Gdańsk, dn. 07.05.2014 r.

Bartłomiej Bałazy,

Paweł Troka, (nr indeksu 132334)

Numer grupy w Moodle: 19

**BAZY WIEDZY 2013/14**

**Zadanie 2: Ontologia**

**1. Odstępstwa od założeń**

Nie wystąpiły istotne odstępstwa od założeń. Jedynie chęć stworzenia ontologii w której jak najwięcej faktów będzie wnioskowanych a jak najmniej wprowadzanych (zdecydowano o wprowadzaniu jedynie ojca i matki każdego indiwiduum typu Osoba) zmusiła nas do skorzystania dodatkowo z widoku „Rules” i języka SWRL, gdyż pewne globalne restrykcje w OWL-u uniemożliwyły nam zdefiniowania poprawnie niektórych „object property”.

Należy nadmienić, że resoner FaCT++ który jest znacznie szybszy od HermiT’a (głównie dzięki natywnej implementacji w C++) nie może być z tego powodu używany do wnioskowania, gdyż nie obsługuje on języka SWRL (Semantic Web Rule Language). HermiT za to dobrze sobie radzi z SWRL i dlatego został użyty do wnioskowania, niestety jego wydajność była bardzo niska – na rezultaty trzeba była nieraz czekać kilka do kilkanaście minut.

**2. Opis ontologii**

**2.1. Koncepty**

|  |  |
| --- | --- |
|  | **Class: Thing**  http://www.w3.org/2002/07/owl#Thing  Class Hierarchy   * + Thing   + - + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) |
|  | **Class: Osoba**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Osoba**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + Osoba     - * [Dziecko](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Dziecko)       * + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * [Rodzic](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Rodzic) |
|  | **Class: Dziecko**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Dziecko**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - Dziecko   **Equivalents (1)**   * [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) |
|  | **Class: Rodzic**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Rodzic**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - Rodzic   **Equivalents (1)**   * [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) |
|  | **Class: Mezczyzna**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Mezczyzna**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + Mezczyzna       * + [Brat](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Brat)         + [Bratanek](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Bratanek)         + [Dziadek](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Dziadek)         + [Kuzyn](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kuzyn)         + [Ojciec](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Ojciec)         + [Pradziadek](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Pradziadek)         + [Prawnuk](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Prawnuk)         + [Siostrzeniec](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Siostrzeniec)         + [Syn](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Syn)         + [Wnuk](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Wnuk)         + [Wuj](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Wuj)   **Superclasses (1)**   * [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Disjoints (1)**  [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Brat**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Brat**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Brat   **Equivalents (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Disjoints (1)**  [Corka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Corka) |
|  | **Class: Bratanek**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Bratanek**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Bratanek   **Equivalents (2)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maOjca](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maOjca) some ([jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))) * [jestBratankiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestBratankiemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Dziadek**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Dziadek**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Dziadek   **Equivalents (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Kuzyn**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Kuzyn**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Kuzyn   **Equivalents (2)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)))) * [jestKuzynemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestKuzynemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Ojciec**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Ojciec**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Ojciec   **Equivalents (2)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) * [jestOjcemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestOjcemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Pradziadek**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Pradziadek**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Pradziadek   **Equivalents (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)))   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Prawnuk**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Prawnuk**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Prawnuk   **Equivalents (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maPrababcie](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maPrababcie) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) or [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maPradziadka](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maPradziadka) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Siostrzeniec**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Siostrzeniec**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Siostrzeniec   **Equivalents (2)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maMatke](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maMatke) some ([jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))) * [jestSiostrzencemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSiostrzencemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Syn**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Syn**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Syn   **Equivalents (2)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) * [jestSynemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSynemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Wnuk**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Wnuk**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Wnuk   **Equivalents (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maBabcie](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maBabcie) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) or [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [maDziadka](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziadka) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Wuj**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Wuj**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)       * Wuj   **Equivalents (2)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)) or [maWspolneDzieckoZ](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maWspolneDzieckoZ) some ([Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))) * [jestWujemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestWujemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Kobieta**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Kobieta**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + Kobieta       * + [Babcia](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Babcia)         + [Bratanica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Bratanica)         + [Ciotka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Ciotka)         + [Corka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Corka)         + [Kuzynka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kuzynka)         + [Matka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Matka)         + [Prababcia](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Prababcia)         + [Prawnuczka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Prawnuczka)         + [Siostra](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Siostra)         + [Siostrzenica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Siostrzenica)         + [Wnuczka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Wnuczka)   **Superclasses (1)**   * [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Disjoints (1)**  [Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) |
|  | **Class: Babcia**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Babcia**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Babcia   **Equivalents (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Bratanica**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Bratanica**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Bratanica   **Equivalents (2)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maOjca](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maOjca) some ([jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))) * [jestBratanicaDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestBratanicaDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Ciotka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Ciotka**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Ciotka   **Equivalents (2)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)) or [maWspolneDzieckoZ](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maWspolneDzieckoZ) some ([Mezczyzna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))) * [jestCiotkaDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestCiotkaDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Corka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Corka**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Corka   **Equivalents (2)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) * [jestCorkaDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestCorkaDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Disjoints (1)**  [Brat](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Brat) |
|  | **Class: Kuzynka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Kuzynka**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Kuzynka   **Equivalents (2)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)))) * [jestKuzynkaDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestKuzynkaDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Matka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Matka**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Matka   **Equivalents (2)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) * [jestMatkaDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestMatkaDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Prababcia**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Prababcia**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Prababcia   **Equivalents (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)))   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Prawnuczka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Prawnuczka**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Prawnuczka   **Equivalents (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maPrababcie](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maPrababcie) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) or [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maPradziadka](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maPradziadka) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Siostra**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Siostra**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Siostra   **Equivalents (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Siostrzenica**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Siostrzenica**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Siostrzenica   **Equivalents (2)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maMatke](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maMatke) some ([jestDzieckiemDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) some ([maDziecko](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) min 2 [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba))) * [jestSiostrzenicaDla](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSiostrzenicaDla) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |
|  | **Class: Wnuczka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#Wnuczka**  **Class Hierarchy**   * + [Thing](about:blank./?uri=http%3A%2F%2Fwww.w3.org%2F2002%2F07%2Fowl%23Thing)   + + [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)     - + [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)       * Wnuczka   **Equivalents (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maBabcie](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maBabcie) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba) or [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) and [maDziadka](about:blank../objectproperties/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziadka) some [Osoba](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Superclasses (1)**   * [Kobieta](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta) |

