

Appendix

APPENDIX A: Protégé OWL in snapshots

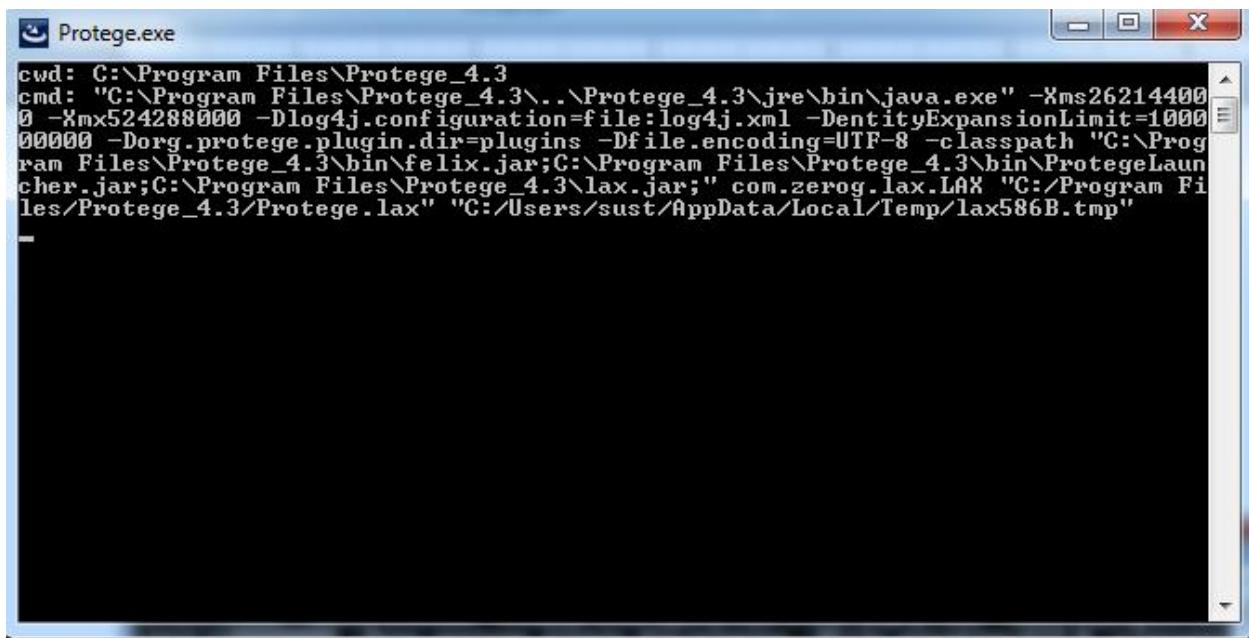


Figure 1: Protégé_4.3_beta Initialization

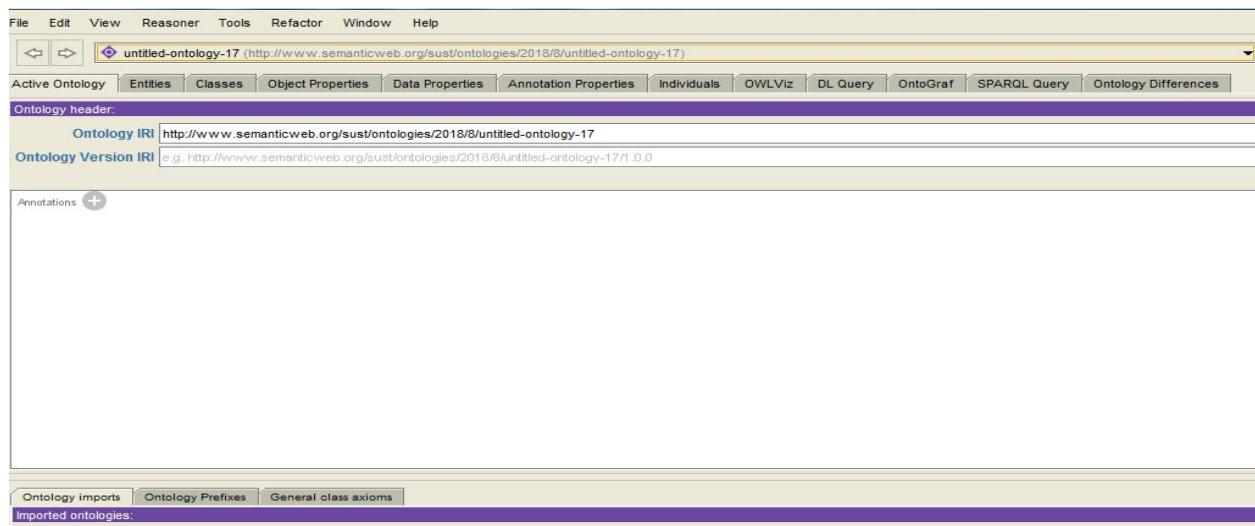


Figure 2: Main screen

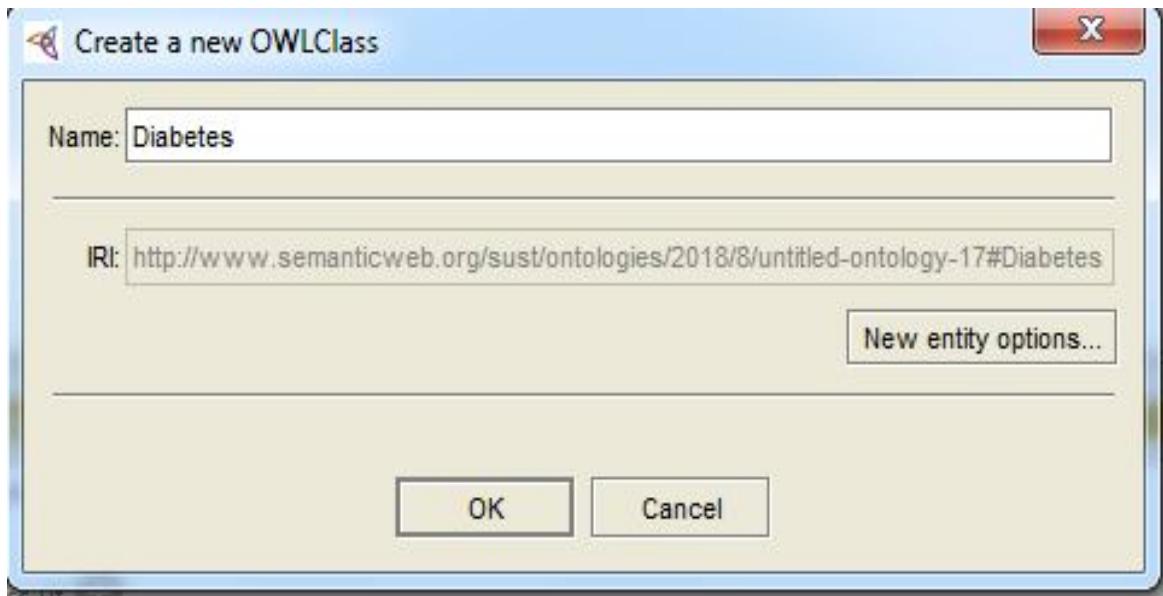


