Career Coaching Services Group 8

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Project Summary

The proposed project is for a company that provides career coaching services to help customers find right jobs. When applying for jobs, candidates with a strong background may fail unexpectedly, if they cannot prove to recruiters that they are good fits appropriately. Those candidates usually lack experiences. The career coaching services will bring industry expertise to help them. This project would create an online portal to allow users obtain access to and manage relevant information.

In this case, career coaching provides four main kinds of services:

- 1) Career coaching courses (1 to 1 coaching): job search plan, resume revision, cover letter review, networking techniques, LinkedIn profile editing, interview preparation (behavioral questions), interview preparation (technical questions), mock interview (behavioral), mock interview (technical)
- 2) Skills enhancement online courses (multiple students per session, large courses): Data analysis, Finance, Case interview, Consulting, Excel, PPT
- 3) Project online courses (multiple students per session, small courses): Data, Finance, Consulting, Accounting
- 4) Industry expertise speeches: Data, Finance, Accounting, Consulting, Marketing

The services involve customers, coaching course consultants, instructors, and teaching assistants.

The assumptions for the proposed system are that for coaching courses, each student is paired with only one instructor per service; for coaching courses, each student can choose only one job search plan per service (for example: accounting industry plan); for skill courses, one course session has one instructor, one teaching assistant, and at most 50 students; for project courses, one course session has two instructors, one teaching assistant, and at most 15 students; for speeches, one session has one speaker, one teaching assistant, and at most 80 students.

Entity and Attribute Glossary

Entities and their Attributes:

Entity Name: Student				
Description: The customer who uses the services				
	Attribute Name	Field Type	Null/Not Null	Description
a.	Student_Id	VARCHAR(10)	NOT NULL	Primary key/ Unique identifier of the
				student
b.	Student_Lname	VARCHAR(30)	NOT NULL	Last name of student
c.	Student_Fname	VARCHAR(30)	NOT NULL	First name of student
d.	Student_Email	VARCHAR(50)	NOT NULL	Email of student
e.	Student_Phone	VARCHAR(15)	NOT NULL	Phone number of students
f.	Student_Major	VARCHAR(30)	NOT NULL	Major of student
g.	Student_Edu	VARCHAR(15)	NOT NULL	Current education level of student; can be
				'Bachelors', 'Masters', 'MBA', 'PhD' or
1.	Ct. 1 C.1 1	VADCIIAD((0)	NOTMUL	'Graduated'
<u>h.</u>	Student_School	VARCHAR(60)	NOT NULL	School that student study at currently
i.	Student_SchoolYr	NUMERIC(1)	NULL	School year of a student; if the student is
	C1tt I.1	VADCIIAD(10)	NOTAHUI	'Graduated', then this will be NULL
j.	Consultant_Id	VARCHAR(10)	NOT NULL	Foreign key; each student must have one
			N C	consultant
		Description: The	Name: Service b	eing stored
	Attribute Name	Field Type	Null/Not Null	Description
я	Service Id	VARCHAR(10)	NOT NULL	Primary key/ Unique identifier of the
.	Service_ia	Vinceni in (10)	TOTIVELL	rimary key omque identifier of the
				Service
b.	Payment_Id	VARCHAR(10)	NOT NULL	Service Foreign Key; One payment can have
b.	Payment_Id	VARCHAR(10)	NOT NULL	
b.	Payment_Id	VARCHAR(10)	NOT NULL	Foreign Key; One payment can have
b.	Payment_Id	VARCHAR(10)	NOT NULL	Foreign Key; One payment can have multiple services, so having payment_id
	Payment_Id Service_Name	VARCHAR(10) VARCHAR(30)	NOT NULL	Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is
	· _	. ,		Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased.
	· _	. ,		Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service
	· _	. ,		Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service types, and each type has different services
	· _	. ,		Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service types, and each type has different services that can be identified by service names.
	· _	. ,		Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service types, and each type has different services that can be identified by service names. For example, for the service type "career coaching", the service names can be "resume revision", "cover letter review",
	· _	. ,	NOT NULL	Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service types, and each type has different services that can be identified by service names. For example, for the service type "career coaching", the service names can be "resume revision", "cover letter review", or "mock interview"
c.	· _	. ,		Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service types, and each type has different services that can be identified by service names. For example, for the service type "career coaching", the service names can be "resume revision", "cover letter review", or "mock interview" Type of service; can be career coaching
c.	Service_Name	VARCHAR(30)	NOT NULL	Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service types, and each type has different services that can be identified by service names. For example, for the service type "career coaching", the service names can be "resume revision", "cover letter review", or "mock interview" Type of service; can be career coaching courses, skill enhancement online courses,
c.	Service_Name	VARCHAR(30)	NOT NULL	Foreign Key; One payment can have multiple services, so having payment_id here can help identify which payment is related to this service purchased. Name of service; there are four service types, and each type has different services that can be identified by service names. For example, for the service type "career coaching", the service names can be "resume revision", "cover letter review", or "mock interview" Type of service; can be career coaching

e. Service_Progress	VARCHAR(30)	NOT NULL	The progress this service; can be "not
			started", "in progress" or "completed"
f. Service_Startdate	DATETIME	NULL	Start date of service
g. Service_Enddate	DATETIME	NULL	End date of service
h. Service_Price	DECIMAL(10,2)	NOT NULL	Price of the single service

Entity Name: Consultant

Description: Consultant helps students find and pair mentors and schedule coach session; he can see information of students and mentors and connect them. Consultant works for this career coaching service company.

