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| P1 442 registrar SQL Doc |
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## P1 442 registrar Database Project

|  |  |
| --- | --- |
| Name | Description |
| [P1 442 registrar](#t1) | MySQL database for Registrar Project (2) |
| URL | **mysql://b9b915bc3dc7f9:61f0ac33@us-cdbr-east-04.cleardb.com/heroku\_8ca18abb0d587c6?reconnect=true** |
| User | **b9b915bc3dc7f9** |
| Password | **61f0ac33** |

### P1 442 registrar Database ERD/SCHEMA/TABLES

See Also: [Tables](#t2) & [Procedures](#t3)

#### Tables: P1 442 registrar

Tables

| Name | Description |
| --- | --- |
| [course](#t4) | Contains course catalog |
| [registrar](#t5) | Contains registrar employees |
| [student](#t6) | Contains students |
| [student\_course](#t7) | Contains enrolled student courses |
| [student\_term](#t8) | Contains various enrolled student terms |
| [studentorder](#t9) | Contains various student orders |
| [studentorderdetails](#t10) | Contains various student order details to normalize data and break many-to-many relationship between courses and orders |
| [subject](#t11) | Contains subjects for various courses |
| [teacher](#t12) | Contains teacher employees |
| [user](#t13) | Super-class user |

Table: course

Columns

| Name | Type | Description |
| --- | --- | --- |
| CourseID | varchar(50) | Primary key course id |
| teacherIDb | varchar(50) | Teacher user id |
| subjectIDb | varchar(10) | Subject id |
| termID | int | Term id (Fall/Spring or 1-or-2) |
| startDate | date | Course start date |
| endDate | date | Course end date |
| credit | int | Number of credits per course |
| time | varchar(50) | Meeting time of course |

Indexes

| Name | Type | Columns | Description |
| --- | --- | --- | --- |
| PRIMARY | Unique | CourseID | Primary key course id |
| subjectID\_idx | Non-unique | subjectIDb | Join to Subject table |
| teacherID\_idx | Non-unique | teacherIDb | Join to Teacher table |

Table: registrar

Columns

| Name | Type | Description |
| --- | --- | --- |
| regID | varchar(50) | Primary key registrar employee id |
| userIDc | varchar(50) | User id |

Indexes

| Name | Type | Columns | Description |
| --- | --- | --- | --- |
| Registrar\_User1\_idx | Non-unique | userIDc | Join to User table |
| PRIMARY | Unique | regID | Primary key registrar employee id |

Table: student

Columns

| Name | Type | Description |
| --- | --- | --- |
| stID | varchar(50) | Primary key student id |
| userIDb | varchar(50) | User id |
| department | varchar(50) | Dept/School |
| Immunization | bit | Is immunized? Yes/No or 1-or-0 |
| AdmissionDate | datetime | Admit date |
| PayMethod | varchar(50) | Credit card or checking account string |

Indexes

| Name | Type | Columns | Description |
| --- | --- | --- | --- |
| PRIMARY | Unique | stID | Primary key student id |
| userID\_idx | Non-unique | userIDb | Join to User table |

Table: student\_course

Columns

| Name | Type | Description |
| --- | --- | --- |
| stIDb | varchar(50) | Primary key student id |
| courseID | varchar(45) | Primary key course id |
| midterm | float | Midterm course grade |
| final | float | Final course grade |
| total | float | Total course grade |
| GPA | char(2) | Course GPA |

Indexes

| Name | Type | Columns | Description |
| --- | --- | --- | --- |
| courseID\_idx | Non-unique | courseID | Join to Course table |
| PRIMARY | Unique | stIDb, courseID | Primary keys student id and course id |

Table: student\_term

Columns

| Name | Type | Description |
| --- | --- | --- |
| stIDe | varchar(50) | Primary key student id |
| term | varchar(45) | Primary key term id |
| registerDate | date | Registration date |
| semester | int | Semester (Fall/Spring or 1-or-0) |
| NumOfCredits | int | Total number of credits of all courses in term |
| AmountDue | float | Total amount of money due to school |
| AmountPaid | float | Total amount paid by student to school |
| DueDate | date | Due date of student payment |
| GPA | char(2) | Total GPA of term |

Indexes

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Columns | Description |
| PRIMARY | Unique | stIDe, term | Primary keys student id and term id |

Table: studentorder

Columns

| Name | Type | Description |
| --- | --- | --- |
| OrderID | varchar(50) | Primary key order id |
| stIDd | varchar(50) | Primary key student id |
| OrderState | varchar(250) | Order state (open,closed, cancelled) |
| term | varchar(45) | Term |

Indexes

| Name | Type | Columns | Description |
| --- | --- | --- | --- |
| PRIMARY | Unique | OrderID, stIDd | Primary keys order id and student id |
| stID\_idx | Non-unique | stIDd | Join to Student table |
| term\_idx | Non-unique | term | Join to Student\_term table |

