

Table C34 PSP1 Project Plan Summary

Student	<u>Seth Lemanek</u>	Date	<u>2/26/16</u>
Program	<u>Linear Regression 2</u>	Program #	<u>5</u>
Instructor	<u>Arturo Concepcion</u>	Language	<u>C++</u>

Summary	Plan	Actual	To Date
LOC/Hour	10	20.7	15.4

Program Size (LOC):	Plan	Actual	To Date
Base(B)	<u>0</u> (Measured)	<u>0</u> (Measured)	
Deleted (D)	<u>0</u> (Estimated)	<u>0</u> (Counted)	
Modified (M)	<u>0</u> (Estimated)	<u>0</u> (Counted)	
Added (A)	<u>83.7</u> (N-M)	<u>75</u> (T-B+D-R)	
Reused (R)	<u>0</u> (Estimated)	<u>0</u> (Counted)	<u>0</u>
Total New & Changed (N)	<u>83.7</u> (Estimated)	<u>75</u> (A+M)	<u>249</u>
Total LOC (T)	<u>83.7</u> (N+B-M-D+R)	<u>75</u> (Measured)	<u>347</u>
Total New Reused	<u>0</u>	<u>0</u>	<u>0</u>
Estimated Object LOC	<u>67.5</u>	<u>50</u>	

Time in Phase (min.)	Plan	Actual	To Date	To Date %
Planning	<u>40</u>	<u>20</u>	<u>68</u>	<u>6.3</u>
Design	<u>20</u>	<u>21</u>	<u>69</u>	<u>6.4</u>
Code	<u>190</u>	<u>93</u>	<u>492</u>	<u>45.8</u>
Compile	<u>30</u>	<u>4</u>	<u>75</u>	<u>7.0</u>
Test	<u>100</u>	<u>49</u>	<u>222</u>	<u>20.7</u>
Postmortem	<u>40</u>	<u>30</u>	<u>149</u>	<u>13.9</u>
Total	<u>420</u>	<u>217</u>	<u>1075</u>	<u>100.0</u>

Defects Injected	Actual	To Date	To Date %
Planning	<u>0</u>	<u>0</u>	<u>0.0</u>
Design	<u>0</u>	<u>4</u>	<u>12.5</u>
Code	<u>3</u>	<u>28</u>	<u>87.5</u>
Compile	<u>0</u>	<u>0</u>	<u>0.0</u>
Test	<u>0</u>	<u>0</u>	<u>0.0</u>
Total Development	<u>3</u>	<u>32</u>	<u>100.0</u>

Defects Removed	Actual	To Date	To Date %
Planning	<u>0</u>	<u>0</u>	<u>0.0</u>
Design	<u>0</u>	<u>0</u>	<u>0.0</u>
Code	<u>0</u>	<u>5</u>	<u>15.6</u>
Compile	<u>2</u>	<u>15</u>	<u>46.9</u>
Test	<u>1</u>	<u>12</u>	<u>37.5</u>
Total Development	<u>3</u>	<u>32</u>	<u>100.0</u>
After Development			

TABLE C39 SIZE ESTIMATING TEMPLATE

Student	<u>Seth Lemanek</u>				Date	<u>2/27/16</u>	
Instructor	<u>Arturo Concepcion</u>				Program #	<u>5</u>	
BASE PROGRAM LOC					ESTIMATE	ACTUAL	
BASE SIZE (B) => => => => => => => =>					<u>0</u>	<u>0</u>	
LOC DELETED (D) => => => => => => => =>					<u>0</u>	<u>0</u>	
LOC MODIFIED (M) => => => => => => => =>					<u>0</u>	<u>0</u>	
OBJECT LOC							
BASE ADDITIONS	TYPE ¹	METHODS	REL. SIZE	LOC	LOC		
TOTAL BASE ADDITIONS (BA) => => => => => => => =>					<u>0</u>		
NEW OBJECTS	TYPE	METHODS	REL. SIZE	LOC (New Reused*)			
<u>LinReg2</u>	<u>calc</u>	<u>6</u>	<u>M</u>	<u>67.5</u>	<u>50</u>		
TOTAL NEW OBJECTS (NO) => => => => => => => =>					<u>67.5</u>	<u>50</u>	
REUSED OBJECTS							
REUSED TOTAL (R) => => => => => => => =>							
Estimated Object LOC (E):					E=BA+NO+M	SIZE	TIME
Regression Parameters:					β_0 (size and time)	<u>0</u>	<u>0</u>
Regression Parameters:					β_1 (size and time)	<u>1.24</u>	<u>0.129</u>
Estimated New and Changed LOC (N):					$N = \beta_0 + \beta_1 * E$	<u>83.7</u>	
Estimated Total LOC:					$T = N + B - D - M + R$	<u>83.7</u>	
Estimated Total New Reuse (sum of * LOC):						<u>0</u>	
Estimated Total Development Time:					Time = $\beta_0 + \beta_1 * E$		<u>8.71</u>
Prediction Range:					Range	<u>20</u>	<u>.2</u>
Upper Prediction Interval:					UPI = N + Range	<u>103.7</u>	<u>8.91</u>
Lower Prediction Interval:					LPI = N - Range	<u>63.7</u>	<u>8.51</u>
Prediction Interval Percent:							

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