Attribute Name	Field Type	Null/Not Null	Description
a. Consultant_Id	VARCHAR(10)	NOT NULL	Primary key/ Unique identifier for the
			consultant
b. Consultant_Lname	VARCHAR(30)	NOT NULL	Last name of consultant
c. Consultant_Fname	VARCHAR(30)	NOT NULL	First name of consultant
d. Consultant_Email	VARCHAR(50)	NOT NULL	Email of consultant
e. Consultant_Phone	VARCHAR(15)	NOT NULL	Phone number of consultant
f. Consultant_Salary	DECIMAL(10,2)	NOT NULL	Monthly salary

Entity Name: Teaching Assistant

Description: Teaching Assistant helps students and assists instructors in the services. They work for this career coaching service company.

Attribute Name	Field Type	Null/Not Null	Description
a. TA_Id	VARCHAR(10)	NOT NULL	Primary key/ Unique identifier for the TA
b. TA_Lname	VARCHAR(30)	NOT NULL	Last name of TA
c. TA_Fname	VARCHAR(30)	NOT NULL	First name of TA
d. TA_Email	VARCHAR(50)	NOT NULL	Email of TA
e. TA_Phone	VARCHAR(15)	NOT NULL	Phone number of TA
f. TA_Edu	VARCHAR(15)	NOT NULL	Highest education level of TA
g. TA_School	VARCHAR(60)	NOT NULL	School with highest education level of TA
h. TA_Major	VARCHAR(30)	NOT NULL	Major of highest education level
i. TA_HourlySalary	DECIMAL(10,2)	NOT NULL	Hourly Salary of TA

Entity Name: Instructor

Description: Instructors teach students in all four types of services. They teach in the career coaching service company as part-time, and they have their own jobs at other companies.

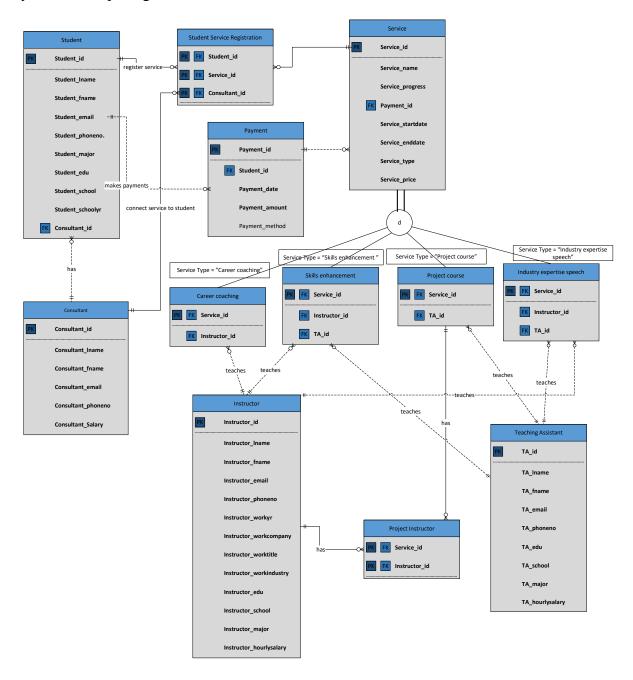
	1 7	<u>, , , , , , , , , , , , , , , , , , , </u>		1
	Attribute Name	Field Type	Null/Not Null	Description
a.	Instructor_Id	VARCHAR(10)	NOT NULL	Primary key/ Unique identifier for the
				instructor
b.	Instructor_Lname	VARCHAR(30)	NOT NULL	Last name of instructor
c.	Instructor_Fname	VARCHAR(30)	NOT NULL	First name of instructor
d.	Instructor_Email	VARCHAR(50)	NOT NULL	Email of insturctor
e.	Instructor_Phone	VARCHAR(15)	NOT NULL	Phone number of instructor
f.	Instructor_WorkYr	NUMERIC(2)	NOT NULL	Number of years worked of instructor
g.	Instructor_WorkCompany	VARCHAR(20)	NOT NULL	Current Company

