ISIT315 ASSIGNMENT 2 (10%)

Due Date: Week 6 (Marking will be done during the computer lab)

<u>*Instruction*</u>

The objective of this assignment is to create an ontology that describes family relationship such as father, mother, siblings, children, etc. You are required to use Protégé to create the family ontology. You must include individuals in the ontology after classes and properties are defined. The lab exercises given in Week 4 should provide the foundation for this assignment.

You must demonstrate *evidence of inferencing* when reasoning is run in Protégé based on individuals you have included in the ontology.

<u>*Submission and Marking*</u>

Your assignment will be marked during tutorial in Week 6. You are required to submit the ontology file (OWL file) to the assignment dropbox in Moodle by the end of your allocated tutorial classes after your assignment is marked.

Marking Criteria

Criteria		Mark
Design	Complexity of family ontology	40
Basic requirements	Correct and appropriate classes created (no inconsistent class should be created and appropriate subclasses)	10
	Correct and appropriate object properties created (including correct range and domain assigned and appropriate subproperties) and evidence of appropriate use of object property characteristics (e.g. functional, symmetric, transitive, reflexive etc.)	10
	All classes are defined using appropriate property restrictions (i.e. existential and/or universal restrictions) – Defined class	10
	Correct and appropriate datatype properties created	5
	Appropriate individuals added to ontology	5
	Correct inferencing	10
Advanced requirement (additional and independent research are expected)	Evidence of advanced features such as cardinality restriction (see page 73), hasValue restriction (see page 92), enumerated class (see page 93) – all pages are based on Protégé tutorial	5
	Appropriate use of property to define a family relationship	5
	Total	100