

WWW

가

HTML

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**Architectures of WWW Based Expert Systems  
and Implementation of HTML Based Backward Chaining Inference Engine**

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WWW

가

, HTML

. WWW

가

CGI

, Web

,

,

Java Applet

,

HTML

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, ,

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가

.

, HTML

, OAV

HTML

JavaScript

.

,

Web Site

가

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Key Words:

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가

,

, HTML, JavaScript, WWW

1.

WWW  
 가 가  
 . WWW  
 가  
 Intelligent E-Mail Interpretation and Classification,  
 Smart Advisor for Marketing Products and Services,  
 and Training, Online Configuration Systems, Help  
 Desk for Technical Support . (Intelligent  
 Software Strategies, 1997) 가

WWW  
 stand-alone Client/Server 가  
 ,  
 ,  
 .  
 WWW Hyper-media CGI  
 , WWW  
 connectionless, stateless (Berners-Lee, Fielding,  
 and Frystyk, 1996)

가 가  
 .  
 , WWW  
 가  
 ,  
 HTML(Berners-Lee and Connolly, 1995)  
 가 . 2  
 WWW 가  
 , 3 HTML  
 WWW HTML  
 가 가 ,  
 4 HTML 가  
 . 5 HTML 가

HTML 가  
 6 .

2. WWW 가

WWW 가  
 . WWW 가  
 (Server)  
 (Client)

(1)

가 . CGI  
 , Web 가  
 ,  
 HTML .  
 CGI WWW FORM

. Web , Web  
 , URL, HTTP, HTML CGI  
 ,  
 ,  
 가  
 . 가  
 WWW connectionless, stateless

. ,  
 FORM HIDDEN field ,  
 Cookie ,

. , CGI 가  
 가 가

,  
 .  
 CGI

Web CGI Dispatcher 가 , Dispatcher (2)  
 Dispatcher Web CGI (External Viewer) ,  
 Dispatcher Web  
 , Dispatcher Web Web  
 가 Protocol MIME 가  
 , ,  
 가  
 Web 가 Plug-In . Plug-In  
 가 가 ,  
 가 Web 가 ,  
 , Web 가 가  
 API( Netscape  
 NSAPI ) Web 가 .  
 가 Web  
 , , ,  
 Web 가 , ,  
 , Web connectionless, stateless  
 Web 가 WWW  
 HTML WWW  
 HTML ,  
 , , ,  
 , CGI , 가  
 , 가 HTML ,  
 가 가  
 3 HTML 가 .  
 Web

Web < 1> .  
 Web < 1>  
 . Java CGI , HTML , Java  
 Applet(Lemay and Perkins, 1996) . Java  
 . , Web Java  
 (Byte Code) 가  
 , Java CGI  
 Web Java . (EXSYS) ,  
 가  
 Web Java 가 가  
 . Java . CGI  
 , Java  
 . , , HTML  
 , , . HTML  
 가  
 Web Java 가 .  
 . , HTML , HTML Hyperlink  
 가  
 가  
 . ,  
 . HTML 가

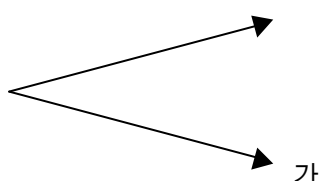
< 1> WWW 가

	CGI		Web		HTML		
				API			
가							

가 , < 1> Hyperlink HTML  
 3 HTML . 4 .  
 3. HTML

HTML (Hyperlink) (Chaining)

< 1> (Decision Tree)가 . , 3  
 Hyperlink HTML  
 < 1> < 3>  
 < 2>  
 HTML



IF	IS
THEN	
IF	IS
THEN	가

< 1> HTML < 2>  
 Web Site ,  
 WWW .  
 < A> Hypertext < B>  
 Hyperlink , Hypertext <  
 < A> Hyperlink . (Fact) , Subgoal Chaining,  
 , HTML . Subgoal  
 (Tree) , Chaining  
 (Graph) 가 . Hyperlink ,

< A>
==
==

< B>
------

< C>
가

< 2> WWW

Web 가 HTML .  
 . , . 가  
 . CGI ,  
 (Fact Type), OAV(Object-Attribute- JavaScript  
 Value Type) , (Numeric Type) 가 .  
 가 . , OAV Hypertext .  
 . <  
 3> OAV IF total\_income >= 0.2 \* threshold  
 < 2> < A> THEN pay\_tax  
 . " " " "

```

<HTML>
<HEAD>
  <TITLE> Expression Type </TITLE>
  <SCRIPT LANGUAGE="JavaScript">
    <!--
      function verifyValue(form)
      {
        if (form.total_income.value >= 0.2 * form.threshold.value)
          location="http://iis.kaist.ac.kr/tax.html"
        else
          location="http://iis.kaist.ac.kr/notax.html"
      }
    //-->
  </SCRIPT>
</HEAD>
<BODY>
<FORM NAME="exprform">
  . <BR>
total_income <INPUT TYPE="text" NAME="total_income"> <BR>
threshold <INPUT TYPE="text" NAME="threshold"> <BR>
<INPUT TYPE="button" VALUE="OK" onClick="verifyValue(this.form)">
</FORM>
</BODY>
</HTML>

