

This was the BNF grammar solution provided on Blackboard.

Terminals

HAI ::= “HAI”
KTHXBYE ::= “KTHXBYE”
OBTW ::= “OBTW”
TLDR ::= “TLDR”
MAEK ::= “MAEK”
OIC ::= “OIC”
GIMMEH ::= “GIMMEH”
MKAY ::= “MKAY”
HEAD ::= “HEAD”
TITLE ::= “TITLE”
PARAGRAF ::= “PARAGRAF”
BOLD ::= “BOLD”
ITALICS ::= “ITALICS”
LIST ::= “LIST”
ITEM ::= “ITEM”
NEWLINE ::= “NEWLINE”
SOUNDZ ::= “SOUNDZ”
VIDZ ::= “VIDZ”
IHAZ ::= “#I HAZ”
ITIZ ::= “#IT IZ”
LEMMEESEE ::= “#LEMME SEE”

VARDEF	::=	any single word (A-Z, a-z, no spaces)
VARVAL	::=	allowed text characters
TEXT	::=	plain text (letters, digits, punctuation, spaces)
ADDRESS	::=	text without spaces

*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)

<lolcode>	::=	HAI <comments> <head> <body> KTHXBYE
<comments>	::=	<comment> <comments> ϵ
<comment>	::=	OBTW TEXT TLDR
<head>	::=	MAEK HEAD \diamond OIC ϵ
<title>	::=	GIMMEH TITLE TEXT MKAY
<body>	::=	<inner-body> <body> ϵ
<inner-body>	::=	<paragraph> <bold> <italics> <list> <audio> <newline> <variable-define> <variable-use> TEXT <comment>
<paragraph>	::=	MAEK PARAGRAF <variable-define> <inner-paragraph> OIC
<inner-paragraph>	::=	<inner-text> <inner-paragraph> ϵ
<inner-text>	::=	<variable-use> <bold> <italics> <list> <audio> <video> <newline> TEXT ϵ
<bold>	::=	GIMMEH BOLD TEXT MKAY
<italics>	::=	GIMMEH ITALICS TET MKAY
<list>	::=	MAEK LIST <list-items> OIC

<list-items> ::= <list-item> <list-items> | ϵ
<list-item> ::= GIMMEH ITEM <inner-list> MKAY
<inner-list> ::= <bold> | <italics> | TEXT | <variable-use> | ϵ
<audio> ::= GIMMEH SOUNDZ ADDRESS MKAY
<newline> ::= GIMMEH VIDZ ADDRESS MKAY
<variable-define> ::= IHAZ VARDEF ITIZ TEXT MKAY | ϵ
<variable-use> ::= LEMME SEE VAR_NAME MKAY