

**Planning**1. Inspection ID 6 Date 2016/5/81. Inspection ID 102062342 102062209

## 2. Team

Moderator 102062342

Author

102062209

Reviewers

(1) 102062342

(4)

(2) 102062209

(5)

(3)

(6)

## 3. Documents

Work products

(1) print\_token.c

(4)

(2) stream.h

(5)

(3) token.h

(6)

References

(1) lecture handouts(2) [http://users.csc.calpoly.edu/~jdalbey/308/Lectures/FTR\\_lecture.ppt](http://users.csc.calpoly.edu/~jdalbey/308/Lectures/FTR_lecture.ppt)

Checklists

(1) missing word(3) Syntax error(2) Logic problem(4) Redundant

## 4. Meetings

Date

Location

Start

End

Orientation

2016/5/5EECS32619:303:30

Review Meeting

2016/5/8EECS32620:30

## 5. Planning

✓ References obtained for work product.

Objectives

✓ Checklists obtained for work product.

✓ Moderator is trained in Formal Technical Review procedure.

✓ Team members agree to proposed times/dates.

✓ Moderator's quick review yields less than 5 major issues.

✓ Reviewers understand responsibilities and are committed.

6. Planning Effort 60 minutes

**Orientation**

7. Prep. Goals \_\_\_\_\_min/pkg x \_\_\_\_\_pgs. = \_\_\_\_\_prep.min/reviewer

7. Prep. Goals 20 min/pkg x 19 pgs. = 380  
prep.min/reviewer

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

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

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

9. Orient. effort 20 minutes x 2 participants = 40 minutes

Preparation 10. Inspection ID 6 11. Document C Primer/Compiler design book  
 12. Reviewer ID 102062342 13. Reviewer name 蔡承宏

14. Critical, Severe and Moderate Issues

Num	Location	Severity	Chk/Ref	Description
<u>1</u>	<u>7</u>	<u>severe</u>	<u>logic pro</u>	<u>False should to be defined 0</u>
<u>2</u>	<u>69</u>	<u>critical</u>	<u>logic pro</u>	<u>should be fopen(filename,"r")</u>
<u>3</u>	<u>117</u>	<u>critical</u>	<u>syntax err</u>	<u>miss';'</u>
<u>4</u>	<u>299</u>	<u>critical</u>	<u>syntax err</u>	<u>miss';'</u>
<u>5</u>	<u>453</u>	<u>minor</u>	<u>Redundant</u>	<u>redundant';'</u>
<u>6</u>	<u>474</u>	<u>severe</u>	<u>logic pro</u>	<u>declare state=-1 will cause logic problem</u>
<u>7</u>	<u>480</u>	<u>severe</u>	<u>logic pro</u>	<u>next[base[state]+ch+1],+1  ogic problem</u>
<u>8</u>	<u>501</u>	<u>severe</u>	<u>logic pro</u>	<u>should be '==' ,not '='</u>
<u>9</u>	<u>503</u>	<u>critical</u>	<u>syntax err</u>	<u>"then" should be revised to "else"</u>
<u>10</u>	<u>527</u>	<u>critical</u>	<u>syntax err</u>	<u>redundant '</u>
<u>11</u>	<u>376~380</u>	<u>minor</u>	<u>Redundant</u>	<u>statements after return can't be executed</u>
<u>12</u>	<u>602</u>	<u>critical</u>	<u>syntax err</u>	<u>miss a '}'</u>
<u>13</u>	<u>stream.h 16</u>	<u>critical</u>	<u>missing word</u>	<u>lose variable</u>
<u>14</u>	<u>229</u>	<u>critical</u>	<u>Redundant</u>	<u>redundant '}'</u>
<u>15</u>	<u>116</u>	<u>minor</u>	<u>Redundant</u>	<u>redundant &amp;&amp;TRUE</u>
<u>16</u>	<u>65~68</u>	<u>critical</u>	<u>missing word</u>	<u>miss struct members</u>
<u>17</u>	<u>233</u>	<u>severe</u>	<u>logic pro</u>	<u>default should be placed at end of switch</u>
<u>18</u>	<u>203</u>	<u>severe</u>	<u>logic pro</u>	<u>redundant'+',logic problem</u>

15. Effort 60 minutes 16. Issues

<u>9</u>	<u>6</u>	<u>0</u>	<u>3</u>	<u>0</u>	
Totals	critical	severe	moderate	minor	author Q's

