FNBr

# Notes about Annotation Data Structure

* Each **AnnotationSet** is related to: *one* **LU** - OR - *one* **Construction**, via *one* **SubCorpus**.
* Each **AnnotationSet** is related to *one* specific **Sentence**.
  + It is possible (and likely) to have the *same* **Sentence** related to *many* **AnnotationSet**s (from *different* **SubCorpus**).
* Each **AnnotationSet** is associated to *one* **AnnotationStatus**.
* Each **AnnotationSet** is related to a *set\_of* **Layer**s.
  + When a **AnnotationSet** is created, the set of **Layer**s associated with it is created in the same transaction.
  + The set of **Layer**s for a **LU** is different from the set of **Layer**s to a **Construction**.
* Each **Layer** has *one* **LayerType**.
* Each **LayerType** is related to a *set\_of* label types. These types indicate which labels are permitted on each type of layer. There isn't a specific table to label types, because a label type can be a **GenericLabel**, a **FrameElement** or a **ConstructionElement.**
  + The **RelationType** of relations between **LayerType** and label types is *rel\_haslabeltype.*
  + A specific **LayerType** is the same for all languages (i.e. there is a single *lty\_target*).
  + For a **GenericLabel** there is *one* record for *each* language (the language is specified by the field **GenericLabel.idLanguage**).
* **Layers** *are not* entities (**Entity**) - they exist only in a **AnnotationSet** context; it is not possible to relate a **Layer** with something else.
* Each **Layer** can be associated with a *set\_of* **Label**s.
  + When a **Layer** is created, it has no associated **Label**.
* Each **Label** is associated to *one* **Entity**. This entity represents the label type (a **GenericLabel**, a **FrameElement** or a **ConstructionElement).** The field **Label*.*idLabelType** is the **idEntity** of the related Entity (label type).
  + Each **Label** is associated with just *one* **Layer**.
  + Each **Label** is associated with *one* **InstantiationType**.

$layers = [  
 **"words"** => **{$i: {word, startChar, endChar}}**,  
 **"chars"** => {wf$i : {offset, char, order}},  
 **"frozenColumns"** => [**field, width**, **title, formatter, styler]**,  
 **"columns"** => [**hidden, field (idAnnotationSet|idLayer|dLayerType|ni|wf**$i), w**idth, resizable, title, formatter, styler]**,  
 **"labels"** => {**idLayer, idLabel : {idLabelType}}**,  
 **"layers"** => **{idLayer : {idAnnotationSet, nameLayer, currentLabel, currentLabelPos}}**,

**"annotationSets"** => {**idAnnotationSet : {idAnnotationSet, name, show},**

**"labelTypes"** => {**idLayer, idLabelType : {label}}**,  
 **'idColor'** => $row[**'idColor'**],  
 **'coreType'** => $row[**'coreType'**],  
 **"nis"** => {**idLayer, idLabelType : {fe, idInstantiationType, label, instantiationType, idColor}}**,  
];