**2.2. Role i atrybuty**

|  |  |
| --- | --- |
|  | **Object Property: topObjectProperty**  **http://www.w3.org/2002/07/owl#topObjectProperty** |
|  | **Object Property: jestBabciaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestBabciaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maBabcie](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maBabcie) |
|  | **Object Property: jestBratanicaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestBratanicaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maBratanice](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maBratanice) |
|  | **Object Property: jestBratankiemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestBratankiemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maBratanka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maBratanka) |
|  | **Object Property: jestCiotkaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestCiotkaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maCiotke](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maCiotke) |
|  | **Object Property: jestDziadkiemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestDziadkiemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maDziadka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziadka) |
|  | **Object Property: jestDzieckiemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestDzieckiemDla**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maDziecko](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko)   **Equivalent Properties (1)**   * [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) |
|  | **Object Property: jestCorkaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestCorkaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maCorke](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maCorke)   **Superproperties (1)**   * [jestDzieckiemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla)   **Disjoint Properties (1)**  [jestSynemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSynemDla) |
|  | **Object Property: jestSynemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestSynemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maSyna](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maSyna)   **Superproperties (1)**   * [jestDzieckiemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla)   **Disjoint Properties (1)**  [jestCorkaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestCorkaDla) |
|  | **Object Property: jestKuzynemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestKuzynemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Disjoint Properties (1)**  [jestKuzynkaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestKuzynkaDla) |
|  | **Object Property: jestKuzynkaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestKuzynkaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Disjoint Properties (1)**  [jestKuzynemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestKuzynemDla) |
|  | **Object Property: jestMatkaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestMatkaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maMatke](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maMatke) |
|  | **Object Property: jestOjcemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestOjcemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maOjca](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maOjca) |
|  | **Object Property: jestPrababciaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestPrababciaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maPrababcie](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maPrababcie) |
|  | **Object Property: jestPradziadkiemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestPradziadkiemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maPradziadka](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maPradziadka) |
|  | **Object Property: jestRodzenstwemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestRodzenstwemDla**  **Property Characteristics (1)**   * Symmetric (jestRodzenstwemDla)   **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Equivalent Properties (1)**   * [maRodzenstwo](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzenstwo) |
|  | **Object Property: jestBratemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestBratemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maBrata](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maBrata)   **Superproperties (1)**   * [jestRodzenstwemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestRodzenstwemDla)   **Disjoint Properties (1)**  [jestSiostraDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSiostraDla) |
|  | **Object Property: jestSiostraDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestSiostraDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maSiostre](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maSiostre)   **Superproperties (1)**   * [jestRodzenstwemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestRodzenstwemDla)   **Disjoint Properties (1)**  [jestBratemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestBratemDla) |
|  | **Object Property: jestSiostrzencemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestSiostrzencemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maSiostrzenca](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maSiostrzenca) |
|  | **Object Property: jestSiostrzenicaDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestSiostrzenicaDla**  **Domains (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maSiostrzenice](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maSiostrzenice) |
|  | **Object Property: jestWujemDla**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#jestWujemDla**  **Domains (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Inverses (1)**   * [maWuja](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maWuja) |
|  | **Object Property: maBabcie**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maBabcie**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestBabciaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestBabciaDla)   **SuperProperty Of (Chain)**   * [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) o [maMatke](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maMatke) SubPropertyOf maBabcie |
|  | **Object Property: maBratanice**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maBratanice**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestBratanicaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestBratanicaDla) |
|  | **Object Property: maBratanka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maBratanka**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Inverses (1)**   * [jestBratankiemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestBratankiemDla) |