h. Instructor_WorkTitle	VARCHAR(20)	NOT NULL	Current Professional Title		
i. Instructor_WorkIndustry	VARCHAR(20)	NOT NULL	Industry that instructor work in		
j. Instructor_Edu	VARCHAR(15)	NOT NULL	Highest education level of instructor; can be 'High School', 'Bachelors', 'Masters', 'MBA' or 'PhD'		
k. Instructor_School	VARCHAR(60)	NOT NULL	School with highest education level		
1. Instructor_Major	VARCHAR(30)	NOT NULL	Major with highest education level		
m. Instructor HourlySalary	DECIMAL(10,2)	NOT NULL	Hourly Salary		
Entity Name: Payment					
	Description: Pa	yment made by c	eustomers		
Attribute Name	Field Type	Null/Not Null	Description		
a. Payment_Id	VARCHAR(10)	NOT NULL	Primary key/ Unique identifier for the payment		
b. Student Id	VARCHAR(10)	NOT NULL	Foreign key		
c. Payment Date	DATETIME	NOT NULL	Date of payment		
d. Payment Amount	DECIMAL(10,2)	NOT NULL	Amount of payment		
e. Payment_Method	VARCHAR(30)	NULL	Method of payment; can be cash, credit		
c. rayment_weined	VIII(30)	IVOLL	card, debit card and e-check		
	Entity Name: Stu	ıdent Service Re			
Description: Registration			student register and the consultant who		
Description. Registration		services to this st			
Attribute Name	Field Type	Null/Not Null	Description		
a. Student Id	VARCHAR(10)	NOT NULL	Primary key/ Foreign key		
	` '	NOTABLE			
b. Service Id	VARCHAR(10)	NOT NULL	Primary key/ Foreign key		
b. Service_Id c. Consultant_Id	VARCHAR(10) VARCHAR(10)	NOT NULL	Primary key/ Foreign key Primary key/ Foreign key		
_	VARCHAR(10)		Primary key/ Foreign key		
c. Consultant_Id Description: According to on	VARCHAR(10) Entity Nam ar business rules, on	NOT NULL e: Project Instru e project course 1	Primary key/ Foreign key actor may have two instructors. So, we create an		
c. Consultant_Id Description: According to on	VARCHAR(10) Entity Nam ar business rules, on instructor to represe	NOT NULL e: Project Instru e project course 1	Primary key/ Foreign key		
c. Consultant_Id Description: According to or entity called Project	VARCHAR(10) Entity Nam ar business rules, on	NOT NULL e: Project Instrue e project course int the relationshi	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses		
c. Consultant_Id Description: According to or entity called Project Attribute Name	VARCHAR(10) Entity Nam ar business rules, on instructor to represe Field Type	NOT NULL e: Project Instrue e project course int the relationshi Null/Not Null	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses Description		
c. Consultant_Id Description: According to ore entity called Project Attribute Name a. Service_Id	VARCHAR(10) Entity Name of the Property of th	NOT NULL e: Project Instrue e project course int the relationshi Null/Not Null NOT NULL	Primary key/ Foreign key actor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key		
c. Consultant_Id Description: According to ore entity called Project Attribute Name a. Service_Id	VARCHAR(10) Entity Name of the surface of the surf	NOT NULL e: Project Instrue e project course int the relationshi Null/Not Null NOT NULL NOT NULL	Primary key/ Foreign key actor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service		
c. Consultant_Id Description: According to ore entity called Project Attribute Name a. Service_Id	VARCHAR(10) Entity Name of the Property of th	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of	Primary key/ Foreign key actor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing		
c. Consultant_Id Description: According to ore entity called Project Attribute Name a. Service_Id	VARCHAR(10) Entity Name of the Property of th	NOT NULL e: Project Instrue e project course int the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac	Primary key/ Foreign key actor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing		
c. Consultant_Id Description: According to or entity called Project Attribute Name a. Service_Id b. Instructor_Id	VARCHAR(10) Entity Name of the process of the proc	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac : A subtype of se	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing revice		
c. Consultant_Id Description: According to ore entity called Project Attribute Name a. Service_Id b. Instructor_Id Attribute Name	VARCHAR(10) Entity Name of the Property of th	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac : A subtype of se Null/Not Null	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing ervice Description		
c. Consultant_Id Description: According to or entity called Project Attribute Name a. Service_Id b. Instructor_Id Attribute Name a. Service_Id	VARCHAR(10) Entity Name of the business rules, on instructor to represe Field Type VARCHAR(10) VARCHAR(10) The following Entity Name of the business rules, on instructor to represe of the business rules, or instructor	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac : A subtype of se Null/Not Null NOT NULL NOT NULL NOT NULL SE Skills Enhance	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing rvice Description Primary key/ Foreign key Foreign key Foreign key Foreign key Foreign key		
c. Consultant_Id Description: According to or entity called Project Attribute Name a. Service_Id b. Instructor_Id Attribute Name a. Service_Id	VARCHAR(10) Entity Name of the business rules, on instructor to represe Field Type VARCHAR(10) VARCHAR(10) The following Entity Name of the business rules, on instructor to represe of the business rules, or instructor	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac : A subtype of se Null/Not Null NOT NULL NOT NULL	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing rvice Description Primary key/ Foreign key Foreign key Foreign key Foreign key Foreign key		
c. Consultant_Id Description: According to or entity called Project Attribute Name a. Service_Id b. Instructor_Id Attribute Name a. Service_Id	VARCHAR(10) Entity Name of the structor of th	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac : A subtype of se Null/Not Null NOT NULL NOT NULL SE Skills Enhance : A subtype of se Null/Not Null	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing rvice Description Primary key/ Foreign key Foreign key Foreign key Ement rvice Description		
c. Consultant_Id Description: According to or entity called Project Attribute Name a. Service_Id b. Instructor_Id Attribute Name a. Service_Id b. Instructor_Id	VARCHAR(10) Entity Name of the structor of th	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac : A subtype of se Null/Not Null NOT NULL NOT NULL : Skills Enhance : A subtype of se Null/Not Null NOT NULL	Primary key/ Foreign key actor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service bing rvice Description Primary key/ Foreign key Foreign key Ement rvice Description Primary key/ Foreign key Primary key/ Foreign key Primary key/ Foreign key Primary key/ Foreign key		
c. Consultant_Id Description: According to ore entity called Project Attribute Name a. Service_Id b. Instructor_Id Attribute Name a. Service_Id b. Instructor_Id	VARCHAR(10) Entity Name of the structor of th	NOT NULL e: Project Instrue e project course in nt the relationshi Null/Not Null NOT NULL NOT NULL are subtypes of ne: Career Coac : A subtype of se Null/Not Null NOT NULL NOT NULL SE Skills Enhance : A subtype of se Null/Not Null	Primary key/ Foreign key uctor may have two instructors. So, we create an p between instructors and courses Description Primary Key/ Foreign key Primary Key/ Foreign key Service hing rvice Description Primary key/ Foreign key Foreign key Foreign key Ement rvice Description		

