2012

Database Systems

FINAL PROJECT

National Talent Hunt Program/ Foundation Program Database Management System

12/24/2012

USER'S MANUAL

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ABOUT

IBA Karachi is a premier national institution of the country offering undergraduate and graduate degrees in Business Administration, Computer Sciences and Economic & Mathematics. Admission to IBA is based strictly on merit through an entrance test and interview. Under its ongoing National Talent Hunt Program meritorious students from poor families belonging from the less privileged areas of Balochistan, Punjab, Sindh, Khyber Pakhtunkhawa, FATA, and Gilgit Baltistan are awarded financial support to enable them to complete their degrees. As the degree obtained from IBA opens the doors to managerial positions in the leading business houses and multinational companies, education at IBA can become a powerful income equalizing force and upward mobility force

National Talent Hunt Program/ Database Management System (NTHP DBMS) is our final project for the course Database Systems taught by Sir Imran Khan.
We have tried to use all the techniques that we studied during this semester and also previous knowledge from the course Web Application Development was utilized in constructing the Entity Relationship (ER) model.
Our group members Sojhoro, Saba and Nadeem are part of the National Talent Hunt Program (NTHP). They knew exact details of the program which helped in making the database more realistic.

1.0 GENERAL INFORMATION

1.1 System Overview

National Talent Hunt Program/ Database Management System (NTHP DBMS) will manage all applications that will be submitted to Institute of Business Administration (IBA). It will aid insertion, updating, and retrieval of data. Retrieval is in two forms, by writing the query or by choosing an option from the dropdown list

Architecture of the system is two-tier, it is based on the database layer and presentation layer also known as interface

1.2 System Menu

- Insert data
    - Personal Information
    - Academic Information
    - Financial Information
- Update data
- Simple information retrieval
- Complex information retrieval
- Writing queries

2.0 GETTING STARTED

2.1 Insert Data

Applicants' information is captured using these three tabs

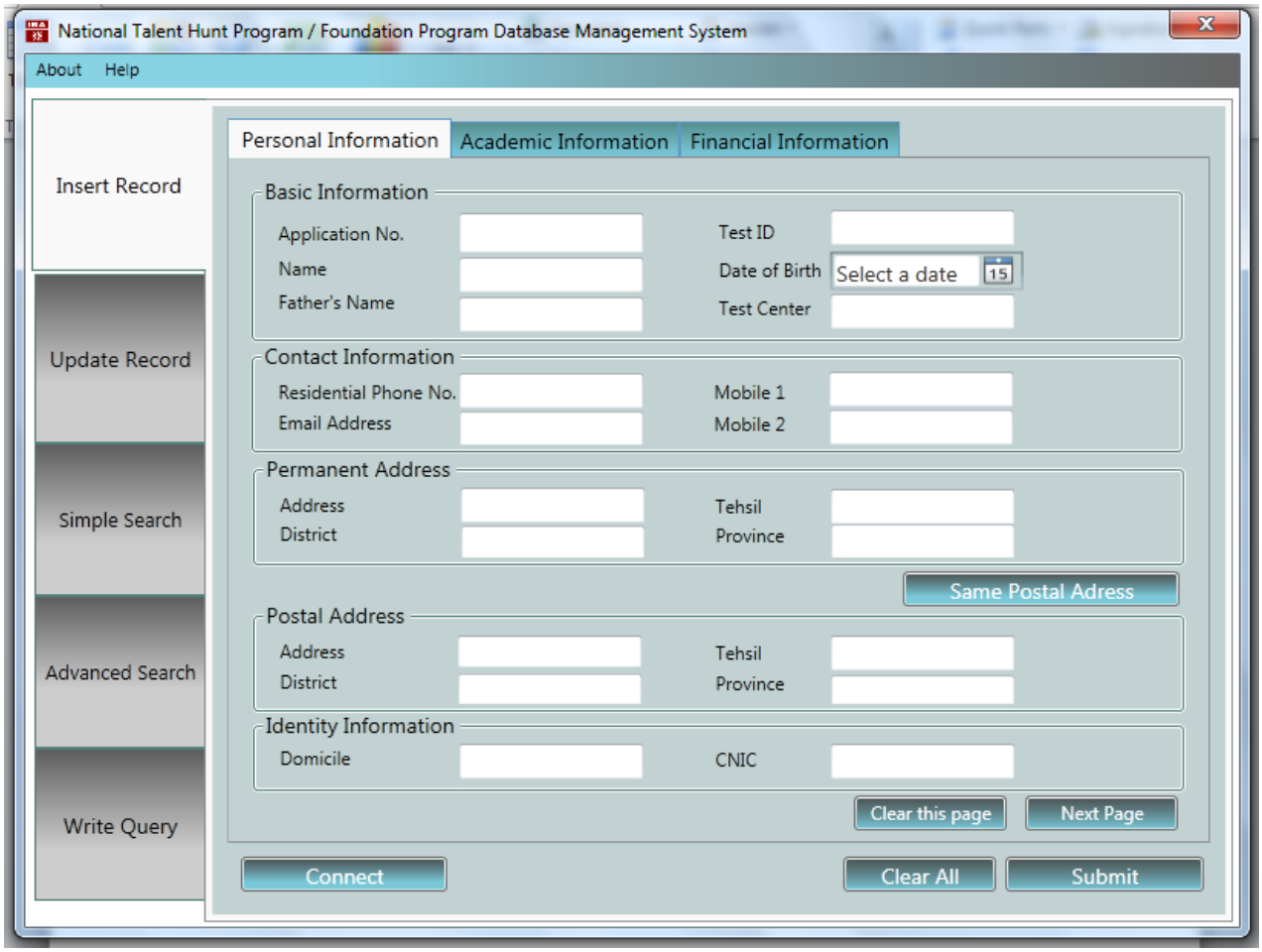
- Personal Information
- Academic Information
- Financial Information