|  | **Object Property: maCiotke**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maCiotke**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestCiotkaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestCiotkaDla) |
|  | **Object Property: maDziadka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maDziadka**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Inverses (1)**   * [jestDziadkiemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDziadkiemDla)   **SuperProperty Of (Chain)**   * [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) o [maOjca](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maOjca) SubPropertyOf maDziadka |
|  | **Object Property: maDziecko**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maDziecko**  **Property Characteristics (2)**   * Asymmetric (maDziecko) * Irreflexive (maDziecko)   **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Syn](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Syn) or [Corka](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Corka)   **Inverses (1)**   * [jestDzieckiemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) |
|  | **Object Property: maCorke**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maCorke**  **Property Characteristics (2)**   * Asymmetric (maCorke) * Irreflexive (maCorke)   **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (2)**   * [Corka](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Corka) * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestCorkaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestCorkaDla)   **Superproperties (1)**   * [maDziecko](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) |
|  | **Object Property: maSyna**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maSyna**  **Property Characteristics (2)**   * Asymmetric (maSyna) * Irreflexive (maSyna)   **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (2)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna) * [Syn](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Syn)   **Inverses (1)**   * [jestSynemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSynemDla)   **Superproperties (1)**   * [maDziecko](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maDziecko) |
|  | **Object Property: maPrababcie**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maPrababcie**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestPrababciaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestPrababciaDla)   **SuperProperty Of (Chain)**   * [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) o [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) o [maMatke](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maMatke) SubPropertyOf maPrababcie |
|  | **Object Property: maPradziadka**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maPradziadka**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Inverses (1)**   * [jestPradziadkiemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestPradziadkiemDla)   **SuperProperty Of (Chain)**   * [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) o [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) o [maOjca](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maOjca) SubPropertyOf maPradziadka |
|  | **Object Property: maRodzenstwo**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maRodzenstwo**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Equivalent Properties (1)**   * [jestRodzenstwemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestRodzenstwemDla) |
|  | **Object Property: maBrata**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maBrata**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Inverses (1)**   * [jestBratemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestBratemDla)   **Superproperties (1)**   * [maRodzenstwo](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzenstwo) |
|  | **Object Property: maSiostre**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maSiostre**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestSiostraDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSiostraDla)   **Superproperties (1)**   * [maRodzenstwo](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzenstwo) |
|  | **Object Property: maRodzica**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maRodzica**  **Domains (1)**   * [Dziecko](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Dziecko)   **Ranges (1)**   * [Rodzic](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Rodzic)   **Equivalent Properties (1)**   * [jestDzieckiemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestDzieckiemDla) |
|  | **Object Property: maMatke**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maMatke**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestMatkaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestMatkaDla)   **Superproperties (1)**   * [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) |
|  | **Object Property: maOjca**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maOjca**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Inverses (1)**   * [jestOjcemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestOjcemDla)   **Superproperties (1)**   * [maRodzica](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maRodzica) |
|  | **Object Property: maSiostrzenca**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maSiostrzenca**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Inverses (1)**   * [jestSiostrzencemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSiostrzencemDla) |
|  | **Object Property: maSiostrzenice**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maSiostrzenice**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Kobieta](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Kobieta)   **Inverses (1)**   * [jestSiostrzenicaDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestSiostrzenicaDla) |
|  | **Object Property: maWspolneDzieckoZ**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maWspolneDzieckoZ**  **Property Characteristics (1)**   * Symmetric (maWspolneDzieckoZ)   **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **SuperProperty Of (Chain)**   * [jestOjcemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestOjcemDla) o [maMatke](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23maMatke) SubPropertyOf maWspolneDzieckoZ |
|  | **Object Property: maWuja**  **http://www.semanticweb.org/start/ontologies/2014/4/untitled-ontology-2#maWuja**  **Domains (1)**   * [Osoba](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Osoba)   **Ranges (1)**   * [Mezczyzna](about:blank../classes/?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23Mezczyzna)   **Inverses (1)**   * [jestWujemDla](about:blank./?uri=http%3A%2F%2Fwww.semanticweb.org%2Fstart%2Fontologies%2F2014%2F4%2Funtitled-ontology-2%23jestWujemDla) |