Entity Name: Project Course					
Description: A subtype of service					
Attribute Name	Field Type	Null/Not Null	Description		
a. Service_Id	VARCHAR(10)	NOT NULL	Primary key/ Foreign key		
b. TA_Id	VARCHAR(10)	NOT NULL	Foreign key		
Entity Name: <u>Industry Expertise Speech</u>					
Description: A subtype of service					
Attribute Name Field Type Null/Not Null Description					
a. Service_Id	VARCHAR(10)	NOT NULL	Primary key/ Foreign key		
b. Instructor_Id	VARCHAR(10)	NOT NULL	Foreign key		
c. TA_Id	VARCHAR(10)	NOT NULL	Foreign key		

Relational Data Model

Entity-Relationship Diagram:



Database System Infrastructure

We use the client-server model that uses SQL Server as the database system and ACCESS as the interface tool.

We design 5 user types – student, consultant, instructor, teaching assistant, and admin. They have different access to the different forms we create for them. In those forms, they view different things and have different editing permissions.

Creation of Tables

1. Consultant:

```
CREATE TABLE Consultant(
Consultant_Id VARCHAR(10) PRIMARY KEY NOT NULL,
Consultant Lname VARCHAR(30) NOT NULL,
Consultant_Fname VARCHAR(30) NOT NULL,
Consultant_Email VARCHAR(50) NOT NULL,
Consultant Phone VARCHAR(15) NOT NULL,
Consultant_Salary DECIMAL(10,2) NOT NULL
SELECT*FROM Consultant
d CREATE TABLE Consultant(
 Consultant_Id VARCHAR(10) PRIMARY KEY NOT NULL,
 Consultant_Lname VARCHAR(30) NOT NULL,
 Consultant_Fname VARCHAR(30) NOT NULL,
 Consultant_Email VARCHAR(50) NOT NULL,
 Consultant_Phone VARCHAR(15) NOT NULL,
 Consultant_Salary DECIMAL(10,2) NOT NULL
 SELECT*FROM Consultant
sults 🔓 Messages
 Consultant_Id Consultant_Lna... Consultant_Fna... Consultant_Em... Consultant_Pho... Consultant_Sala...
```

