

Dickinson Language Reference

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October 7, 2020

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0.1 Introduction

Dickinson is a language for generative literature targeting English. This reference specifies the syntax and semantics of the language.

0.2 Syntax

0.2.1 Lexical Structure

Dickinson programs have the following lexical structure:

```

comment ::= ;.*$
identifier ::= [a-z][a-zA-Z0-9]*
typeIdentifier ::= [A-Z][a-zA-Z0-9]*
moduleIdentifier ::= (identifier.)*identifier
wildcard ::= _
include ::= : include
let ::= : let
match ::= : match
branch ::= : branch
oneof ::= : oneof
def ::= : def
lambda ::= : lambda
flatten ::= : flatten
pick ::= : pick
bind ::= : bind
text ::= text
tydecl ::= tydecl
arrow ::= (→ | - >)
probability ::= ([0-9]+ | [0-9]+.[0-9]*)

```

0.2.2 Syntax Tree

```

⟨pattern⟩      ::= ⟨wildcard⟩
                |  ⟨identifier⟩
                |  ⟨typeIdentifier⟩

⟨expression⟩  ::= ⟨string⟩
                |  (let: ⟨identifier⟩ ⟨expression⟩)

```