 1350  
#define IDC_DANGERTWINS_INFO 1351  
#define IDC_EDIT_WHOLE_WORD 8603  
...
```

“Merge.rc” needs to be told where to put our text field and how big to make it.

```
LTEXT      "(Private Build)", IDC_PRIVATEBUILD, 63, 33, 153, 8  
LTEXT      "All rights reserved.", IDC_STATIC, 7, 60, 170, 8  
LTEXT      "[DangerTwins info will replace this text]",  
           IDC_DANGERTWINS_INFO, 7, 60, 170, 8  
LTEXT      "Visit the WinMerge HomePage!", IDC_WWW, 7, 79, 209, 8
```

Unfortunately, it isn't clear how to add a scrollbar to this location; we presume that using the GUI editor in Visual Studio could take care of this for us. If we could compile the code, we would investigate this addition further.

6. Sources:

- a. <http://msdn.microsoft.com/en-us/library/xwz5tb1x.aspx>
Talks about the DDX methods in AboutDlg.cpp.
- b. <http://www.functionx.com/visualc/classes/radiobuttons1.htm>
Gave us ideas about what ID's were for.
- c. <http://msdn.microsoft.com/en-us/library/hbdk609.aspx>
Information about the CDataExchange class.