Figure 3: Create new class

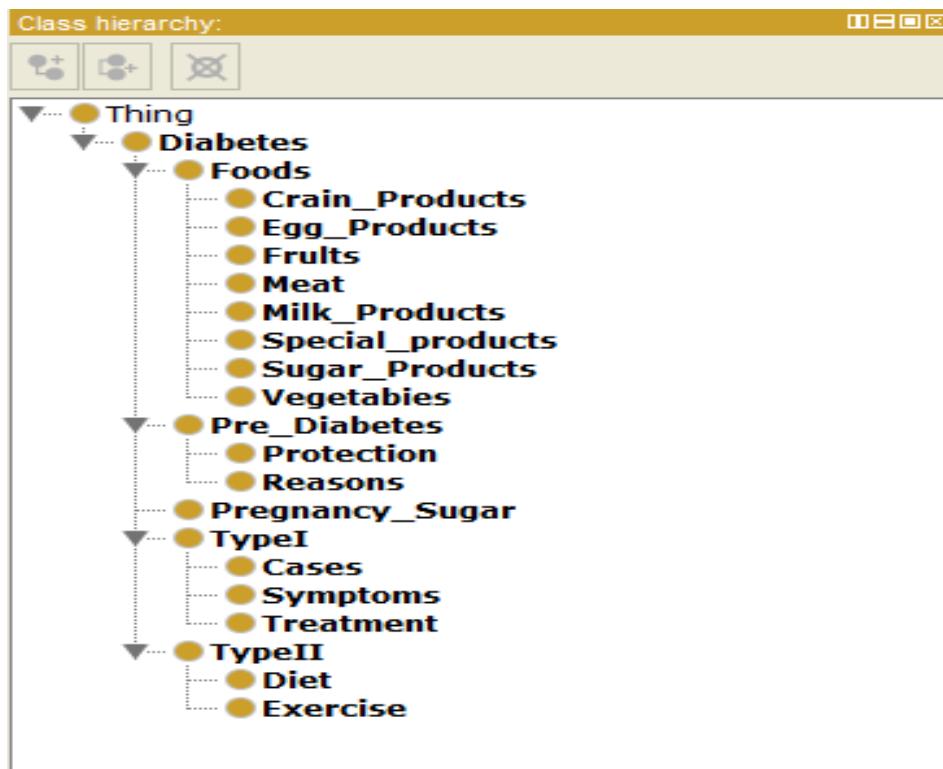


Figure 4: Class hierarchy

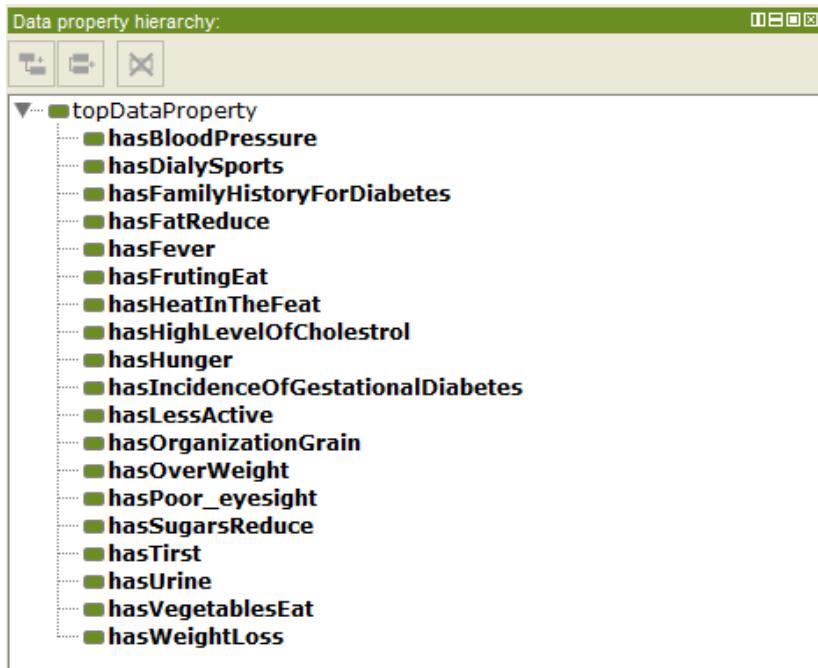


Figure 5: Diabetes data Properties

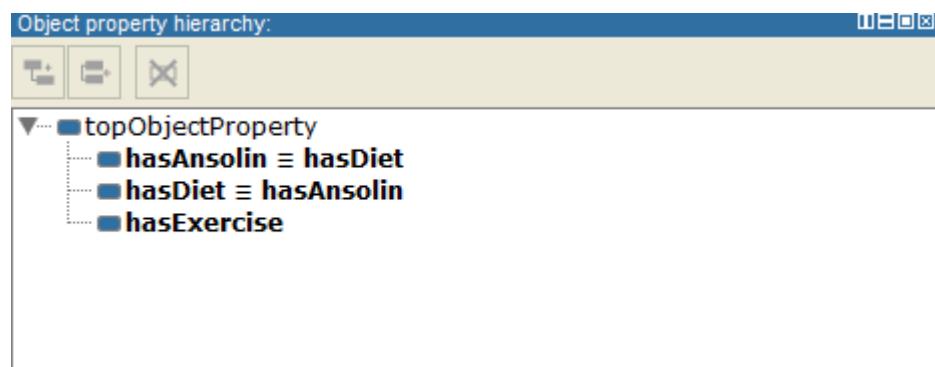


Figure 6: Diabetes object Properties

Found 8 uses of hasDiet

- Apple**
 - Apple **Type** hasDiet **some** Fruits
- hasAnsolin**
 - hasAnsolin **DisjointWith** hasDiet
 - hasAnsolin **EquivalentTo** hasDiet
- hasDiet**
 - hasDiet **Range** hasDiet **some** TypeI