You have to fill all text fields, in order to submit the form. As all fields are filled the form can be processed by clicking on button.

If you have entered incorrect data or you need to erase data for any other reason click on "Clear this page" button. It pops a message to ensure if you want to clear all fields on respective page.

Previous page and Next page helps you to traverse between pages on the Insert Data tab

This is what the Insert Data tab looks like



Update Data

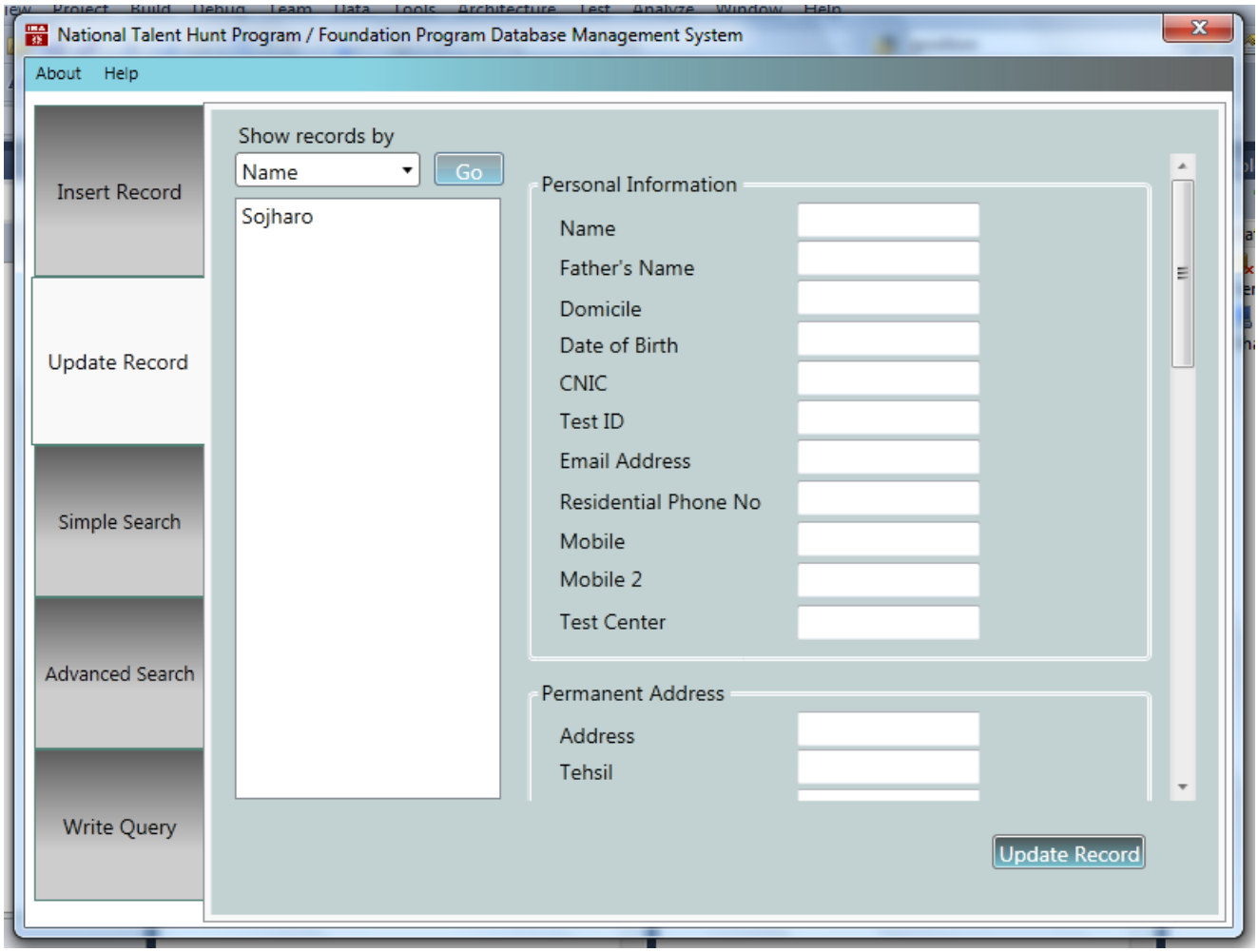
If you want to update an existing candidate or institute record, you can use “Update Data” tab.
This page contains a drop down list, using which you can sort data according to selected option i.e.

