Model

View

Controller

External Services

Key:
- Double Arrow
  One-To-Many

Model:
- User
- POS
- Word
- Sentence
- Passage
- Tag

View:
- Home Page
- Login Page
- Signup Page
- Create Passage
- Edit Passage
- View Passages with Tag
- View All Tags
- View Passage
- View Passage with Suggestions

Controller:
- Application Controller
- Passage Controller
- Parsing Controller
- Passage Analysis Controller
- WordNet Controller
- Mashape Controller
- Phrase Validator (Interface)
- Microsoft NGrams Validator Is a Phrase Validator

External Services:
- Stanford Core NLP
- Mashape Words
- WordNet
- Microsoft NGrams

Labels/Edges:

User.byUsernameOrEmail

create

Login or Signup (Home Page → Application Controller)

Login() (Login Page → Application Controller)

Signup() (Signup Page)

Create (Create Passage → Passage Controller)

Edit (Edit Passage → Passage Controller)

analyzePassage()

Passage.byTag()

Passage.allTags()

View

viewWithSuggestions

Create

Edit

view

Tag.all()
viewAtGradeLevel()

determineGradeLevel()

getNumSyllables(word)

getSynonyms(word, pos)

getNumSyllables(word)

getSynonyms(word,pos)

orderSynonymsByNGramFrequency(synonyms)

getFrequencyForWord(word)