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2. Instructor:

```
CREATE TABLE Instructor(
Instructor_Id VARCHAR(10) PRIMARY KEY NOT NULL,
Instructor_Lname VARCHAR(30) NOT NULL,
Instructor_Fname VARCHAR(30) NOT NULL,
Instructor_Email VARCHAR(50) NOT NULL,
Instructor_Phone VARCHAR(15) NOT NULL,
Instructor_WorkYr NUMERIC(2) NOT NULL,
Instructor_WorkCompany VARCHAR(20) NOT NULL,
```

```
Instructor_WorkTitle VARCHAR(20) NOT NULL,
Instructor WorkIndustry VARCHAR(20) NOT NULL,
Instructor Edu VARCHAR(15) NOT NULL CHECK(Instructor Edu IN ('High
School', 'Bachelors', 'Masters', 'MBA', 'PhD')),
Instructor School VARCHAR(60) NOT NULL,
Instructor_Major VARCHAR(30) NOT NULL,
Instructor_HourlySalary DECIMAL(10,2) NOT NULL
SELECT*FROM Instructor
CREATE TABLE Instructor(
 Instructor_Lname VARCHAR(30) NOT NULL,
 Instructor_Fname VARCHAR(30) NOT NULL,
 Instructor_Email VARCHAR(50) NOT NULL,
 Instructor_Phone VARCHAR(15) NOT NULL,
 Instructor_WorkYr NUMERIC(2) NOT NULL,
 Instructor_WorkCompany VARCHAR(20) NOT NULL,
 Instructor_WorkTitle VARCHAR(20) NOT NULL,
 Instructor\_WorkIndustry\ VARCHAR(20)\ NOT\ NULL,
 Instructor_Edu VARCHAR(15) NOT NULL CHECK(Instructor_Edu IN ('High School', 'Bachelors', 'Masters', 'MBA', 'PhD')),
 Instructor_School VARCHAR(60) NOT NULL,
 Instructor_Major VARCHAR(30) NOT NULL,
 Instructor_HourlySalary DECIMAL(10,2) NOT NULL
 SELECT*FROM Instructor
esults 🔓 Messages
 Instructor_Id Instructor_L... Instructor_F... Instructor_E... Instructor_E... Instructor_Ph... Instructor_Work. Instructor_WorkT... Instructor_WorkI... Instructor_WorkI... Instructor_E... Instructor_S... Instructor_S...
uery executed successfully
                                                                                ist-s-students.syr.edu (12.... AD\yxiao19 (75) | IST659_M004_yxiao19 | 00:00:00 | 0 rows
```

3. Teaching Assistant:

```
CREATE TABLE Teaching_Assistant(
TA_Id VARCHAR(10) PRIMARY KEY NOT NULL,
TA_Lname VARCHAR(30) NOT NULL,
TA_Fname VARCHAR(30) NOT NULL,
TA_Email VARCHAR(50) NOT NULL,
TA_Phone VARCHAR(15) NOT NULL,
TA_Edu VARCHAR(15) NOT NULL CHECK(TA_Edu IN ('High School', 'Bachelors', 'Masters', 'MBA', 'PhD')),
TA_School VARCHAR(60) NOT NULL,
TA_Major VARCHAR(30) NOT NULL,
TA_HourlySalary DECIMAL(10,2) NOT NULL
)
SELECT* FROM Teaching_Assistant
```

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4. Student:

```
CREATE TABLE Student(
Student_Id VARCHAR(10) PRIMARY KEY NOT NULL,
Student_Lname VARCHAR(30) NOT NULL,
Student_Fname VARCHAR(30) NOT NULL,
Student_Email VARCHAR(50) NOT NULL,
Student_Phone VARCHAR(15) NOT NULL,
Student_Edu VARCHAR(15) NOT NULL CHECK(Student_Edu IN
('Bachelors', 'Masters', 'MBA', 'PhD', 'Graduated')),
Student_SchoolYr Numeric(1),
Student_School VARCHAR(60) NOT NULL,
Student_Major VARCHAR(30) NOT NULL,
Consultant_Id VARCHAR(10) FOREIGN KEY (Consultant_Id) REFERENCES Consultant(Consultant_Id)
NOT NULL
)
SELECT*FROM Student
```

```
CREATE TABLE Student(
Student_Id VARCHAR(10) PRIMARY KEY NOT NULL,
Student_Lname VARCHAR(30) NOT NULL,
Student_Email VARCHAR(30) NOT NULL,
Student_Email VARCHAR(50) NOT NULL,
Student_Phone VARCHAR(15) NOT NULL,
Student_Edu VARCHAR(15) NOT NULL CHECK(Student_Edu IN ('Bachelors', 'Masters', 'MBA', 'PhD', 'Graduated')),
Student_Schoolry Numeric(1),
Student_School VARCHAR(60) NOT NULL,
Student_Major VARCHAR(30) NOT NULL,
Consultant_Id VARCHAR(10) FOREIGN KEY (Consultant_Id) REFERENCE'S Consultant(Consultant_Id) NOT NULL
)
SELECT*FROM Student
%

**Cesults **B Messages**
Student_.... Student_Ena... Student_Ena... Student_Pho... Student_School... Student_School... Student_Maj... Consultant_Id

**Consultant_Id VARCHAR_Maj... Consultant_Id

**Student_.... Student_Lna... Student_Fna... Student_Em... Student_Pho... Student_School... Student_Sch... Student_Maj... Consultant_Id
```