1. “App_No” → application number
2. “Name” → candidate name

And click “Go”.

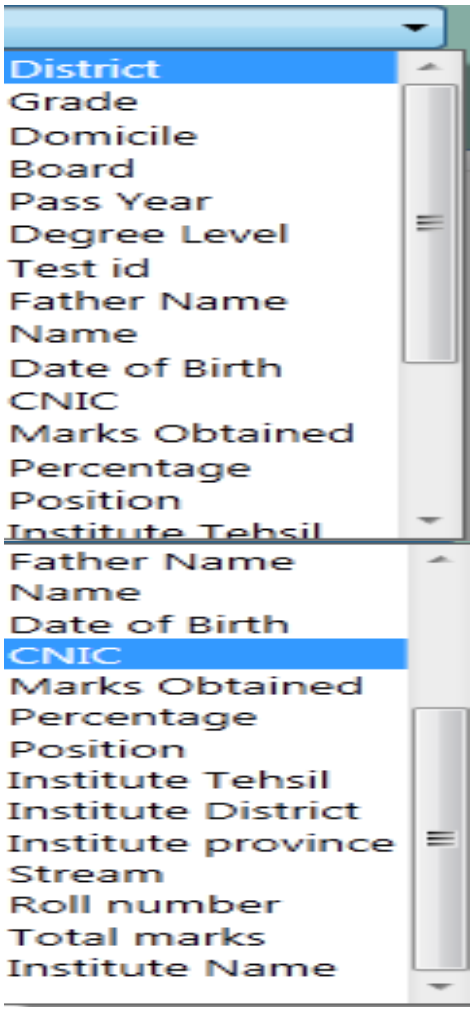
The sorted data is returned in the list underneath “Go” button. When the option is selected from the sorted list the data is retrieved in the respective text fields.
Then press the “Update Record” to save the changes This way Database will be updated and changes will be saved.

This is what the Update Data tab looks like

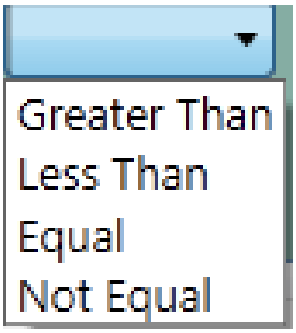


Simple Information Retrieval

Information can be retrieved using this tab. Internally it works as a simple SQL select query. The combo box contains field names. The required field can be the selected from the first combo box option.



The second combo box shows comparison operators.