Table: studentorderdetails

Columns

| Name | Type | Description |
| --- | --- | --- |
| stIDc | varchar(45) | Primary key student id |
| subOrderID | varchar(45) | Primary Sub-order id |
| CourseIDb | varchar(50) | Course id |
| Credits | int | Total Credits of course order |
| IsApproved | tinyint | Is approved to enroll in course? |
| CourseDescription | varchar(250) | Description of course |
| OrderID | varchar(50) | Overall order id |

Indexes

| Name | Type | Columns | Description |
| --- | --- | --- | --- |
| OrderID\_idx | Non-unique | OrderID | Join to StudentOrder table |
| PRIMARY | Unique | stIDc, subOrderID | Primary keys student id and sub-order id |

Table: subject

Columns

| Name | Type | Description |
| --- | --- | --- |
| subjectID | varchar(10) | Subject id |
| name | varbinary(250) | Name of subject |
| department | varchar(50) | Department name where subject resides |

Indexes

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Columns | Description |
| PRIMARY | Unique | subjectID | Primary key subject id |

Table: teacher

Columns

| Name | Type | Description |
| --- | --- | --- |
| teacherID | varchar(50) | Teacher id |
| userIDd | varchar(50) | User id |
| eduLevel | varchar(50) | Highest level of education |
| hireDate | varchar(10) | Hire date |
| Faculty | varchar(50) | Faculty |

Indexes

| Name | Type | Columns | Description |
| --- | --- | --- | --- |
| PRIMARY | Unique | teacherID | Primary key teacher id |
| userID\_idx | Non-unique | userIDd | Join to User table |

Table: user

Columns

| Name | Type | Description |
| --- | --- | --- |
| userID | varchar(50) | User id |
| UserName | varchar(250) | User name |
| FirstName | varchar(250) | First name |
| LastName | varchar(250) | Last name |
| Phone | varchar(50) | Phone number |
| Email | varchar(250) | Email address |
| BirthDate | datetime | DOB |
| SSN | int | Social security number |
| Gender | char(1) | Male/Female |
| Address | varchar(250) | Address/Residence |
| IsApproved | bit | IsAprroved? (for use or enrollment) |
| Role | varchar(50) | Role |

Indexes

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Columns | Description |
| PRIMARY | Unique | userID | Primary key user id |

#### Procedures: P1 442 registrar

Procedures

|  |  |
| --- | --- |
| Name | Description |
| [GetStudent(varchar)](#t14) | Returns student info like name and address |
| [GetStudentEnroll(varchar)](#t14) | Returns student info like enrollment |
| [GetStudentOrder(varchar)](#t14) | Returns student info like order details |
| [GetTeacher(varchar)](#t14) | Returns teacher info like name and address |
| [GetTeacherEnroll(varchar)](#t14) | Returns student info like enrollment of classes taught by professor |
| [AddStudent(varchar)](#t14) | Inserts new student into database |
| [DeleteStudent(varchar)](#t14) | Deletes student from database |
| [AddTeacher(varchar)](#t14) | Inserts new teacher into database |
| [DeleteTeacher(varchar)](#t14) | Deletes teacher from database |
| [GetCourseCatalog(varchar)](#t14) | Returns list of courses |
| [AddCourse(varchar)](#t14) | Inserts new course into database |
| [DeleteCourse(varchar)](#t14) | Deletes course from database |
| Insert\_Drop\_UpdateTables | Inserts, drops or updates all tables |

Procedure: GetStudent(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_stiD | varchar | Input | Student id |

Procedure: GetStudentEnroll(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_stiD | varchar | Input | Student id |

Procedure: GetStudentOrder(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_stiD | varchar | Input | Student id |
| \_OrderID | varchar | Input | Order id |

Procedure: GetTeacher(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_teacherID | varchar | Input | Teacher id |

Procedure: GetTeacherEnroll(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_teacherID | varchar | Input | Teacher id |

Procedure: AddStudent(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_stiD | varchar | Input | Student id |

Procedure: DeleteStudent(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_stiD | varchar | Input | Student id |

Procedure: AddTeacher(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_teacherID | varchar | Input | Teacher id |

Procedure: DeleteTeacher(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_teacherID | varchar | Input | Teacher id |

Procedure: GetCourseCatalog(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_regID | varchar | Input | Registrar id |

Procedure: AddCourse(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_regID | varchar | Input | Student id |
| \_courseID | varchar | Input | Course id |

Procedure: DeleteCourse(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_regID | varchar | Input | Student id |
| \_courseID | varchar | Input | Course id |

Procedure: Insert\_Drop\_UpdateTables(varchar)

Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Direction | Description |
| \_tableName | varchar | Input | Table name |