

Planning

1. Inspection ID 第四組

2. Team

Moderator 廖御伯

Author Tarak S. Goradia

Reviewers (1) 廖御伯 (4) _____

(2) 賴宥銘 (5) _____

(3) _____ (6) _____

3. Documents

Work products (1) replace.c (4) _____

(2) _____ (5) _____

(3) _____ (6) _____

References (1) <http://ppt.cc/N1mw4> (Code Inspection checklist for C code)

(2) <http://ppt.cc/OTeZw> (IfSQ Level-2 Standard)

(3) <http://ppt.cc/jxmdl> (C code checklist)

(4) <http://ppt.cc/mpGdj> (C 語法 ISO 標準)

Checklists (1) Critical: Syntax error

(2) Severe: Logical error

(3) Moderate: Redundant condition, Redundant statement,
Redundant parameter, Unreachable code

(4) Minor: Misspelling

4. Meetings

	Date	Location	Start	End
Orientation	<u>5/12/2016</u>	<u>NTHU CSIE</u>	<u>19:30</u>	<u>21:00</u>
Review Meeting	<u>5/14/2016</u>	<u>NTHU CSIE</u>	<u>08:20</u>	<u>11:00</u>

5. Planning

Objectives

- o References obtained for work product.
- o Checklists obtained for work product.
- o Moderator is trained in Formal Technical Review procedure.
- o Team members agree to proposed times/dates.
- o Moderator's quick review yields less than 5 major issues.
- o Reviewers understand responsibilities and are committed.

6. Planning Effort 50 minutes

Orientation

7. Prep. Goals 10 min/pkg x 16 pgs. = 160 prep.min/reviewer

8. Orientation o Reviewers understand scope and purpose of work product.

Objectives o Reviewers understand checking process, checklists, and references.

o Work product, references, checklists and checking forms provided.

9. Orient. effort 40 minutes x 2 participants = 80 minute

Preparation

10. Inspection ID _____ 11. Document _____
 12. Reviewer ID 102062101 13. Reviewer name 廖御伯

14. Critical, Severe and Moderate Issues:

Num	Location	Severity	Chk/Ref	Description
01	45	Critical	Syntax error	Add ';'
02	55	Severe	Logical error	"<" -> ">="
03	72	Severe	Logical error	"s[*i]+1 -> s[*i]"
04	88	Severe	Logical error	result++ -> result
05	105	Moderate	Redundant declaration	Delete "int i"
06	109	Severe	Logical error	src[*i-1] -> src[*i]
07	146	Critical	Syntax error	Add '}'
08	149	Severe	Logical error	+= -> =
09	162	Minor	Misspelling	Ja -> jt
10	167	Severe	Logical error	"jp >= lastj-1" -> "jp >= lastj"
11	179	Severe	Logical error	"c != CLOSURE" -> "c == CLOSURE"
12	209	Severe	Logical error	Delete "= j"
13	218	Severe	Logical error	If -> else if
14	243	Moderate	Redundant parameter	Delete the last parameter
15	255	Moderate	Redundant parameter	Delete the last parameter "result"
16	280	Moderate	Redundant condition	Delete " false"
17	294	Moderate	Redundant statement	Delete "else if"
18	307	Moderate	Unreachable code	Statement after "return"
19	334	Critical	Syntax error	Need to add ';'
20	340	Severe	Logical error	"flag++" -> "flag"
21	354	Moderate	Redundant statement	Unnecessary "&& true"
22	390	Critical	Syntax error	Such case not exist
23	404	Critical	Syntax error	Need to add '}'
24	417	Minor	Misspelling	pet -> pat
25	449	Severe	Logical error	Missing left bracket
26	467	Severe	Logical error	Missing right bracket
27	480	Critical	Redundant parameter	Redundant "s3"
28	492	Severe	Logical error	-- -> ++
29	498	Severe	Logical error	Redundant condition "if(s1 == s2)"
30	536	Minor	Redundant declaration	Unnecessary boolean flag
31	543	Severe	Logical error	redundant condition "if(flag) return;"
32	562	Minor	misspelling	stdou -> stdout
33	571	Critical	Syntax error	Unexpected "%s"

12. Effort: 180 minutes

13. Issues:

Critical 6
 Severe 14
 Moderate 7
 Minor 4
 AuthorQ's 0
 Totals: 33 issues.

14. Preparation o Work product has been completely checked.
- Objectives o All critical, severe and moderate issues are noted on this form.
 o All minor issues and author questions are noted on the work product.

