**ER Diagram, Class Diagram Representation for Genealogy (Family Domain)**

The following diagram represents the ER Diagram for the Genealogy



Figure 1 ER Diagram Representation

* The ER Diagram consists of a Person entity whose attributes will be gender and name which are represented in the oval shape.
* A person has father, mother and sibling’s relationships. These relationships are represented in the diamond shape.
* A Person can be wife or husband only if he/she is married, so the marriage becomes the relationship for person - husband and person –wife.
* A husband and wife has a children relationship.

The following diagram represents the class diagram for the Genealogy (Family domain)



Figure 2 Class Diagram Representation

* In the above class diagram, Person will be an interface and its member variables will be sName, cGender, iAge, sMaritalStatus.
* A person can be a husband/wife or child based on the Marital status. And the classes Husband, Wife and Child will be inheriting the Person interface.
* Husband and Wife class are associated with Father and Mother Class respectively. And the Father and Mother Class consists of iNumberOfChildren member variable.
* Here the relationship between child and Father/Wife will be a composition, because the father and mother class exists only if the child class exists. There can be no father/mother if there are no children.