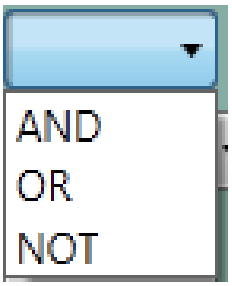


When you type the specified text in the empty text field and click on the “Submit” button the system will display result in the data grid below.

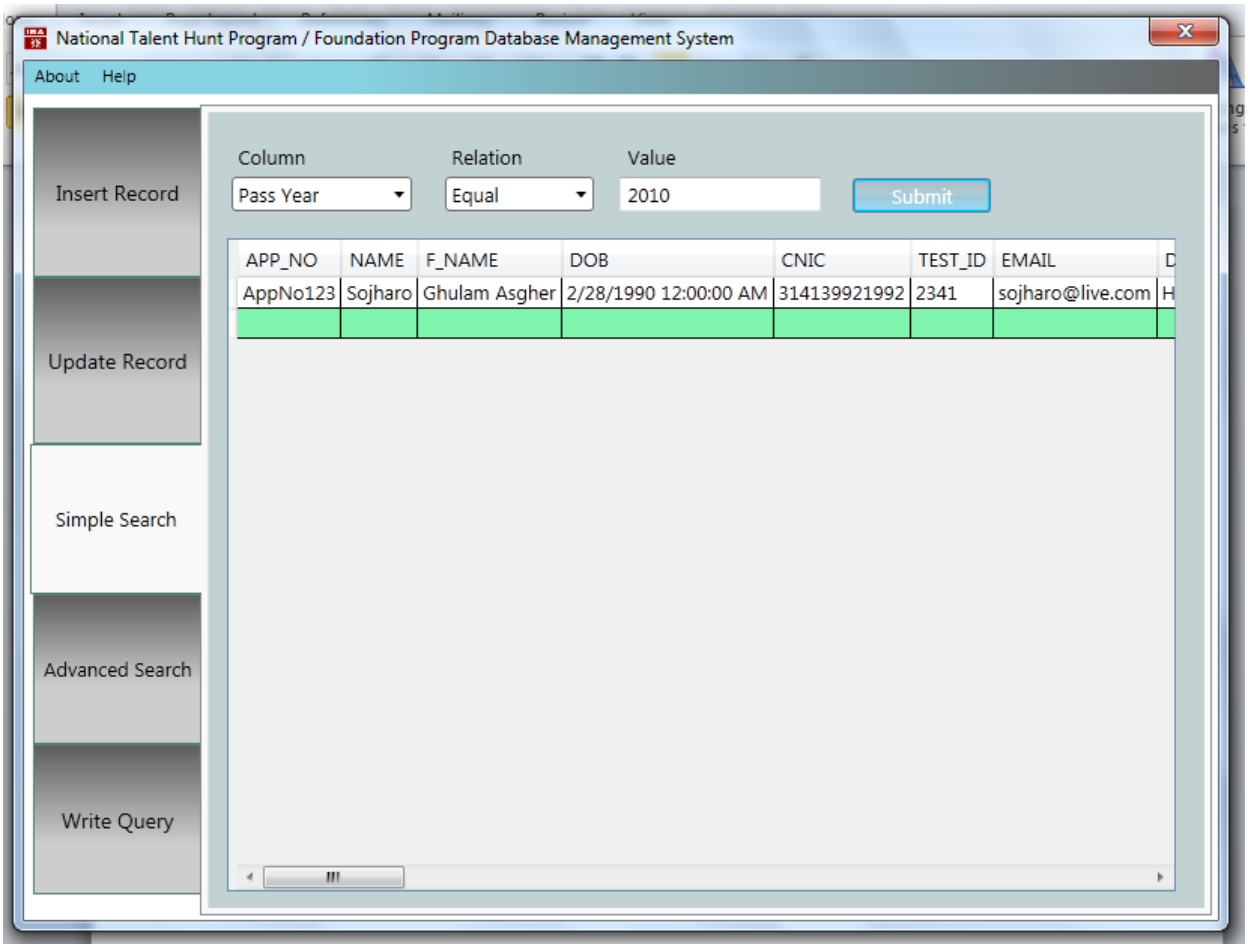
You have to fill all the fields to obtain the correct result.