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5. Payment:

```
CREATE TABLE Payment(
Payment Id VARCHAR(10) NOT NULL PRIMARY KEY,
Student_Id VARCHAR(10) NOT NULL,
Payment Date DATETIME NOT NULL,
Payment Amount DECIMAL(10,2) NOT NULL,
Payment_Method VARCHAR(30) ,
FOREIGN KEY(Student_Id) REFERENCES Student(Student_Id)
SELECT*FROM Payment
GCREATE TABLE Payment(
Payment_Id VARCHAR(10) NOT NULL PRIMARY KEY,
Student_Id VARCHAR(10) NOT NULL,
Payment_Date DATETIME NOT NULL,
Payment_Amount DECIMAL(10,2) NOT NULL,
Payment_Method VARCHAR(30) ,
{\tt FOREIGN\ KEY(Student\_Id)\ REFERENCES\ Student(Student\_Id)}
SELECT*FROM Payment
sults 🔓 Messages
Payment_ld Student_ld
                Payment_Date Payment_Amount Payment_Method
```

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6. Service:

```
CREATE TABLE Service(
Service_Id VARCHAR(10) NOT NULL PRIMARY KEY,
```

```
Service Name VARCHAR(30) NOT NULL ,
Service Progress VARCHAR(30) NOT NULL CHECK(Service Progress IN ('Not Started', 'In
Progress','Completed')),
Payment Id VARCHAR(10) NOT NULL FOREIGN KEY REFERENCES Payment (Payment Id),
Service Startdate DATETIME,
Service_Enddate DATETIME,
Service_Type VARCHAR(30) NOT NULL CHECK(Service_Type IN ('Career Coaching', 'Skills
Enhancement', 'Project Course', 'Industry Expertise Speech')),
Service_Price DECIMAL(10,2) NOT NULL
SELECT*FROM Service
□CREATE TΔBLE Service(
 Service_Id VARCHAR(10) NOT NULL PRIMARY KEY,
 Service_Name VARCHAR(30) NOT NULL ,
 Service Progress VARCHAR(30) NOT NULL CHECK(Service Progress IN ('Not Started', 'In Progress', 'Completed')),
 Payment_Id VARCHAR(10) NOT NULL FOREIGN KEY REFERENCES Payment (Payment_Id),
 Service_Startdate DATETIME,
 Service_Enddate DATETIME,
 Service_Type VARCHAR(30) NOT NULL CHECK(Service_Type IN ('Career Coaching','Skills Enhancement','Project Course','Industry Expertise Speech'))
 Service_Price DECIMAL(10,2) NOT NULL
 SELECT*FROM Service
sults 🔓 Messages
 Service_Id Service_Name Service_Progress Payment_Id Service_Startdate Service_Enddate Service_Type Service_Price
```

ery executed successfully

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7. Service_Type_Career_Coaching:

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8. Service Type Skills Enhancement:

```
CREATE TABLE Service_Type_Skills_Enhancement(
Service Id VARCHAR(10) NOT NULL PRIMARY KEY,
Instructor_Id VARCHAR(10) NOT NULL,
TA_Id VARCHAR(10) NOT NULL,
FOREIGN KEY(Service Id) REFERENCES Service(Service Id),
FOREIGN KEY(Instructor_Id) REFERENCES Instructor (Instructor_Id) ,
FOREIGN KEY(TA_Id) REFERENCES Teaching_Assistant (TA_Id)
SELECT*FROM Service_Type_Skills_Enhancement
CREATE TABLE Service_Type_Skills_Enhancement(
 Service_Id VARCHAR(10) NOT NULL PRIMARY KEY,
Instructor_Id VARCHAR(10) NOT NULL,
 TA_Id VARCHAR(10) NOT NULL,
 FOREIGN KEY(Service_Id) REFERENCES Service(Service_Id),
 FOREIGN KEY(Instructor_Id) REFERENCES Instructor (Instructor_Id) ,
 \begin{tabular}{ll} FOREIGN & KEY(TA\_Id) & REFERENCES & Teaching\_Assistant & (TA\_Id) \\ \end{tabular}
 SELECT*FROM Service_Type_Skills_Enhancement
 - (
sults 🔓 Messages
 Service Id Instructor Id TA Id
```

ery executed successfully.

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9. Service Type Project Course:

```
CREATE TABLE Service_Type_Project_Course(
Service_Id VARCHAR(10) NOT NULL PRIMARY KEY,
TA_Id VARCHAR(10) NOT NULL,
FOREIGN KEY(Service_Id) REFERENCES Service(Service_Id),
FOREIGN KEY(TA_Id) REFERENCES Teaching_Assistant (TA_Id)
)
SELECT*FROM Service_Type_Project_Course
```

iery executed successfully.

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10. Project Instructor:

```
CREATE TABLE Project Instructor(
Service Id VARCHAR(10) NOT NULL,
Instructor_Id VARCHAR(10) NOT NULL,
PRIMARY KEY (Service_Id,Instructor_Id),
FOREIGN KEY (Service Id) REFERENCES Service(Service Id) ,
FOREIGN KEY (Instructor_Id) REFERENCES Instructor(Instructor_Id)
SELECT*FROM Project Instructor
CREATE TABLE Project_Instructor(
Service_Id VARCHAR(10) NOT NULL,
Instructor_Id VARCHAR(10) NOT NULL,
PRIMARY KEY (Service_Id,Instructor_Id),
FOREIGN KEY (Service Id) REFERENCES Service(Service Id) ,
FOREIGN KEY (Instructor_Id) REFERENCES Instructor(Instructor_Id)
SELECT*FROM Project_Instructor
 + (
sults 🔓 Messages
Service_ld Instructor_ld
```

ery executed successfully.

