

**Table C55 PSP2 Project Plan Summary**

Student	James Small	Date	3/4/14
Program	4A	Program #	8
Instructor	Dr. Concepcion	Language	C++

<b>Summary</b>	<b>Plan</b>	<b>Actual</b>	<b>To Date</b>
LOC/Hour	68.6	84.3	62.5
Actual Time		111	698
Planned Time	105		575
CPI(Cost-Performance Index)			0.824
			(Actual/Planned)
% Reused	15.2	14.2	7.6
% New Reused	84.2	89.7	28.7
<b>Test Defects/KLOC</b>	21	6.4	17.9
<b>Total Defects/KLOC</b>	35	38.5	35.8
<b>Yield %</b>	0	66.667	15.385

<b>Program Size (LOC):</b>	<b>Plan</b>	<b>Actual</b>	<b>To Date</b>
Base(B)	266	266	
	(Measured)	(Measured)	
Deleted (D)	0	0	
	(Estimated)	(Counted)	
Modified (M)	0	4	
	(Estimated)	(Counted)	
Added (A)	120	152	
	(N-M)	(T-B+D-R)	
Reused (R)	69	69	119
	(Estimated)	(Counted)	
Total New & Changed (N)	120	156	727
	(Estimated)	(A+M)	
Total LOC (T)	455	487	1571
	(N+B-M-D+R)	(Measured)	
Total New Reused	101	140	209
<b>Upper Prediction Interval (70%)</b>	127.232		
<b>Lower Prediction Interval (70%)</b>	87.232		

<b>Time in Phase (min.)</b>	<b>Plan</b>	<b>Actual</b>	<b>To Date</b>	<b>To Date %</b>
Planning	4	5	29	4.2
Design	9	16	75	10.7
<b>Design review</b>	9	10	10	1.4
Code	32	32	249	35.7
<b>Code review</b>	9	15	15	2.1
Compile	5	1	38	5.4
Test	25	15	187	26.8
Postmortem	12	17	95	13.6
Total	105	111	698	100
<b>Total Time UPI (70%)</b>	119.487			
<b>Total Time LPI (70%)</b>	79.487			

(continued)

**Table C55 PSP2 Project Plan Summary (continued)**

Student	James Small	Date	3/4/14
Program	4A	Program #	8
Instructor	Dr. Concepcion	Language	C++

<b>Defects Injected</b>	<b><i>Plan</i></b>	<b><i>Actual</i></b>	<b><i>To Date</i></b>	<b><i>To Date %</i></b>
Planning	0	0	0	0
Design	0.3	0	1	3.8
<b><i>Design review</i></b>	0	0	0	0
Code	6.3	6	25	96.2
<b><i>Code review</i></b>	0	0	0	0
Compile	0	0	0	0
Test	0	0	0	0
Total Development	6.7	6	26	100

<b>Defects Removed</b>	<b><i>Plan</i></b>	<b><i>Actual</i></b>	<b><i>To Date</i></b>	<b><i>To Date %</i></b>
Planning	0	0	0	0
Design	0	0	0	0
<b><i>Design review</i></b>	0	0	0	0
Code	0	0	0	0
<b><i>Code review</i></b>	0	4	4	15.4
Compile	2.7	1	9	34.6
Test	4	1	13	50
Total Development	6.7	6	26	100
After Development	0	0	0	

<b><i>Defect Removal Efficiency</i></b>	<b><i>Plan</i></b>	<b><i>Actual</i></b>	<b><i>To Date</i></b>
<b><i>Defects/Hour - Design review</i></b>	0	0	0
<b><i>Defects/Hour - Code review</i></b>	0	16	16
<b><i>Defects/Hour - Compile</i></b>	29.25	60	14.21
<b><i>Defects/Hour - Test</i></b>	9.44	4	4.17
<b><i>DRL(DLDR/UT)</i></b>	0	0	0
<b><i>DRL(CodeReview/UT)</i></b>	0	4	3.84
<b><i>DRL(Compile/UT)</i></b>	3.1	15	3.41

**Table C39 Size Estimating Template**

Student	James Small								Date	3/4/14	
Instructor	Dr. Concepcion								Program #	8	
<b>BASE PROGRAM LOC</b>									ESTIMATE	ACTUAL	
BASE SIZE (B) => => => => => => => => =>									266	266	
LOC DELETED (D) => => => => => => => => =>									0	0	
LOC MODIFIED (M) => => => => => => => => =>									0	4	
<b>OBJECT LOC</b>											
BASE ADDITIONS			TYPE <sup>1</sup>		METHODS		REL. SIZE		LOC	LOC	
TOTAL BASE ADDITIONS (BA) => => => => => => => => =>											
NEW OBJECTS			TYPE		METHODS		REL. SIZE		LOC (New Reused*)		
Linear Regression			Calc		9		Medium		101	140*	
TOTAL NEW OBJECTS (NO) => => => => => => => => =>									101	140	
<b>REUSED OBJECTS</b>											
StringToFloat (3B)									50	50	
FileCheck (4B)									19	19	
REUSED TOTAL (R) => => => => => => => => =>									69	69	
									SIZE	TIME	
Estimated Object LOC (E):									101		
Regression Parameters:									155.929	101.806	
Regression Parameters:									-0.482143	-0.0229592	
Estimated New and Changed LOC (N):									107.232		
Estimated Total LOC:									438.232		
Estimated Total New Reuse (sum of * LOC):									101		
Estimated Total Development Time:										99.487	
Prediction Range:									20	20	
Upper Prediction Interval:									127.232	119.487	
Lower Prediction Interval:									87.232	79.487	
Prediction Interval Percent:									N/A	N/A	

<sup>1</sup> L=Logic, I=I/O, C=Calculation, T=Text, D=Data, S=Set-up