Description: hasDiet

Equivalent To + **hasAnsolin**

SubProperty Of +

Inverse Of +

Domains (intersection) + **hasDiet some Treatment**

Ranges (intersection) + **hasDiet some TypeI**

Disjoint With + **hasAnsolin**

Figure 7: hasDiet Propertie

Individuals: Adil

- Adil**
 - Apple
 - Hozifa
 - Nahied
 - Orange
 - Osama

Usage: Adil

Show: this different

Found 7 uses of Adil

- Adil**
 - Adil **SameAs** Osama
 - Individual: Adil
 - Adil **DifferentFrom** Nahied
 - Adil **DifferentFrom** Hozifa
- Hozifa**
 - Adil **DifferentFrom** Hozifa

Description: Adil

Types +

Same Individual As + **Osama**

Different Individuals + **Nahied**

Hozifa

Figure 8: Diabetes instance

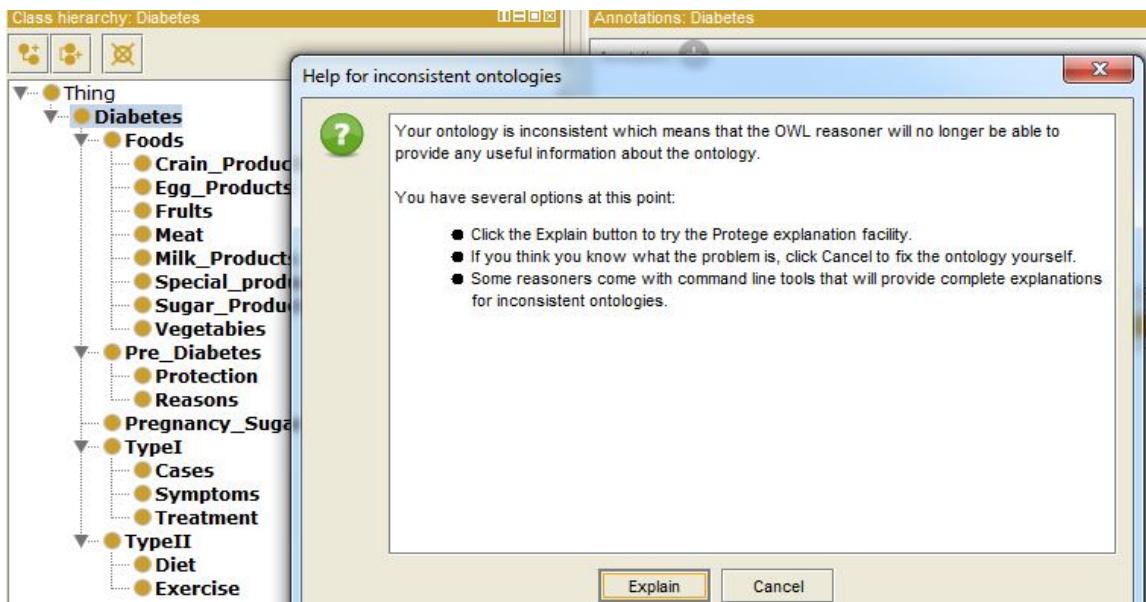


Figure 9: Inconsistent Ontology

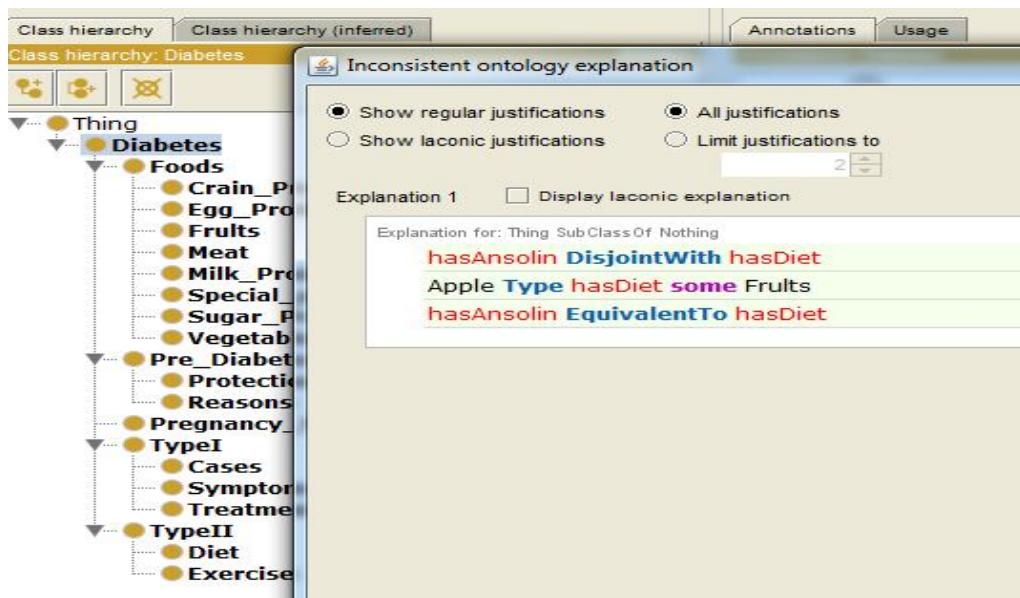


Figure 10: Inconsistent Ontology