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11. Service_Type_Industry_Expertise_Speech:

```
CREATE TABLE Service_Type_Industry_Expertise_Speech(
Service_Id VARCHAR(10) NOT NULL PRIMARY KEY,
Instructor_Id VARCHAR(10) NOT NULL,
TA_Id VARCHAR(10) NOT NULL,
FOREIGN KEY(Service_Id) REFERENCES Service(Service_Id) ,
FOREIGN KEY(Instructor_Id) REFERENCES Instructor (Instructor_Id) ,
FOREIGN KEY(TA_Id) REFERENCES Teaching_Assistant (TA_Id)
)
```

SELECT*FROM Service_Type_Industry_Expertise_Speech

ery executed successfully.

ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19

12. Student Service Registration:

```
CREATE TABLE Student Service Registration(
Student Id VARCHAR(10) NOT NULL,
Service Id VARCHAR(10) NOT NULL,
Consultant Id VARCHAR(10) NOT NULL,
PRIMARY KEY (Student_Id, Service_Id, Consultant_Id),
FOREIGN KEY(Student Id) REFERENCES Student(Student Id) ,
FOREIGN KEY(Service Id) REFERENCES Service(Service Id),
FOREIGN KEY(Consultant Id) REFERENCES Consultant(Consultant Id)
SELECT*FROM Student_Service_Registration
CREATE TABLE Student_Service_Registration(
Student_Id VARCHAR(10) NOT NULL,
Service_Id VARCHAR(10) NOT NULL,
Consultant_Id VARCHAR(10) NOT NULL,
PRIMARY KEY (Student_Id,Service_Id, Consultant_Id),
{\tt FOREIGN~KEY(Student\_Id)~REFERENCES~Student(Student\_Id)~,}
 FOREIGN KEY(Service_Id) REFERENCES Service(Service_Id) ,
FOREIGN KEY(Consultant_Id) REFERENCES Consultant(Consultant_Id)
SELECT*FROM Student_Service_Registration
 ▼ <
sults 🗓 Messages
Student_Id Service_Id Consultant_Id
```

ery executed successfully.

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Inserting Sample Data

1. Consultant:

```
INSERT INTO Consultant
VALUES
('C1', 'Zhong', 'Karen', 'zkaren@gmail.com', '635-229-2002', 6000.00),
('C2', 'Fu', 'Reem', 'freem@gmail.com', '215-620-5694', 5000.00),
('C3','Yan','Justice','yjustice@gmail.com','850-722-1794',8000.00),
('C4','Tong','Thomas','tthomas@gmail.com','403-480-8229',6000.00),
('C5', 'Yang', 'Zachary', 'yzachary@gmail.com', '854-810-5762',5000.00);
SELECT*FROM Consultant
   ⊟INSERT INTO Consultant
    VALUES
     ('C1','Zhong','Karen','zkaren@gmail.com','635-229-2002',6000.00),
    ('C2', 'Fu', 'Reem', 'freem@gmail.com', '215-620-5694', 5000.00),
     ('C3','Yan','Justice','yjustice@gmail.com','850-722-1794',8000.00),
    ('C4','Tong','Thomas','tthomas@gmail.com','403-480-8229',6000.00),
    ('C5','Yang','Zachary','yzachary@gmail.com','854-810-5762',5000.00);
    SELECT*FROM Consultant
100 % - <
Results 🔓 Messages
    Consultant Id Consultant Lna...
                           Consultant Fna...
                                                       Consultant Pho.
                                        Consultant Email
                                                                   Consultant Sala.
              Zhong
                           Karen
                                        zkaren@gmail.com
                                                       635-229-2002
                                                                   6000.00
    C2
              Fu
                           Reem
                                        freem@gmail.com
                                                       215-620-5694
                                                                   5000 00
3
    C3
              Yan
                           Justice
                                        yjustice@gmail.com
                                                       850-722-1794
                                                                   8000.00
                                        tthomas@gmail.com
                                                       403-480-8229
                                                                   6000.00
    C4
              Tong
                           Thomas
    C5
              Yang
                           Zachary
                                        yzachary@gmail.com 854-810-5762
                                                                   5000.00
Query executed successfully
                                                                                         ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
```

