

## Developer's log for Software Construction

Chris Johnson, derived from PSP personal software process Watts Humphreys v1.2013

**Programmer** 19/03/13

Jimmy Lin

### Task Description

Basic version: Write a Java program called 'Change' that works out how to make change in coins for a given number of cents in Australian currency.

Estimates & actuals	estimate	final actual
classes	2	2
methods	5	7
lines/NCNB	200/100	154/82
time (hours)	1.5	2.25

Working session	date	start	end	interrupts (min)	work time (min)	achieved
1	19/03/13	0:00	1:30	10	80	Version 1.0: runnable version with sufficient comment
2	19/03/13	2:00	2:30	5	25	Version 1.1: add mechanism to generate testcases.txt automatically
3	25/03/13	0:00	0:30	0	30	Version 1.2: fix bugs and implements the rounding-up for amount with last digit 3,4,8,9
total work time					135	

Defects	type of defect	location	time to fix (min)	cause
1	cent round up	Change class	5	No knowledge of the rounding up rules for currency
2	unnecessary local variable	Change class	1	lack of techniques for tidy codes
number of defects		2		

### Reflective comments observations, problems in skills and practices, plans to improve

1. Implemented a general .sh script to do Linecount and method counter automatically for each homework. Autogeneration of test for program is really a good approach for verification of correctness of our programs. 2. There is no need to create a local variable sometimes. (we can directly new a object and pass it to another method)