Cheemera belief structuring examples

Sentences are one of the core elements of Cheemera beliefs:

All sentences must be grammatically complete and be framed in the positive sense:

Acceptable:

- The situation is puzzling
- The license in question is legally obtained.
- The temperature is above 35 degrees.

Unacceptable:

- The situation is not puzzling
- The person is not qualified as a doctor.

Topics in a sentence must make sense by itself and must avoid relative language.

Acceptable:

- The person in question is licensed to be a lawyer.
- An unacceptable situation arises.

Unacceptable:

- It is a good person (*what is ‘it’?*)
- The food is better than yesterday (’Better’ than what?)

Text-to-Scenario examples

These are examples showing how rules, principles and beliefs written in text should be translated into the Cheemera Scenario Schema.

```
//Belief: If A and B are true, then C and E are true.
{
    "scenario":
    {
```

```
        "type": "IF_THEN",
        "consequences":
        [
            {
                "modal": "Always",
                "properties":
                [
                    {
                        "valence": true,
                        "sentence": "C is true"
                    },
                    {
                        "valence": true,
                        "sentence": "E is true"
                    }
                ]
            }
        ],
        "antecedents":
        [
            [
                {
                    "valence": true,
                    "sentence": "A is true"
                },
                {
                    "valence": false,
                    "sentence": "B is true"
                }
            ]
        ]
    },
    "beliefUniqueId": "uusdfe-dgdfg32-3434-dfg11",
    "originatingRuleSystemName": "Belief set 1",
```

```
    "originatingRuleSystemUuid": "uuid-1"
}
```

```
//Belief: If A or B are true, then C and E are true
{
        "scenario":
        {
           "type": "IF_THEN",
           "consequences": [
             {
               "modal": "Always",
               "properties": [
                 {
                   "valence": true,
                   "sentence": "C is true"
                 },
                 {
                   "valence": true,
                   "sentence": "E is true"
                 }
               ]
             }
           ],
           "antecedents": [
             [
               {
                 "valence": true,
                 "sentence": "A is true"
               }
             ],
                 [
                     {
                 "valence": true,
                 "sentence": "B is true"
               }
```

```
                ]
          },
         "beliefUniqueId": "uusdfe-dgdfg32-3434-dfg12",
     "originatingRuleSystemName": "Belief set 1",
     "originatingRuleSystemUuid": "uuid-1"
}
```

If A and B are true, then C and E are true.

```
{
   "type": "IF_THEN",
   "consequences": [
     {
       "modal": "Always",
       "properties": [
         {
           "valence": true,
           "sentence": "C is true"
         },
         {
           "valence": true,
           "sentence": "E is true"
         }
       ]
     }
   ],
   "antecedents": [
     [
       {
         "valence": true,
         "sentence": "A is true"
       },{
         "valence": false,
         "sentence": "B is true"
```

```
        }
      ]
    ]
 }
```

If A and B are tru or if C are true, then D and E are true

```
{
   "type": "IF_THEN",
   "consequences": [
     {
       "modal": "Always",
       "properties": [
         {
           "valence": true,
           "sentence": "C is true"
         },
         {
           "valence": true,
           "sentence": "E is true"
         }
       ]
     }
   ],
   "antecedents": [
     [
       {
         "valence": true,
         "sentence": "A is true"
       },
            {
         "valence": true,
         "sentence": "B is true"
       }
```

```
     ],
         [
             {
         "valence": true,
         "sentence": "C is true"
       }
       ]
 }
```

```
//Belief: If A and B are true, then D and E is true and F and G
{
        "scenario":
            {
           "type": "IF_THEN",
           "consequences": [
             {
               "modal": "Always",
               "properties": [
                 {
                   "valence": true,
                   "sentence": "D is true"
                 },
                 {
                   "valence": true,
                   "sentence": "E is true"
                 }
               ]
             },
                 {
               "modal": "Never",
               "properties": [
                 {
                   "valence": true,
                   "sentence": "F is true"
                 },
```

```
                {
                  "valence": false,
                  "sentence": "G is true"
                }
              ]
            }
          ],
          "antecedents": [
            [
              {
                "valence": true,
                "sentence": "A is true"
              },
                    {
                "valence": true,
                "sentence": "B is true"
              }
            ]
        },
       "beliefUniqueId": "uusdfe-dgdfg32-3434-593hfn",
    "originatingRuleSystemName": "Belief set 1",
    "originatingRuleSystemUuid": "uuid-1"
}
```