**2.3. Inne aksjomaty (asercje)**

Co prawda nie zostały zdefiniowane żadne aksjomaty na zakładce Active Ontology -> General Class Axiom, jednak jak wspomniano wcześniej napisano kilka reguł w języku SWRL na zakładce „Rules” (w Protge 4.3 należy ją dodać jako dodatkowy widok – utworzyć nową, pustą zakładkę (Window -> Create new tab…), nadać jej jakąś nazwę, otworzyć nowoutworzoną zakładkę, wybrać z menu Windows -> Views -> Ontology views -> Rules i kliknąć w obszar zakładki – to doda widok z regułami które można definiować w SWRL). Poniżej przedstawiono napisane reguły.

* **Ma siostrzenicę**

maCorke(?siostra, ?corka), maSiostre(?on, ?siostra) -> maSiostrzenice(?on, ?corka)

* **Jest kuzynką dla**  
  jestRodzenstwemDla(?rodzic, ?bratsiostra), maCorke(?bratsiostra, ?syn), maRodzica(?ja, ?rodzic) -> jestKuzynkaDla(?syn, ?ja)
* **Ma ciotkę (1)**  
  Kobieta(?ktos), maRodzenstwo(?rodz, ?bls), maRodzica(?ja, ?rodz), maWspolneDzieckoZ(?bls, ?ktos) -> maCiotke(?ja, ?ktos)
* **Ma bratanka**  
  maBrata(?on, ?brat), maSyna(?brat, ?syn) -> maBratanka(?on, ?syn)
* **Ma brata**  
  Mezczyzna(?brat), jestRodzenstwemDla(?brat, ?siostralubbrat) -> maBrata(?siostralubbrat, ?brat)
* **Ma ciotkę (2)**  
  maRodzica(?ja, ?rodzic), maSiostre(?rodzic, ?brat) -> maCiotke(?ja, ?brat)
* **Ma wuja (1)**  
  Mezczyzna(?ktos), maRodzenstwo(?rodz, ?bls), maRodzica(?ja, ?rodz), maWspolneDzieckoZ(?bls, ?ktos) -> maWuja(?ja, ?ktos)
* **Ma siostrzeńca**  
  maSiostre(?on, ?siostra), maSyna(?siostra, ?syn) -> maSiostrzenca(?on, ?syn)
* **Ma syna**  
  Mezczyzna(?dziecko), maDziecko(?ojciec, ?dziecko) -> maSyna(?ojciec, ?dziecko)
* **Ma córkę**  
  Kobieta(?dziecko), maDziecko(?ojciec, ?dziecko) -> maCorke(?ojciec, ?dziecko)
* **Jest rodzeństwem dla (są rodzeństwem)**  
  maDziecko(?ojciec, ?dziecko), maDziecko(?ojciec, ?inneDziecko), DifferentFrom (?dziecko, ?inneDziecko) -> jestRodzenstwemDla(?dziecko, ?inneDziecko)
* **Ma bratanicę**  
  maBrata(?on, ?brat), maCorke(?brat, ?corka) -> maBratanice(?on, ?corka)
* **Jest kuzynem dla**  
  jestRodzenstwemDla(?rodzic, ?bratsiostra), maRodzica(?ja, ?rodzic), maSyna(?bratsiostra, ?syn) -> jestKuzynemDla(?syn, ?ja)
* **Ma wuja (2)**  
  maBrata(?rodzic, ?brat), maRodzica(?ja, ?rodzic) -> maWuja(?ja, ?brat)
* **Ma siostrę**  
  Kobieta(?siostra), jestRodzenstwemDla(?siostra, ?siostralubbrat) -> maSiostre(?siostralubbrat, ?siostra)

Są to jednocześnie podstawowe reguły aby wszystkie pozostałe potrzebne do wnioskowania informacje dało się wyciągnąć z object property, zdefiniowanych asercji i klas.

**3. Przypadki testowe**

**3.1. Asercje wspólne**

1. *Mezczyzna*(PawelTroka)
2. PawelTroka *maMatke* LidiaTroka
3. PawelTroka *maOjca* WieslawTroka
4. WieslawTroka *maOjca* LeonTroka
5. WieslawTroka *maMatke* TeresaTroka
6. LidiaTroka *maMatke* EugeniaOsman
7. LidiaTroka *maOjca* StanislawOsman

**3.2. Przypadek nr 1**

*W kolejnych punktach należy opisać kolejne przypadki testowe w następującej formie:*

***3.2.1. Asercje***

1. *Mezczyzna*(AdamOsman)
2. AdamOsman *maMatke* EugeniaOsman
3. AdamOsman *maOjca* StanislawOsman

***3.2.2. Problem***

Do „drzewa” dochodzi nowa osoba która jest w relacji maMatke z EugeniaOsman i w relacji maOjca z StanislawOsman oraz jest typu Mezczyzna. Kim owa osoba jest dla pozostałych już obecnych w „drzewie”? Chcemy poznać relacje nowo-dodanej osoby AdamOsman z LidiaTroka.

***3.2.3. Odpowiedź***

AdamOsman ma siostrę LidiaTroka.