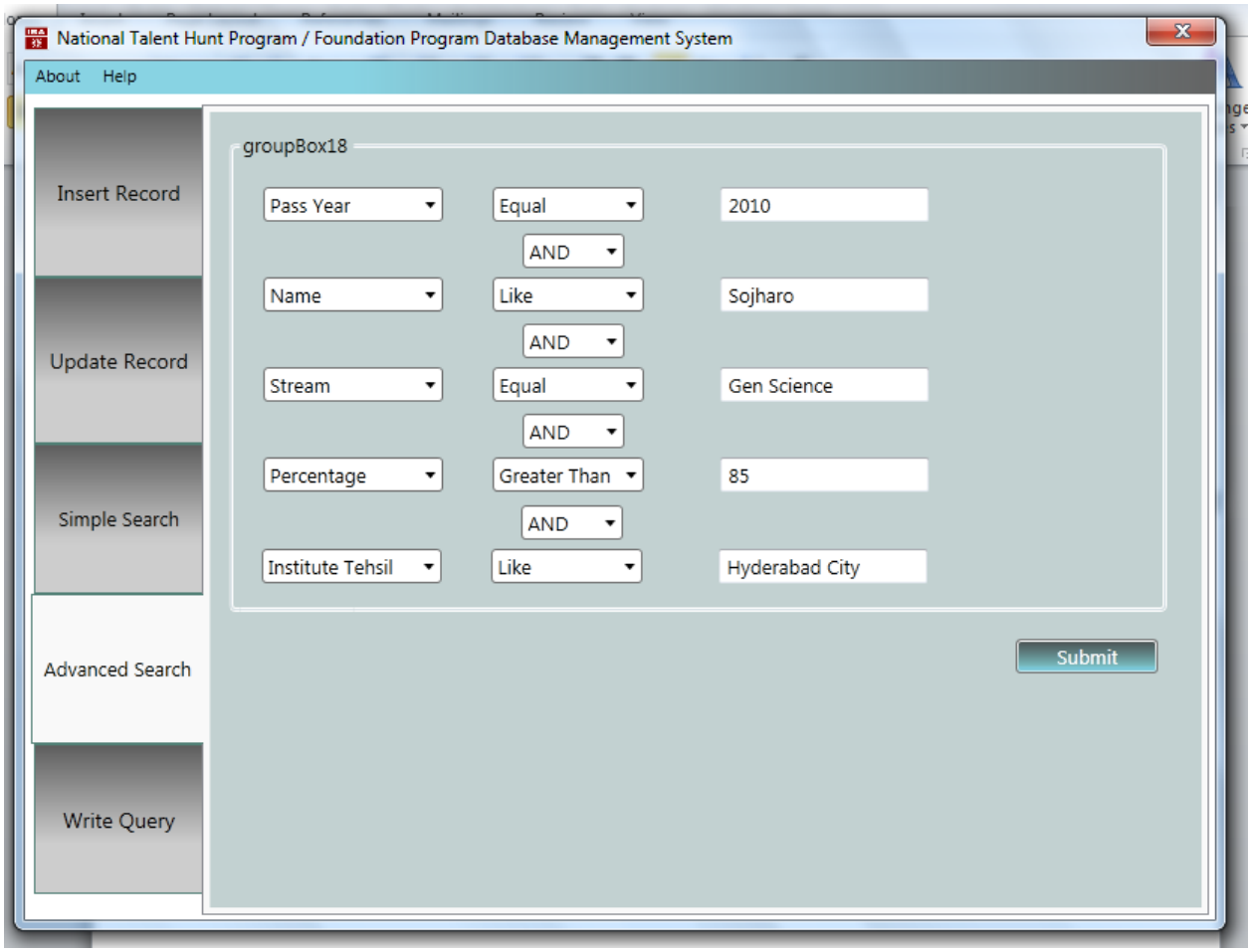
Complex Information Retrieval

This is the same as simple information retrieval with the addition of three logical operators, using which you can test multiple conditions.
In this tab it is not necessary to fill all the text fields.
When you will click on the “Submit” button, a window will pop up displaying the result.

