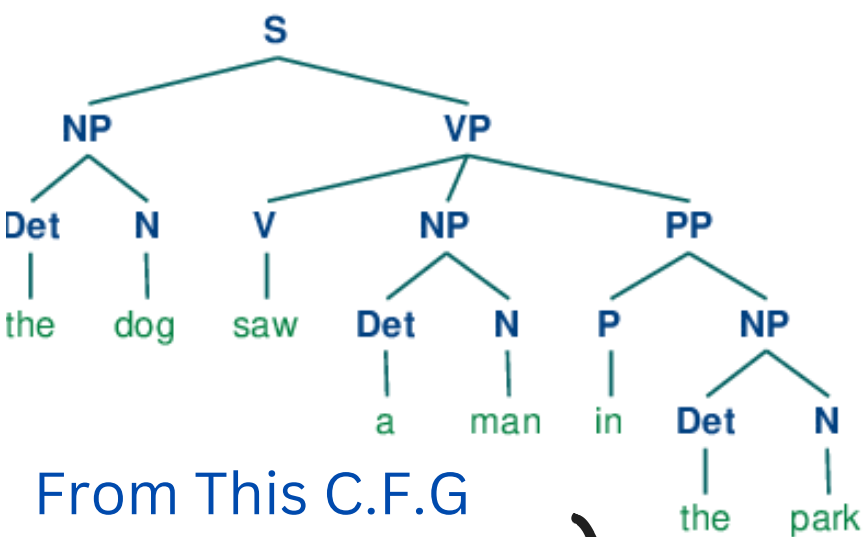


Random Sentence From CFG

By Bryce Manley

Take The given Parse Tree



Symbol	Meaning	Example
S	sentence	the man walked
NP	noun phrase	a dog
VP	verb phrase	saw a park
PP	prepositional phrase	with a telescope
Det	determiner	the
N	noun	dog
V	verb	walked
P	preposition	in

From This C.F.G

s-> NP VP
NP->Det N
Det-> the | a |...
N->dog|cat|Elon...
VP->V NP PP
V->saw|ran ...
PP-> P NP
P-> into| in| around| ect.

