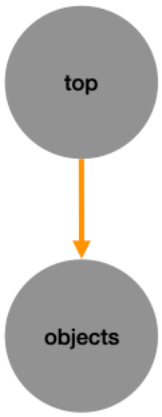
Manual para la representación de la base de conocimientos

Definición de la ontología y de las clases que la conforman:

```
{
  "ontology": [
    {
      "clase": "top",
      "mother": null,
      "properties": [],
      "relations": [],
      "individuals": []
    },
    {
      "clase": "object",
      "mother": "top",
      "properties": [],
      "relations": [],
      "individuals": []
    }
  ]
}
```



Definición de propiedades booleanas tanto para clases como para individuos:

```
{
  "type": "bool",
  "name": "fun",
  "value": true, <——— Valor booleano
  "priority": 0
}
```

fun

$not(fun)$

Definición de propiedades de valor:

```
{
  "type": "value",
  "name": "size",
  "value": “large", <—— puede ser una lista de strings
  "bool": true, <——— si es False
  "priority": 0
}
```

$size => large$

$not(size => large)$

Definición de propiedades de implicación (solo para clases):

```
{
  "type": "imp",
  "antecedent": "born",
  "consequent": "study",
  "value": [true, true],
  "priority": 5
}
```

$$born(\_) => study(\_)$$

```
{
  "type": "imp",
  "antecedent": [“born”, “sleep”],
  "consequent": "study",
  "value": [true, true, true],
  "priority": 5
}
```

$$born(\_) \,\&\, sleep(\_) => study(\_)$$

Definición de relaciones:

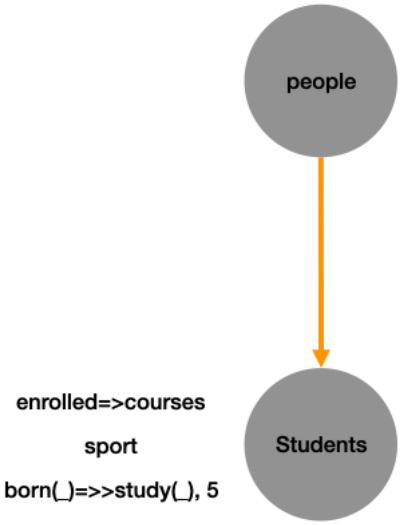
```
{
  "type":"value",
  "subject":"enrolled",
  "object": “courses", <—— puede ser una lista
  "value": true, <——— si es False
  "priority": 0
}
```

$$enrolled => courses$$

$$not(enrolled => courses)$$

Definición de clase con propiedades y relaciones:

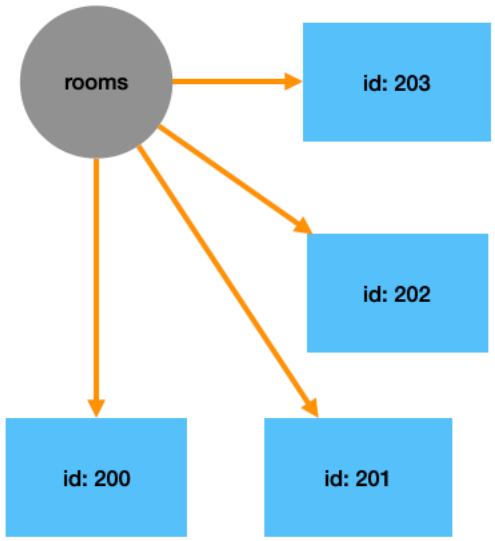
```
{
 "clase": "students",
 "mother": "people",
 "properties": [
   {
     "type": "bool",
     "name": "sport",
     "value": true,
     "priority": 0
   },
   {
     "type": "imp",
     "antecedent": "born",
     "consequent": "study",
     "value": [true, true],
     "priority": 5
   }
 ],
```



```
    "relations": [
      {
        "type":"value",
        "subject":"enrolled",
        "object": "courses",
        "value": true,
        "priority": 0
      }
      ],
    "individuals": []
  }
```

Definición de un individuos dentro de clase:

```
{
   "clase": "rooms",
   "mother": "concrete",
   "properties": [],
   "relations": [],
   "individuals": [
     {
       "id": "200",
       "properties": [],
       "relations": []
     },
     {
       "id": "201",
       "properties": [],
       "relations": []
     },
     {
       "id": "202",
       "properties": [],
       "relations": []
     },
     {
       "id": "203",
       "properties": [],
       "relations": []
     }
   ]
}
```



Definición de individuo con propiedades y relaciones:

```
{
  "clase": "students",
  "mother": "people",
  "properties": [],
  "relations": [],
  "individuals": [
    {
      "id": "pete",
      "properties": [
        {
          "type": "bool",
          "name": "teach",
          "value": true,
          "priority": 0
        },
        {
          "type": "value",
          "name": "work",
          "value": "uk",
          "bool": true,
          "priority": 0
        },
        {
          "type": "value",
          "name": "born",
          "value": "mexico",
          "bool": true,
          "priority": 0
        }
      ],
      "relations": [
        {
          "type": "value",
          "subject": "enrolled",
          "object": "prog",
          "value": false,
          "priority": 0
        }
      ]
    }
  ]
}
```