**Project 1 Documentation**

**public class Patient { }**//object for storing patient information

//Patient data variables

**private String id = new String();**

**private String pred = new String();**

**private String result = new String();**

**private ArrayList<Double> genes = new ArrayList<Double>();**

//Patient Class Methods

**public Patient() { }**

**public Patient(String i, String p, String r, ArrayList<Double> g){}**

**public Patient(String i, ArrayList<Double> g) {}**

**public String getId() {}**

**public void setId(String id) {}**

**public String getPred() {}**

**public void setPred(String pred) {}**

**public String getResult() {}**

**public void setResult(String result) {}**

**public ArrayList<Double> getGenes() {}**

**public void setGenes(ArrayList<Double> genes) {}**

**public String toString() {}**

**public boolean equals(Patient rhs) {}**

**public interface PatientCollectionADT {}** // Object for storing/manipulating an ArrayList of Patient

//PatientCollection variables

**private ArrayList<Patient> list; //Stores an array of patient objects**

**Iterator<Patient> i; // iterator object for traversing ArrayList<Patient>**

**Scanner sc = null; // Scanner object for reading files**

//PatientCollection Class Methods

**public Patient getPatient (String id);**

// Return the patient with the given id. Return void if the id does not exist in the collection

**public Patient removePatient (String id);**

// Remove and return the Patient with the given id. Return void if the id does not exist.

**public void setResultForPatient (String id, String result);**

// Set the result field for the patient with given id.

**public ArrayList<String> getIds ();**

// Return an ArrayList with all of the collection's patient ids

**public String addPatientsFromFile (String fileName);**

// Method reads all lines from comma separated file named fileName.

**public String toString ();**

// Return a String representation of the collection.

**public class Predictor {}**

//Predicts Patient result via double values in ArrayList<Double> genes

//Predictor Class Methods

**public static String Predict(double p1, double p2) {}**

//Predictor method

**public class Tester {}**

// Class used to test Predictor, PatientCollection, Patient classes

//Tester Class Methods

**public static void main(String[] args) {}**

// main body of program, consisting of several temp variables to test functionality

**UML Diagram**