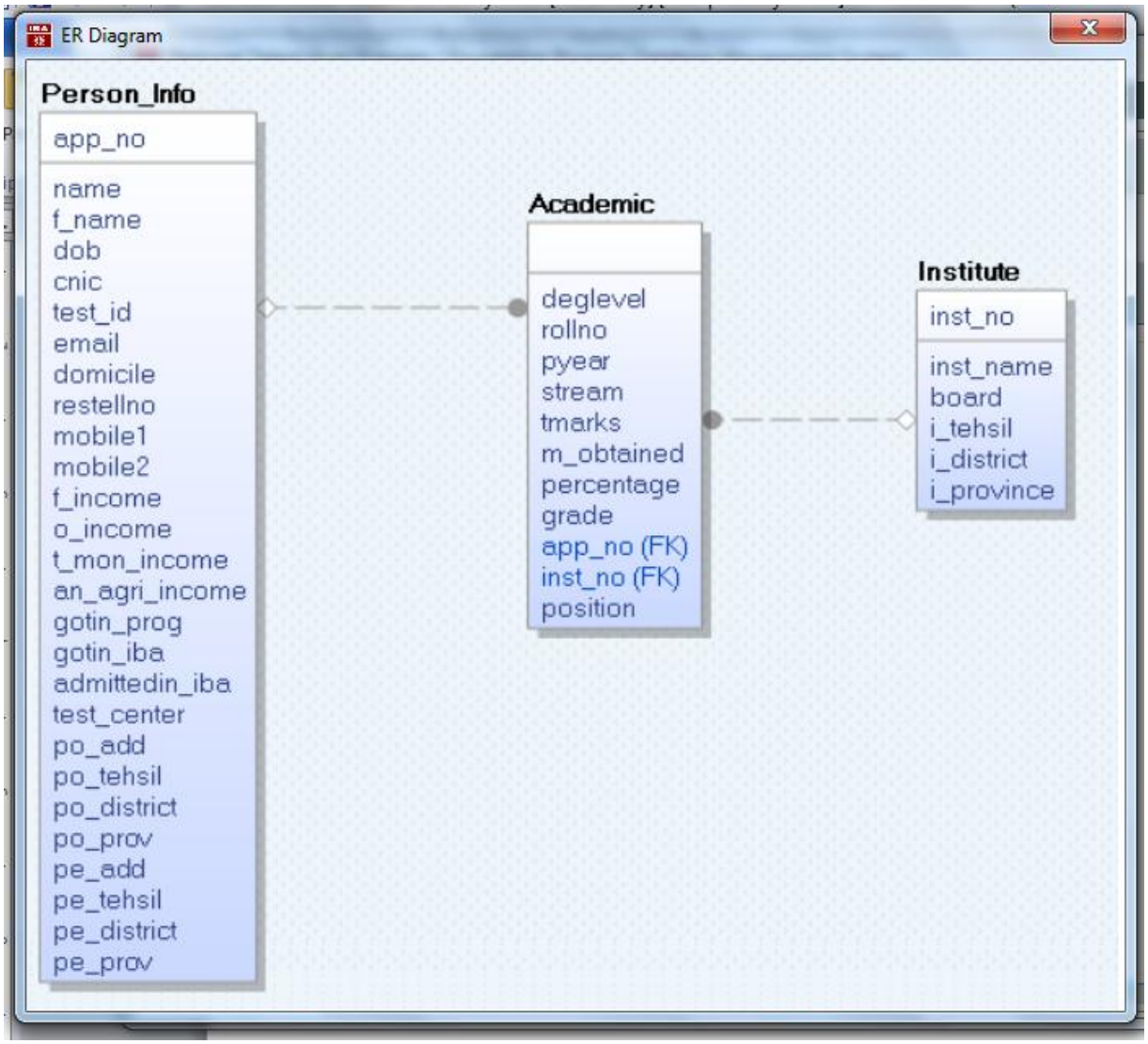


This is what these tabs looks like




National Talent Hunt Program / Foundation Program Database Management System
About
Help
Insert Record
Update Record
Simple Search
Advanced Search
Write Query
groupBox18
Pass Year
Equal
2010
AND
Name
Like
Sojharo
AND
Stream
Equal
Gen Science
AND
Percentage
Greater Than
85
AND
Institute Tehsil
Like
Hyderabad City
Submit

Writing Query

Using this tab you can write a query using SQL and test it. You need to have proper understanding on the language in order to obtain accurate result.
The system has to be connected to oracle. When you will click on the “Submit” button after typing the query, the result will be displayed in the data grid below.

For reference purpose, you are provided with the Entity Relationship (ER) Diagram on the model to that you can use it to examine the relationships between entities