

CECS-343 SWE Intro — Parts CRC Cards Example

Parts CRCs Example

o- Input: The UCs built earlier

UC: VCS – Create Repository

2. Create a new Repository in a folder for a Project Tree of folders/files.
3. **Summary:** See PDF assignment
4. **Role:** VCS User
6. **Main-Scen:**
 - o- Get source & target;
 - o- Start new manifest file with cmd-line & timestamp

- o- Traverse source tree: for each file: {
- o- Create file's CPL ID
- o- Add file line to Manifest
- o- Copy file into repo w CPL filename }

5. **Data Parts:** Repo, Manifest, File, CPL-ID, Treewalker, VCS-User

Key: Try to limit couplings in the control graph.

Note: How UC(s) **mismatches** Parts CRCs, also note awkwardness in choosing parts & placing responsibilities. (Cards are cheap. Try ideas.)

Q: Who should be boss of (or collab with) who?

<p>PARTS CRC</p> <p>MANIFEST</p> <p>UCS</p> <table> <tr> <td>- ADD CMD-LINE (VIA PIECES?)</td> <td>SUPTS:</td> </tr> <tr> <td>- ADD TIMESTAMP</td> <td>- FILE</td> </tr> <tr> <td>- ADD FILE LINE (VIA PIECES)</td> <td>- REPO</td> </tr> </table>	- ADD CMD-LINE (VIA PIECES?)	SUPTS:	- ADD TIMESTAMP	- FILE	- ADD FILE LINE (VIA PIECES)	- REPO	<p>FILE</p> <p>UCS</p> <table> <tr> <td>- GET PATHNAME</td> <td>SUPTS:</td> </tr> <tr> <td>- GET LENGTH</td> <td>- MANIFEST</td> </tr> <tr> <td>- COPY TO TARGET WITH CPL NAME</td> <td>- CPL-ID</td> </tr> <tr> <td>- TELL MANIFEST ABOUT COPYING FILE</td> <td></td> </tr> </table>	- GET PATHNAME	SUPTS:	- GET LENGTH	- MANIFEST	- COPY TO TARGET WITH CPL NAME	- CPL-ID	- TELL MANIFEST ABOUT COPYING FILE					
- ADD CMD-LINE (VIA PIECES?)	SUPTS:																		
- ADD TIMESTAMP	- FILE																		
- ADD FILE LINE (VIA PIECES)	- REPO																		
- GET PATHNAME	SUPTS:																		
- GET LENGTH	- MANIFEST																		
- COPY TO TARGET WITH CPL NAME	- CPL-ID																		
- TELL MANIFEST ABOUT COPYING FILE																			
<p>CPL-ID</p> <p>UCS</p> <table> <tr> <td>- CALC FILE'S C-ID VIA FILE BYTE SCAN</td> <td>- FILE</td> </tr> <tr> <td>- COMPOSE CPL-ID WITH FILE'S PATH & LENGTH</td> <td></td> </tr> </table>	- CALC FILE'S C-ID VIA FILE BYTE SCAN	- FILE	- COMPOSE CPL-ID WITH FILE'S PATH & LENGTH		<p>VCS-USER</p> <p>UCS</p> <table> <tr> <td>(DOES UI DIALOG)</td> <td>SUPTS:</td> </tr> <tr> <td>- START UI DIALOG (PUT UP WEB PAGE?)</td> <td>- REPO</td> </tr> <tr> <td>- GET CMD</td> <td></td> </tr> <tr> <td>- GET PROJECT TREE PATH</td> <td></td> </tr> <tr> <td>- GET REPO PATH</td> <td></td> </tr> </table>	(DOES UI DIALOG)	SUPTS:	- START UI DIALOG (PUT UP WEB PAGE?)	- REPO	- GET CMD		- GET PROJECT TREE PATH		- GET REPO PATH					
- CALC FILE'S C-ID VIA FILE BYTE SCAN	- FILE																		
- COMPOSE CPL-ID WITH FILE'S PATH & LENGTH																			
(DOES UI DIALOG)	SUPTS:																		
- START UI DIALOG (PUT UP WEB PAGE?)	- REPO																		
- GET CMD																			
- GET PROJECT TREE PATH																			
- GET REPO PATH																			
<p>TREEWALKER</p> <p>UCS</p> <table> <tr> <td>- MAYBE SETUP TREEWALK?</td> <td>- FILE</td> </tr> <tr> <td>- GET NEXT FILE</td> <td></td> </tr> <tr> <td>- MAYBE CREATE OUR FILE OB?</td> <td></td> </tr> <tr> <td>- TELL FILE TO COPY ITSELF</td> <td></td> </tr> </table>	- MAYBE SETUP TREEWALK?	- FILE	- GET NEXT FILE		- MAYBE CREATE OUR FILE OB?		- TELL FILE TO COPY ITSELF		<p>REPO (X BOSS)</p> <p>UCS</p> <table> <tr> <td>- KNOWS PROJECT FOLDING</td> <td>- VCS-USER</td> </tr> <tr> <td>- KNOWS REPO FOLDING</td> <td>- MANIFEST</td> </tr> <tr> <td>- GETS CMD-LINE PARTS FROM VCS-USER</td> <td>- TREEWALKER</td> </tr> <tr> <td>- STARTS (CREATES?) MANIFEST W CMD-LINE PARTS</td> <td></td> </tr> <tr> <td>- STARTS (CREATES?) PROJECT FOLDING TREEWALK</td> <td></td> </tr> </table>	- KNOWS PROJECT FOLDING	- VCS-USER	- KNOWS REPO FOLDING	- MANIFEST	- GETS CMD-LINE PARTS FROM VCS-USER	- TREEWALKER	- STARTS (CREATES?) MANIFEST W CMD-LINE PARTS		- STARTS (CREATES?) PROJECT FOLDING TREEWALK	
- MAYBE SETUP TREEWALK?	- FILE																		
- GET NEXT FILE																			
- MAYBE CREATE OUR FILE OB?																			
- TELL FILE TO COPY ITSELF																			
- KNOWS PROJECT FOLDING	- VCS-USER																		
- KNOWS REPO FOLDING	- MANIFEST																		
- GETS CMD-LINE PARTS FROM VCS-USER	- TREEWALKER																		
- STARTS (CREATES?) MANIFEST W CMD-LINE PARTS																			
- STARTS (CREATES?) PROJECT FOLDING TREEWALK																			