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

Preparation 10. Inspection ID 6 11. Document C Primer/Compiler design book  
 12. Reviewer ID 102062209 13. Reviewer name Chiu Cheng Kai

14. Critical, Severe and Moderate Issues

Num	Location	Severity	Chk/Ref	Description
<u>1</u>	<u>15 ~ 19</u>	<u>Critical</u>	<u>Missing word</u>	<u>function declaration missing parameter</u>
<u>2</u>	<u>69</u>	<u>Severe</u>	<u>Logic Problem</u>	<u>fopen(...,"w") -&gt; fopen(...,"r")</u>
<u>3</u>	<u>69~75</u>	<u>Severe</u>	<u>Logic Problem</u>	<u>condition and statement in branch "if" and else if" should exchange.</u>
<u>4</u>	<u>99</u>	<u>Severe</u>	<u>Logic Problem</u>	<u>(stream_ptr-&gt;stream_ind) --, -- -&gt; ++</u>
<u>5</u>	<u>116</u>	<u>Minor</u>	<u>Redundant</u>	<u>" &amp;&amp; TRUE" is redundant</u>
<u>6</u>	<u>230</u>	<u>Critical</u>	<u>Syntax error</u>	<u>an extra '}' causes the wrong scopes</u>
<u>7</u>	<u>234</u>	<u>Severe</u>	<u>Logic Problem</u>	<u>default should not be put at the first case</u>
<u>8</u>	<u>224</u>	<u>Severe</u>	<u>Logic Problem</u>	<u>ch_stream-- , -- is redundant,</u>
<u>9</u>	<u>226</u>	<u>Severe</u>	<u>Missing Word</u>	<u>There should be a strcpy(...) here</u>
<u>10</u>	<u>454</u>	<u>Minor</u>	<u>Redundant</u>	<u>There is a redundant ';'.</u>
<u>11</u>	<u>528</u>	<u>Minor</u>	<u>Redundant</u>	<u>There is a redundant '.</u>
<u>12</u>	<u>603</u>	<u>Critical</u>	<u>Syntax Error</u>	<u>There is a missing }</u>
<u>13</u>	<u>597</u>	<u>Severe</u>	<u>Logic Problem</u>	<u>the redundant ';' make the loop useless</u>
<u>14</u>	<u>474~487</u>	<u>Critical</u>	<u>Missing Word</u>	<u>base/check/next/default1 are not defined</u>
<u>15</u>	<u>6 in tokens.h</u>	<u>Critical</u>	<u>Syntax Error</u>	<u>"keyword" is conflict with function name</u>
<u>16</u>	<u>15~18 in tokens.h</u>	<u>Critical</u>	<u>Missing word</u>	<u>Missing the Definition of struct stream_type, token_stream_type token</u>
<u>17</u>	<u>159</u>	<u>Critical</u>	<u>Missing word</u>	<u>The parameter FILENAME is missing</u>
<u>18</u>	<u>371</u>	<u>moderate</u>	<u>logic pro</u>	<u>Return type should be int , not double</u>

15. Effort 120 minutes 16. Issues 7 7 1 3 0  
 Totals critical severe moderate minor author Q's

17. 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.