```

IF total\_income < 0.2 \* threshold  
 THEN do\_not\_pay\_tax

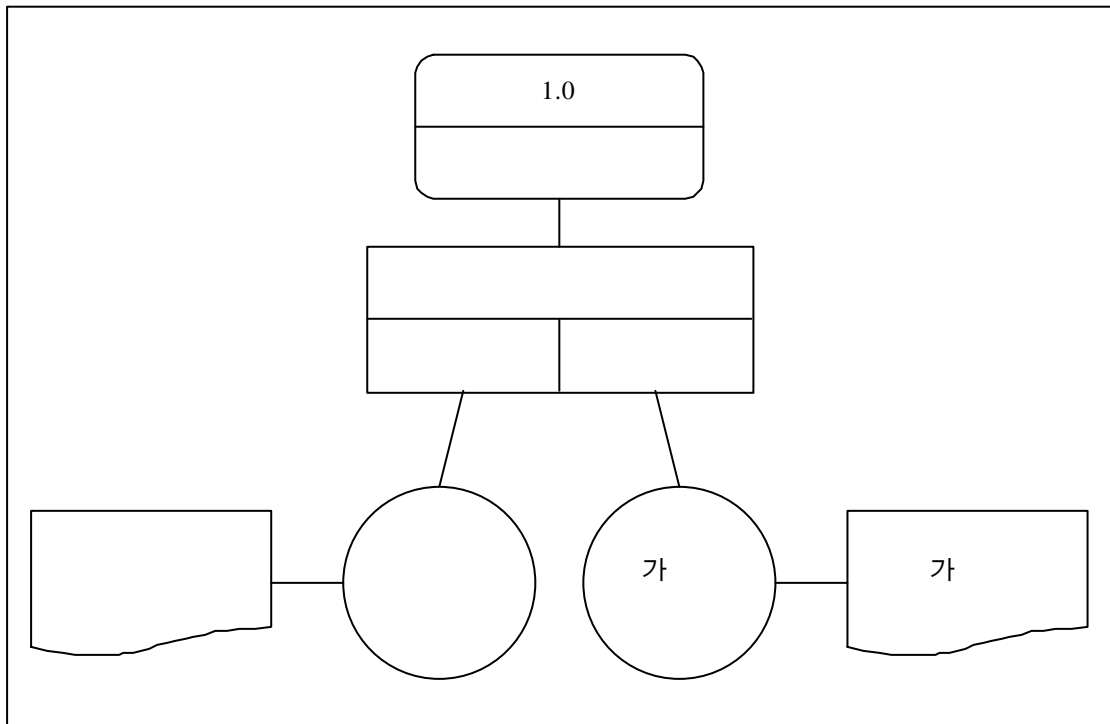
. (Lee, Lee, and Choi, 1990)

HTML

total\_income threshold HTML  
 < 3>  
 4> JavaScript HTML < 5> . <  
 . < 4> 5> Topic Node Display Node  
 Branch Node 1 Conclusion Node 2 가  
 HTML  
 FORM Tag , HTML  
 가 Hyperlink , HTML  
 SCRIPT Tag . JavaScript 가 .  
 LIFT SKI2

HTML  
 가 .  
 5. , Web Site  
 J. K. Lee 가

6.



HTML . , 가 Graph Path 가  
. 2 Certainty  
, , , Factor . HTML  
가 , Graph Tree  
가 가 .  
, Hypothetical Reasoning,  
가 가 , 가  
HTML .  
가 5  
가 HTML  
가 Web .  
Web HTML  
가 7.  
Web 가 WWW 가  
(Undo)  
. CGI 가 . CGI Java  
, , , ,  
(Fact)  
가 . stand-alone . HTML  
, Java  
가 . , HTML . ,  
HTML 가 HTML  
. 가 , HTML  
CGI Java  
HTML . ,  
가 1KB HTML  
KB 가 .  
. Hypothetical Reasoning XML  
가 . What-if 가 .  
HTML  
. ,  
. Certainty Factor , "  
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