The screenshot shows two panels from an ontology editor. The left panel, titled 'Object property hierarchy: hasDiet', displays a tree structure of property definitions. It includes a top-level node 'topObjectProperty' with three children: 'hasAnsolin ≡ hasDiet', 'hasDiet ≡ hasAnsolin', and 'hasExercise'. The right panel, titled 'Usage: hasDiet', shows the following information:

- Show:** this disjoint
- Found 8 uses of hasDiet**
- Apple**: Apple Type hasDiet some Fruits
- hasAnsolin**: hasAnsolin DisjointWith hasDiet; hasAnsolin EquivalentTo hasDiet
- hasDiet**: hasDiet Range hasDiet some TypeI

Below these, there are sections for 'Description: hasDiet' with links to 'Equivalent To', 'SubProperty Of', 'Inverse Of', 'Domains (intersection)', and 'Ranges (intersection)'.

Figure 11: Inconsistent Ontology Explanation

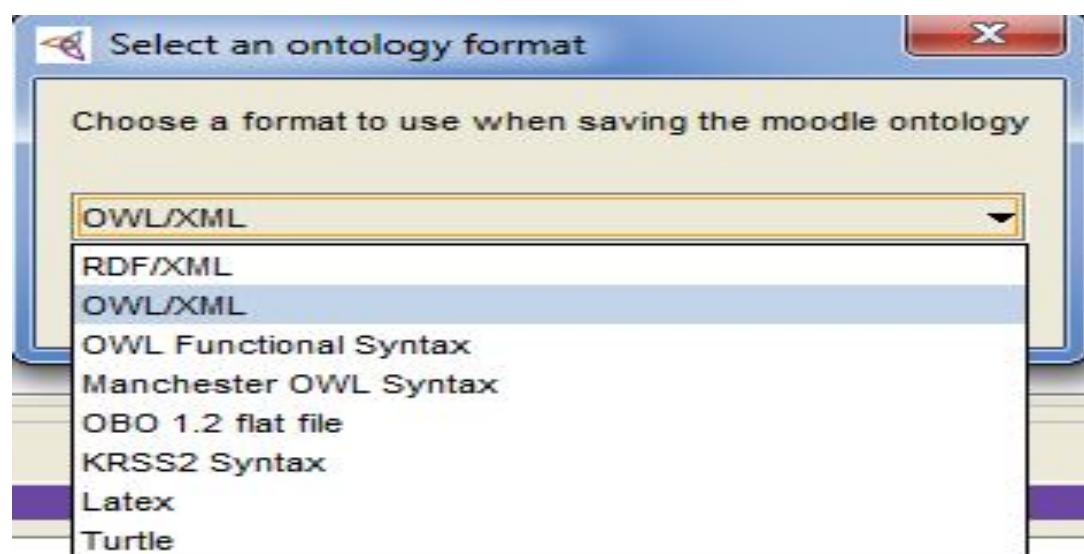


Figure 12: Ontology Format