If A and B are true, then D and E is true and F and G is not true.

```
{
   "type": "IF_THEN",
   "consequences": [
     {
       "modal": "Always",
       "properties": [
         {
           "valence": true,
```

```
            "sentence": "D is true"
          },
          {
            "valence": true,
            "sentence": "E is true"
          }
        ]
      },
          {
        "modal": "Never",
        "properties": [
          {
            "valence": true,
            "sentence": "F is true"
          },
          {
            "valence": false,
            "sentence": "G is true"
          }
        ]
      }
    ],
    "antecedents": [
      [
        {
          "valence": true,
          "sentence": "A is true"
        },
              {
          "valence": true,
          "sentence": "B is true"
        }
      ]
  }
```

```
//Belief: C is never true when A and B are true, and vice versa
{
        "scenario":
        {
           "type": "MUTUAL_EXCLUSION",
           "antecedents": [
             [
               {
                 "valence": true,
                 "sentence": "A is true"
               },
                     {
                 "valence": true,
                 "sentence": "B is true"
               }
             ],
                 [
               {
                 "valence": true,
                 "sentence": "C is true"
               }
             ]
         },
        "beliefUniqueId": "uusdfe-dgdfg32-3434-57393",
    "originatingRuleSystemName": "Belief set 1",
    "originatingRuleSystemUuid": "uuid-1"
}
```

```
//Belief: Only one of A, B or C can be true.
{
        "scenario":
        {
           "type": "MUTUAL_EXCLUSION",
           "antecedents": [
```

```
            [
              {
                "valence": true,
                "sentence": "A is true"
              }
            ],
                [
              {
                "valence": true,
                "sentence": "B is true"
              }
            ],
                [
              {
                "valence": true,
                "sentence": "C is true"
              }
            ]
         },
        "beliefUniqueId": "uusdfe-dgdfg32-gggd-11232",
    "originatingRuleSystemName": "Belief set 1",
    "originatingRuleSystemUuid": "uuid-1"
}
```

```
//Belief: A, B and C are always true together. Or you can say th
{
        "scenario":
        {
           "type": "MUTUAL_INCLUSION",
           "antecedents": [
             [
               {
                 "valence": true,
                 "sentence": "A is true"
               }
```

```
            ],
                [
              {
                "valence": true,
                "sentence": "B is true"
              }
            ],
                [
              {
                "valence": true,
                "sentence": "C is true"
              }
            ]
         },
        "beliefUniqueId": "33423-dgdfg32-3434-dfg12",
    "originatingRuleSystemName": "Belief set 1",
    "originatingRuleSystemUuid": "uuid-1"
}
```

```
//Belief: You can only have a situation where either A is true,
{
        "scenario":
        {
           "type": "MUTUAL_EXCLUSION",
           "antecedents": [
             [
               {
                 "valence": true,
                 "sentence": "A is true"
               }
             ],
                 [
               {
                 "valence": true,
                 "sentence": "B is true"
```

```
                },
                        {
                  "valence": true,
                  "sentence": "D is true"
                }
              ],
                  [
                {
                  "valence": true,
                  "sentence": "C is true"
                }
              ]
           },
          "beliefUniqueId": "uusdfe-4jfjf-3434-dfg12",
    "originatingRuleSystemName": "Belief set 1",
    "originatingRuleSystemUuid": "uuid-1"
}
```