Preparation

10. Inspection ID _____ 11. Document _____
 12. Reviewer ID 102062224 13. Reviewer name 賴宥銘

14. Critical, Severe and Moderate Issues:

Num	Location	Severity	Chk/Ref	Description
01	3	Critical	Syntax error	Add line "#include<stdio.h>"
02	45	Critical	Syntax error	Add ';
03	72	Severe	Logical error	"s[*i]+1 -> s[*i]"
04	87	Severe	Logical error	Delete "else return"
05	88	Severe	Logical error	result++ -> result
06	109	Severe	Logical error	src[*i-1] -> src[*i]
07	127	Severe	Logical error	j -> abs(j)
08	146	Critical	Syntax error	Add '}'
09	149	Severe	Logical error	+= -> =
10	152	Severe	Logical error	+= -> =
11	167	Severe	Logical error	"jp >= lastj-1" -> "jp >= lastj"
12	179	Severe	Logical error	"c != CLOSURE" -> "c == CLOSURE"
13	192	Critical	Syntax error	Add ';
14	209	Severe	Logical error	Delete "= j"
15	218	Severe	Logical error	If -> else if
16	241	Severe	Logical error	i-1 -> i+1
17	243	Moderate	Redundant parameter	Delete the last parameter
18	247	Severe	Logical error	(!done) -> (!junk)
19	255	Moderate	Redundant parameter	Delete the last parameter "result"
20	261	Moderate	Redundant parameter	Delete the last parameter "makeres"
21	294	Moderate	Redundant statement	Delete "else if"
22	307	Moderate	Unreachable code	Statement after "return"
23	330	Severe	Incorrect statement	delete "flag = true"
24	340	Severe	Logical error	"flag++" -> "flag"
25	354	Moderate	Redundant statement	Unnecessary "&& true"
26	368	Severe	Logical error	"+=" -> "="
27	390	Critical	Syntax error	Such case not exist
28	404	Critical	Syntax error	Need to add '}'
29	417	Minor	Misspelling	pet -> pat
30	458	Moderate	Redundant condition	Unnecessary " true"
31	467	Severe	Logical error	Missing right bracket
32	480	Critical	Redundant parameter	Redundant "s3"
33	489	Severe	Logical error	delete "s1 = s2 = 0"
34	492	Severe	Logical error	"--" -> "++"
35	512	Severe	Logical error	delete "lin = 0;"
36	539	Severe	Logical error	!(result) -> (result)
37	571	Critical	Syntax error	Unexpected "%s"

15. Effort: 163 minutes

16. Issues:

Critical 8
 Severe 21
 Moderate 7
 Minor 1
 AuthorQ's 0

Totals: 37 issues.

Review

Aggregate Checking Data

Meeting

	R1	R2	R3	R4	R5	Total
18. Prep. Effort	<u>180</u> +	<u>163</u> +	___ +	___ +	___ =	<u>243</u> minutes
19. #Critical Iss.	<u>6</u> +	<u>8</u> +	___ +	___ +	___ =	<u>9</u> issues
20. #Severe Iss.	<u>14</u> +	<u>21</u> +	___ +	___ +	___ =	<u>25</u> issues
21. #Moder. Iss.	<u>7</u> +	<u>7</u> +	___ +	___ +	___ =	<u>9</u> issues
22. #Minor Iss.	<u>4</u> +	<u>1</u> +	___ +	___ +	___ =	<u>4</u> issues
22. #Author Q's	<u>0</u> +	<u>0</u> +	___ +	___ +	___ =	<u>0</u> questions

23. Consolidated list of critical, severe and moderate issues

Num	Location	Severity	Chk/Ref	Description
01	3	Critical	Syntax error	Add line "#include<stdio.h>"
02	45	Critical	Syntax error	Add ';
03	55	Severe	Logical error	"<" -> ">="
04	72	Severe	Logical error	"s[*i]+1 -> s[*i]"
05	87	Severe	Logical error	Delete "else return"
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07	105	Moderate	Redundant declaration	Delete "int i"
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29	340	severe	Logical error	"flag++" -> "flag"
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31	368	severe	Logical error	"+=" -> "="
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41	498	severe	Logical error	Redundant condition "if(s1 == s2)"
42	512	severe	Logical error	delete "lin = 0;"
43	536	minor	Redundant declaration	Unnecessary boolean flag
44	539	severe	Logical error	!(result) -> (result)
45	543	severe	Logical error	redundant condition "if(flag) return;"
46	562	minor	misspelling	stdou -> stdout
47	571	critical	Syntax error	Unexpected "%s"

24. Review Meeting o All reviewers present. List absent reviewer ID's: None

Objectives o All reviewers prepared sufficiently for meeting.

o All issues noted by Scriber and understood by Author for rework.

o Any problems with inspection process have been noted.

25. R.M. effort 45 minutes x 2 participants = 90 minute

Inspection Metrics

Please calculate the following metrics and record the process. (e.g., the formula)

- Estimated Total Defects: 33*37 / 23 = 53.08
- Yield: = Total Defects Found / Estimated Total Defects × 100 %
= 47 / 53.08 × 100 % = 88.54 %
- Defect Density: = Total Defects Found / Size
= 47/16
= 2.9375 (defects/pages)
- Inspection Rate: = Size / Total Inspection Hours
= 16 / [(50+40+45)*2 + 180 + 163] / 60
= 1.56 (pages/hour)
- Defect Finding Efficiency: = Total Defects Found / Total Inspection Hours
= 47 / (613 / 60)
= 4.60 (defects/hour)