**StudentInfoClient**

Read / Write info to disk file - Kiran

Generate unique Student IDs / Verify records are unique - Rahul

Display the info using SWT - Antonio

Code to add / delete Student Records - Robin

Code to Modify student records - Calvin

Interface to link add / delete / modify code to SWT widgets - Daniel

**Sample Code**

**public** **class** StudentInfoClient {

/\*\*

\* **@param** args

\*/

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

// **TODO** Auto-generated method stub

StudentDatabase studentDB = **new** StudentDatabase();

StudentRecord newStudent = **new** StudentRecord("Daniel", "Gopal", "1234");

studentDB.addStudent(newStudent);

newStudent = **new** StudentRecord("Kiran", "Hart", "5678");

studentDB.addStudent(newStudent);

newStudent = **new** StudentRecord("Antonio", "N-J", "2468");

studentDB.addStudent(newStudent);

newStudent = **new** StudentRecord("Robin", "Saran", "1357");

studentDB.addStudent(newStudent);

newStudent = **new** StudentRecord("Rahul", "Tailor", "7899");

studentDB.addStudent(newStudent);

newStudent = **new** StudentRecord("Calvin", "Ye", "1111");

studentDB.addStudent(newStudent);

System.*out*.println("Student DAtabase Printout");

System.*out*.println("=========================");

studentDB.printStudents();

}

}

**public** **class** StudentDatabase {

// The student database uses an Array of Student Records

**private** **int** index;

**private** StudentRecord [] students = **new** StudentRecord[7];

// A constructor method is used when using the class

// to create a student database object

**public** StudentDatabase() {

index = 0;

}

// The class defines methods to access records in the database

**public** **void** addStudent(StudentRecord student ) {

**this**.students[index] = student;

index++;

}

**public** StudentRecord getStudent(**int** index) {

**return** **this**.students[index];

}

**public** **void** printStudents() {

**this**.students[0].printRecord();

**this**.students[1].printRecord();

**this**.students[2].printRecord();

**this**.students[3].printRecord();

**this**.students[4].printRecord();

**this**.students[5].printRecord();

}

}

**public** **class** StudentRecord {

// A student has the following data fields

**private** String firstName;

**private** String lastName;

**private** String idNumber;

// A constructor method is used when using the class

// to create student record objects

**public** StudentRecord(String firstName, String lastName, String idNumber) {

**this**.firstName = firstName;

**this**.lastName = lastName;

**this**.idNumber = idNumber;

}

// A class defines methods to access the private data fields

**public** **void** setFirstName(String firstName) {

**this**.firstName = firstName;

}

**public** **void** setLastName(String lastName) {

**this**.lastName = lastName;;

}

**public** **void** setIdNumber(String idNumber) {

**this**.idNumber = idNumber;

}

**public** String getFirstName() {

**return** **this**.firstName;

}

**public** String getLastName() {

**return** **this**.lastName;

}

**public** String getIdNumber() {

**return** **this**.idNumber;

}

**public** **void** printRecord() {

System.*out*.println("First: " + firstName + ", Last: " + lastName + ", ID: " + idNumber);

}

}