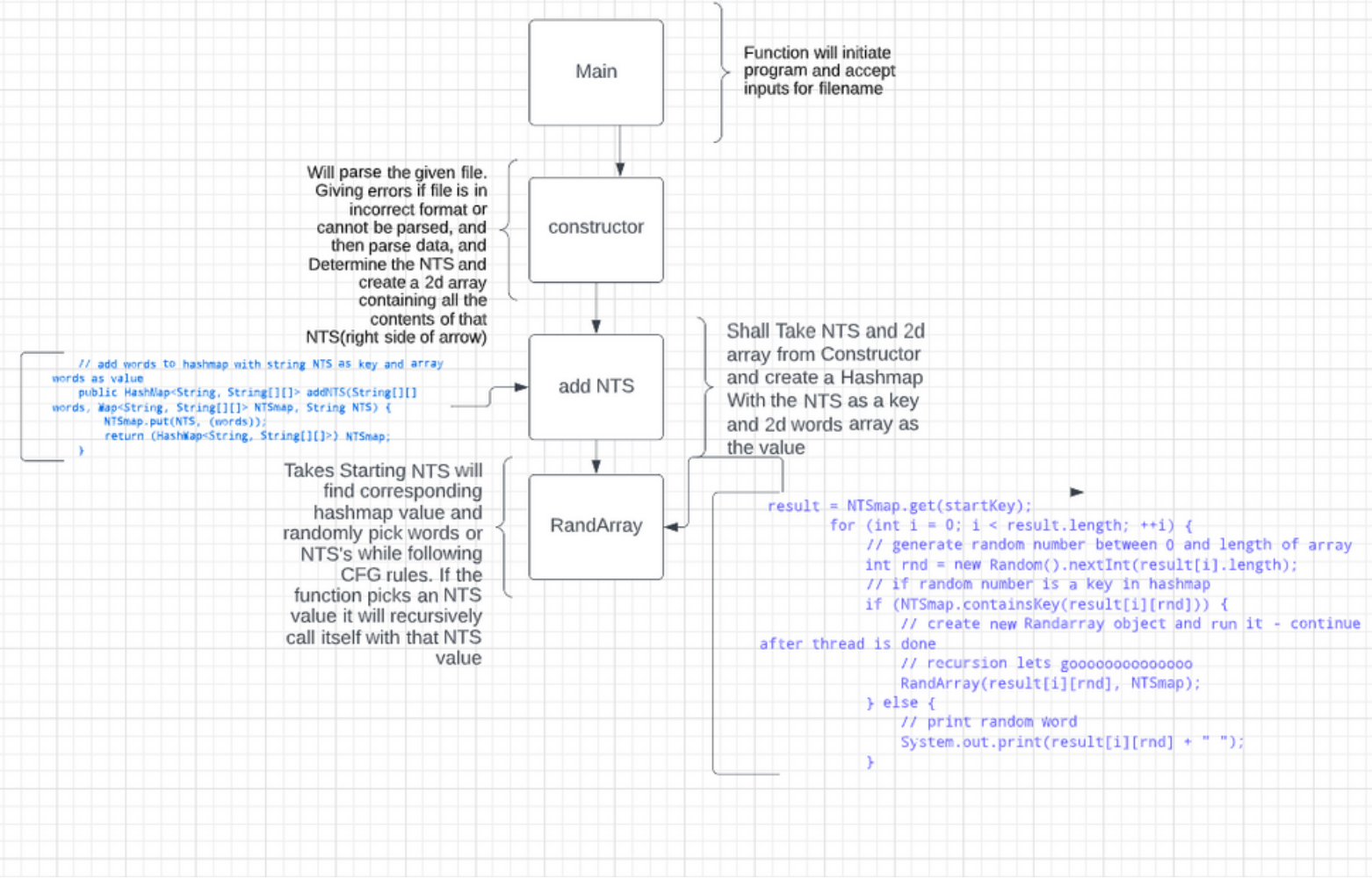
CONVERT TO PROGRAM INPUT

S-> {NP} {VP}
NP-> {Det} {N}
Det-> {the, a,}
N-> {dog, cat, Elon}
VP->{V} {NP} {PP}
V-> {saw, ran, hunted}
PP-> {P} {NP}

ENJOY A RANDOM SENTENCE

the Elon ran the Elon into the dog

Project Diagram



TESTS

	A	B	C
1	Input A-> {the ,a} {N}	Output	Pass or fail (P/F)
2	N->{policeman , firefighter , paramedic} {V} V-> {ran, sprinted, helped} S-> {A}{N}{V}{A}{N}	the paramedic ran	P
3	A-> {the ,a} N->{policeman, firefighter, paramedic, guy, persor V-> {assisted, helped} S-> {A}{B}{X}{A}{V}	a guy helped the guy	P
4	A-> {I, he, the Pope} N->{policeman, firefighter, paramedic, guy, persor, B X-> {is, was} V->{nice, kind, hateful, mean} S-> A, B X, A, V	I is the Pope hateful	P
5	A- {I, he, the Pope} N->{policeman, firefighter, paramedic, guy, persor, B V-> {is, was} V->{nice, kind, hateful, mean}	Error: First non empty line does not contain "->"please fix	P
6	s->{hello} {this , should, work} S->{A}{B}{X}{A}{V}	hello should	P
7	A- {I, he, the Pope} N->{policeman, firefighter, paramedic, guy, persor, B X-> {is, was} V->{nice, kind, hateful, mean} S-> {NP} {VP} NP-> {Det} {N} Det-> {the, a} N-> {dog, cat, Elon} VP->{V} {NP} {PP} V-> {saw, ran, hunted} PP-> {P} {NP} P-> {in, around}	Warning: Line does not contain "->" please check line:A- {I, he, the Pop A was A hateful	P
8		the dog ran the dog in a cat	P