## Review

## Aggregate Checking Data

### Meeting

	R1	R2	R3	R4	R5	Total
18. Prep. Effort	<u>60</u> +	<u>120</u> +	_____	+ _____	+ _____	= <u>180</u> minutes
19. #Critical Iss.	<u>9</u> +	<u>7</u> +	_____	+ _____	+ _____	= <u>16</u> issues
20. #Severe Iss.	<u>6</u> +	<u>7</u> +	_____	+ _____	+ _____	= <u>13</u> issues
21. #Moder. Iss.	<u>0</u> +	<u>1</u> +	_____	+ _____	+ _____	= <u>1</u> issues
22. #Minor Iss.	<u>3</u> +	<u>3</u> +	_____	+ _____	+ _____	= <u>6</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
<u>1</u>	<u>7</u>	<u>severe</u>	<u>logic pro</u>	<u>False should to be defined 0</u>
<u>2</u>	<u>69</u>	<u>critical</u>	<u>logic pro</u>	<u>Should be fopen(filename,"r")</u>
<u>3</u>	<u>117</u>	<u>critical</u>	<u>syntax err</u>	<u>Miss';</u>
<u>4</u>	<u>299</u>	<u>critical</u>	<u>syntax err</u>	<u>Miss';</u>
<u>5</u>	<u>453</u>	<u>minor</u>	<u>Redundant</u>	<u>Redundant ';</u>
<u>6</u>	<u>474</u>	<u>severe</u>	<u>logic pro</u>	<u>Declare state--1 will cause logic problem</u>
<u>7</u>	<u>480</u>	<u>severe</u>	<u>logic pro</u>	<u>next[base[state]+ch+1],+1 is logic problem</u>
<u>8</u>	<u>501</u>	<u>severe</u>	<u>logic pro</u>	<u>Should be '==' ,not assign '='</u>
<u>9</u>	<u>503</u>	<u>critical</u>	<u>syntax err</u>	<u>"then" should be revised to "else"</u>
<u>10</u>	<u>527</u>	<u>critical</u>	<u>syntax err</u>	<u>Redundant '</u>
<u>11</u>	<u>376~380</u>	<u>minor</u>	<u>Redundant</u>	<u>Statements after return can't be executed</u>
<u>12</u>	<u>602</u>	<u>critical</u>	<u>syntax err</u>	<u>Miss a '}'</u>
<u>13</u>	<u>229</u>	<u>critical</u>	<u>syntax err</u>	<u>Extra '}' which would lead to malfunc</u>
<u>14</u>	<u>116</u>	<u>minor</u>	<u>Redundant</u>	<u>Redundant "&amp;&amp;TRUE"</u>
<u>15</u>	<u>233</u>	<u>severe</u>	<u>logic pro</u>	<u>"default" should be placed at end of switch</u>
<u>16</u>	<u>203</u>	<u>severe</u>	<u>logic pro</u>	<u>"+=" should be "= "</u>
<u>17</u>	<u>69~75</u>	<u>severe</u>	<u>logic pro</u>	<u>condition and statement in branch "if"</u>
<u>18</u>	<u>100</u>	<u>severe</u>	<u>logic pro</u>	<u>"and else if" should exchange.</u>
<u>19</u>	<u>6 in tokens.h</u>	<u>critical</u>	<u>syntax error</u>	<u>stream ind -- , -- should be ++,</u>
<u>20</u>	<u>371</u>	<u>moderate</u>	<u>logic pro</u>	<u>"keyword" is conflicted with function name</u>
<u>21</u>	<u>159</u>	<u>critical</u>	<u>missing word</u>	<u>Return type should be int , not double</u>
<u>22</u>	<u>15 ~ 17</u>	<u>critical</u>	<u>missing word</u>	<u>The parameter FILENAME is missing.</u>
<u>23</u>	<u>474~487</u>	<u>critical</u>	<u>missing Word</u>	<u>Function declaration missing parameter</u>
<u>24</u>	<u>15~18 in tokens.h</u>	<u>critical</u>	<u>missing word</u>	<u>base/check/next/default1 are not defined</u>
				<u>Missing the Definition of struct</u>
				<u>stream_type,token_stream_type token</u>

### 24. Review Meeting

✓ All reviewers present. List absent reviewer ID's: N/A

#### Objectives

✓ All reviewers prepared sufficiently for meeting.

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

✓ Any problems with inspection process have been noted.

25. R.M. effort    90 minutes x 2 participants = 180 minutes

## Inspection Metrics

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

Total Defects Found:  $18+18-12=24$

Total inspection hours:  $60\text{min}+120\text{min}=180\text{min}=3\text{hour}$

- Estimated Total Defects:  $(A(\text{Number of defects found by A}) \times B(\text{Number of defects found by B}))/C(\text{Number of defects found by both A and B})$

$$\underline{18 \times 18 / 12 = 27}$$

- Yield:  $\text{Total Defects Found} / \text{Estimated Total Defects} \times 100\%$

$$\underline{(24/27) \times 100\% = 88.8\%}$$

- Defect Density:  $\text{Total Defects Found} / \text{Size}(\text{pages})$

$$\underline{24/19 = 1.26}$$

- Inspection Rate:  $\text{size}(\text{pages}) / \text{total inspection hours}$

$$\underline{19\text{pages} / 3\text{hours} = 6.3\text{pages/hour}}$$

- Defect Finding Efficiency:  $\text{Total defects found} / \text{total inspection hours}$

$$\underline{24/3\text{hours} = 8\text{defects/hour}}$$