Gittex Markdown Language Context Free Grammar

The following is one possible context free (i.e., BNF) grammar for our Gittex Markdown language, described in Project 1.

Terminals

DOCB ::=	'\BEGIN'	
DOCE ::=	'\END'	
TITLEB ::=	'\TITLE['	
BRACKETE ::=	']'	
HEADING ::=	'#'	
PARAB ::=	'\PARAB'	
PARAE ::=	'\PARAE'	
BOLD ::=	'*'	
LISTITEM ::=	'+'	
NEWLINE ::=	\\'	
LINKB ::=	'['	
ADDRESSB ::=	'('	
ADDRESSE ::=	')'	
IMAGEB ::=	'!['	
DEFB ::=	'\DEF['	
EQSIGN ::=	'='	
USEB ::=	'\USE['	
REQTEXT ::=	Any plain text	
TEXT ::=	Any plain text | ε	

* Note that these terminals **_are not_ case sensitive.**
* * The only allowed plain text in our language is: A-Z, a-z, 0-9, commas, period, quotes, colons, question marks, underscores and forward slashes.

Production Rules (i.e., non-terminals)

<gittex> ::=	DOCB <variable-define> <title> <body> DOCE

<title> ::=   TITLEB REQTEXT BRACKETE

<body> ::=
              <inner-text> <body>
              | <paragraph> <body>
              | <newline> <body>
              | ε

<paragraph> ::=   PARAB <variable-define> <inner-text> PARAE

<inner-text> ::=
              <variable-use> <inner-text>
              | <heading> <inner-text>
              | <bold> <inner-text>
              | <listitem> <inner-text>
              | <image> <inner-text>
              | <link> <inner-text>
              | TEXT <inner-text>
              | ε

<heading> ::=   HEADING REQTEXT | ε

<variable-define> ::= DEFB REQTEXT EQSIGN REQTEXT BRACKETE <variable-define> | ε

<variable-use> ::=   USEB REQTEXT BRACKETE | ε

<bold> ::=   BOLD TEXT BOLD | ε

<listitem> ::=   LISTITEMB <inner-item> <list-item> | ε

<inner-item> ::=   <variable-use> <inner- item>
                      | <bold> <inner- item>
                      | <link> <inner- item>
                      | REQTEXT <inner- item>
                      | ε

<link> ::=   LINKB REQTEXT BRACKETE ADDRESSB REQTEXT ADDRESSE | ε

::=   IMAGEB REQTEXT BRACKETE ADDRESSB REQTEXT ADDRESSE | ε

<newline> ::=   NEWLINE | ε