Entity annotation Documentation

*Entity type descripti*on
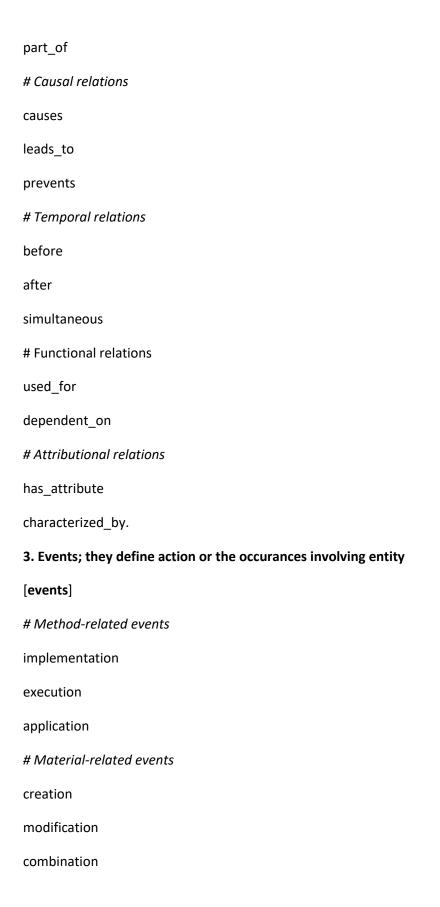
>. **Structure** such as neural system .

>. **Material** we can give an example of magnetic material.

>. **Methods** like the neural circuit .

>. **Features** let's say performance and advantages.

>. **Functional** for example we only make the function of the entire invention.

>. **Energy** which includes incorporating both physical energy and related quantities .

>. **Matter** mata is categorized into three states of matter that is solid liquid and gas .

>. **Information** which includes the signals data and numeric values that are being incorporated into the entity annotation.

>. **Problems** the includes the defects for example large charge densities.

>. **Attributes** The attributes includes conductive structures such as surface of a material.

>. **Operation** like progress stage and instructions

>. **Application of the entire entity annotation according to the specified data or rule**s and where it's being applied in real life situation using the concept of data annotation.

F*or the first instructions provide, now let's define the hiracle ontologies for entity types relation ,bypass relation types, event types and attribute based on the ACE'05 entity definitions and the categories provided now let's define the annotation from each subsection starting with entities.*

Let's define the hierarchical ontologies for entity types, relation types, event types, and attributes based on the ACE'05 entity definitions and the categories provided in your assignment instructions. I'll create a structured format for each category:

[**entities**]

 # Physical entities

structure

material

substance

 # Conceptual entities

==function==

scientific concept

information

energy

 # Method entities

method

operation

interaction

 # Characteristics

features_performance_advantages

==attributes==

state

 # Situational entities

application_scenarios

problem

question

 # Other entities

task

2.Relation :Now they define how the entity annotation are related to each other

[relations]

 # Spatial relations

located_at

adjacent_to

part_of

 # Causal relations

causes

leads_to

prevents

 # Temporal relations

before

after

simultaneous

Functional relations

used_for

dependent_on

 # Attributional relations

has_attribute

characterized_by.

3. Events; they define action or the occurances involving entity

[**events**]

 # Method-related events

implementation

execution

application

 # Material-related events

creation

modification

combination

 # Functional events

operation

performance

failure

 # Situational events

occurrence

detection

identification

4.Attributes ;they describe the characteristics of each entities.

[attributes]

 # Structural attributes

size

shape

color

material

 # Performance attributes

efficiency

speed

accuracy

 # State attributes

status

condition

state

 # Quantitative attributes

value

quantity

level

These are the required structure or the layout of what is required for the documentation of the entity annotation.