|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Mental Disorder Ontology | | | | |
| SEEMP Reference Ontology Requirements Specification Document | | | | |
| **1** | **Purpose** | | | |
|  | The purpose of building the Mental Disorder Ontology is to provide a consensual knowledge model of the different types of mental disorders to be used by different users. | | | |
| **2** | **Scope** | | | |
|  | The ontology has to focus just on the different types of mental disorders, their types, symptoms, relevance, risk factors, and level of intensity. The level of granularity is directly related to the competency questions and terms identified. | | | |
| **3** | **Implementation Language** | | | |
|  | The ontology has to be implemented in OWL language. | | | |
| **4** | **Intended End-Users** | | | |
|  | . User 1. Mental health professionals.  User 2. People with Mental issues. | | | |
| **5** | **Intended Uses** | | | |
|  | Use 1. For gaining knowledge about mental disorders.  Use 2. To improve people's knowledge of different mental health problems/disorders.  Use 3. Gather information about different mental disorders.  Use 4. To help make the optimal diagnoses for a person.  Use 5. To describe different types of mental disorders. | | | |
| **6** | **Ontology Requirements** | | | |
|  | **a. Non-Functional Requirements** | | | |
|  | NFR1. The ontology must be consistent and should be able to answer all the competency questions.  NFR2. The ontology must satisfy the FAIR (Findable, Accessible, Interoperable, Reusable) principle. | | | |
|  | **b. Functional Requirements: Groups of Competency Questions** | | | |
|  | Group 1: Classification/Types  CQ1. Is a schizotypal personality disorder a type of schizophrenia spectrum disorder?  CQ2. How many types of Paraphilic Disorders are there?  Group 2: Code  CQ1. What is the ICD code of Fetishistic Disorder?  CQ2. What is the code of intellectual disability disorder if it has a profound level of intensity?  CQ3. Which mental disorder has the “F80.81” ICD code?  Group 3: Symptoms  CQ1. List the name of disorders that have breathing problems as their symptoms.  CQ2. What are the symptoms of Speech Sound Disorder?  CQ3. Is sleepwalking a sign of a mental disorder?  CQ4. Which disorder has trembling, palpitation, and chest pain as symptoms?  CQ5. How many symptoms a person must have to diagnose development coordination disorder?  Group 4: Correlation(comorbidity)  CQ1. Which disorders are correlated to schizophrenia disorder?  CQ2. Is cyclothymic disorder correlated to bulimia nervosa disorder?  CQ3. Could anxiety and depression occur together?  Group 5: Risk Factors  CQ1. What are the risk factors of posttraumatic stress disorder?  CQ2. Is Language disorder affected by genetic factors?  Group 6: Level of intensity /severity level  CQ1. What are the severity levels of intellectual disability disorder?  CQ2. How many symptoms a patient must have to diagnose a profound level of stress disorder    Group 7: Age Group  CQ1. Name the disorders that can only occur in children.  CQ2. Could neurocognitive disorder occur after the age of 50?  CQ3. Which are the minimum age criteria for the diagnosis of Alzheimer's disorder? | | | |
| 7 | **Pre-Glossary of Terms** | | | |
|  | **Terms from Competency Questions** | | | |
|  | Types  Disorder  Mental disorder  Symptoms  Genetic Factors  Severity Level  Diagnoses |  | Correlation  Comorbidity  Risk factors  Environmental factor  Temporal Factor  Level of intensity  Age group |  |