***3.2.4. Dowód***

1. AdamOsman maOjca StanislawOsman, maMatke EugeniaOsman, obie właściwości dziedziczą po właściwości maRodzica, więc AdamOsman maRodzica StanislawOsman i maRodzica EugeniaOsman
2. Własność maDziecko jest odwrotna dla własności maRodzica, co za tym idzie z punktu 1 wynika, że StanislawOsman maDziecko AdamOsman
3. W punkcie 3.1 LidiaOsman maOjca StanislawOsman, posługując się więc tą samą logiką dla LidiaOsman jak w punktach 1-2 dla AdamOsman dochodzimy do wniosku, że StanislawOsman maDziecko LidiaOsman
4. W asercjach wspolnych PawelTroka maMatke LidiaTroka
5. maMatke ma zakres Kobieta, więc LidiaTroka jest kobietą
6. Z 3.2.1 wynika, że AdamOsman jest Mężczyzną
7. AdamOsman i LidiaTroka to różne indywidua (gdyż różnią się choćby wydedukowanym typem)
8. Z punktów 1,2,3 wynika, że LidiaTroka i AdamOsman spełniają relację maRodzica do tego samego indywiduum StanislawOsman
9. Z punktu 2.3 z reguły „Jest rodzeństwem dla” wynika, że jeżeli różne indywidua spełniają relację maRodzica do tego samego indywiduum to są w relacjj symetrycznej jestRodzenstwemDla, więc z punktu 7 i 8 oraz tej reguły wynika, że LidiaTroka i AdamOsman są w relacji symetrycznej jestRodzenstwemDla.
10. Z punktu 2.3 z reguły „Ma siostrę” wynika, że jeżeli jedno z indywiduów będących w relacji jestRodzenstwemDla jest typu Kobieta to drugie indywiduum jest w relacji maSiostre z pierwszym indywiduum
11. LidiaTroka jest typu kobieta i jest w relacji jestRodzenstwemDla z AdamOsman, więc z punktu 10 wynika, że AdamOsman jest w relacji maSiostre z LidiaTroka

**3.3. Przypadek nr 2**

*W kolejnych punktach należy opisać kolejne przypadki testowe w następującej formie:*

***3.3.1. Asercje***

1. *Mezczyzna*(AdamOsman)
2. AdamOsman *maMatke* EugeniaOsman
3. AdamOsman *maOjca* StanislawOsman
4. PiotrOsman maOjca AdamOsman
5. Mezczyzna(PiotrOsman)

***3.3.2. Problem***

Do „drzewa” dochodzi nowa osoba która jest w relacji w relacji maOjca z AdamOsman oraz jest typu Mezczyzna. Kim owa osoba jest dla pozostałych już obecnych w „drzewie”? Chcemy poznać relacje nowo-dodanej osoby PiotrOsman z PawelTroka.

***3.3.3. Odpowiedź***

PiotrOsman jestKuzynemDla PawelTroka.

***3.3.4. Dowód***

1. PiotrOsman maOjca AdamOsman, a jako, że własność maOjca jest podzbiorem własności maRodzica, to wynika z tego, że także PiotrOsman maRodzica AdamOsman
2. Z punktow 1-9 z dowodu z przypadku 1 wynika, że AdamOsman jestRodzenstwemDla LidiaTroka
3. Z asercji wspólnych wynika, że PawelTroka maMatke LidiaTroka
4. Relacja maMatke jest podzbiorem relacji maRodzica, więc PawelTroka maRodzica LidiaTroka
5. PiotrOsman jest w relacji maRodzica z AdamOsman, dla której odwrotną relacją jest relacja maDziecko, więc AdamOsman jest w relacji maDziecko z PiotrOsman
6. Z asercji z punktu 3.3.1 wynika, że Mezczyzna(PiotrOsman)
7. Z punktu 2.3 wynika, że jeżeli indywiduuum jest w relacji maDziecko z indywiduum typu Mezczyzna to jest ono w relacji maSyna z drugim indywiduum. Co za tym idzie AdamOsman jest w relacji maSyna z PiotrOsman
8. Z punktu 2.3 z reguły „Jest kuzynem dla” wynika, że jeżeli indywiduum jest w relacji maRodzica z Osobą (PawelTroka z LidiaTroka, patrz punkty 3-4) która jest w relacji jestRodzenstwemDla z Osobą (LidiaTroka z AdamOsman, parz punkt 2) która jest w relacji maSyna z Osobą (AdamOsman z PiotrOsman, patrz punkty 5-7), to ostatnia Osoba jest w relacji jestKuzynemDla indywiduum, więc PiotrOsman jestKuzynemDla PawelTroka.