2. Instructor:

```
INSERT INTO Instructor
VALUES
('I1','Ai','Luke','aluke@gmail.com','447-909-8671',3,'Facebook','Data
Analyst', 'Data', 'Masters', 'University of Chicago', 'Statistics', 130.00),
('I2','Nian','Arielle','narielle@gmail.com','932-435-9070',5,'EY','Senior
Audit', 'Accounting', 'Masters', 'Syracuse University', 'Accounting', 150.00),
('I3', 'Da', 'Victor', 'dvictor@gmail.com', '958-567-2167',7, 'Morgan Stanely', 'Risk
Management', 'Finance', 'Masters', 'Columbia University', 'Finance', 170.00),
('I4','Ha','Emily','hemily@gmail.com','529-574-
6797',4,'McKinsey','Consultant','Consulting','MBA','Brown University','Management',150.00),
('I5','Mo','Melissa','mmelissa@gmail.com','483-856-3666',5,'Deloitte','Tax
Analyst', 'Accounting', 'Masters', 'Boston University', 'Accounting', 150.00),
('I6', 'Shang', 'Phoebe', 'sphoebe@gmail.com', '358-340-1801',6, 'Wayfair', 'Data
Scientist', 'Data', 'Masters', 'Rice University', 'Data Science', 160.00),
('I7','Bo','Ruth','bruth@gmail.com','357-676-5845',3,'Amazon','Marketing
Analyst', 'Marketing', 'Masters', 'Cornell University', 'Marketing', 130.00),
('I8','Nai','Lauren','nlauren@gmail.com','544-221-2988',7,'Amex','Supply Chain
Analyst', 'Supply Chain', 'Bachelors', 'Lehigh University', 'Supply Chain', 170.00)
SELECT*FROM Instructor
```

```
('I1','Ai','Luke','aluke@gmail.com','447-909-8671',3,'Facebook','Data Analyst','Data','Masters','University of Chicago','Statistics',130.00),
     ('I2','Nian','Arielle','narielle@gmail.com','932-435-9070',5,'EY','Senior Audit','Accounting','Masters','Syracuse University','Accounting',150
      'I3','Da','Victor','dvictor@gmail.com','958-567-2167',7,'Morgan Stanely','Risk Management','Finance','Masters','Columbia University','Finance
     ('I4','Ha','Emily','hemily@gmail.com','529-574-6797',4,'McKinsey','Consultant','Consulting','MBA','Brown University','Management',150.00),
     ('IS','Mo','Melissa','mmelissa@gmail.com','483-856-3666',5,'Deloitte','Tax Analyst','Accounting','Masters','Boston University','Accounting',15
('I6','Shang','Phoebe','sphoebe@gmail.com','358-340-1801',6,'Wayfair','Data Scientist','Data','Masters','Rice University','Data Science',160.0
       'I7','Bo','Ruth','bruth@gmail.com','357-676-5845',3,'Amazon','Marketing Analyst','Marketing','Masters','Cornell University','Marketing',130.0
      ''I8','Nai','Lauren','nlauren@gmail.com','544-221-2988',7,'Amex','Supply Chain Analyst','Supply Chain','Bachelors','Lehigh University','Supply
     SELECT*FROM Instructor
100 %
Results  Messages
     Instructor_Id Instructor..
                            Instructor.
                                       Instructor Email
                                                          Instructor Phone Instru...
                                                                                 Instructor Work...
                                                                                                  Instructor WorkTitle
                                                                                                                     Instructor WorkIndust...
                                                                                                                                          Instructor Edu Instructor School
                                                                                                                                                                          Instructor Major
                                                                                                                                                                                        Instructo
                                                          447-909-8671
     11
                 Αi
                            Luke
                                       aluke@gmail.com
                                                                         3
                                                                                  Facebook
                                                                                                  Data Analyst
                                                                                                                     Data
                                                                                                                                          Masters
                                                                                                                                                        University of Chicago
                                                                                                                                                                          Statistics
                                                                                                                                                                                         130.00
                                                          932-435-9070
     12
                  Nian
                            Arielle
                                       narielle@gmail.com
                                                                                  EY
                                                                                                  Senior Audit
                                                                                                                     Accounting
                                                                                                                                          Masters
                                                                                                                                                        Syracuse University
                                                                                                                                                                          Accounting
                                                                                                                                                                                         150.00
     13
                                                          958-567-2167
                                                                                                                                          Masters
                                                                                                                                                                                         170.00
                  Da
                             Victor
                                       dvictor@gmail.com
                                                                                  Morgan Stanely
                                                                                                  Risk Management
                                                                                                                     Finance
                                                                                                                                                        Columbia University
                                                                                                                                                                           Finance
                            Emily
                                       hemily@gmail.com
                                                          529-574-6797
                                                                                  McKinsey
                                                                                                   Consultant
                                                                                                                      Consulting
                                                                                                                                          MBA
                                                                                                                                                        Brown University
                                                                                                                                                                           Management
                                                                                                                                                                                         150.00
                                                           483-856-3666
                                                                                                                      Accounting
                                                                                                                                          Masters
                                                                                                                                                                                         150.00
     15
                  Мо
                            Melissa
                                       mmelissa@gmail.com
                                                                                  Deloitte
                                                                                                   Tax Analyst
                                                                                                                                                        Boston University
                                                                                                                                                                           Accounting
                                                                                                                                                                           Data Science
                                       sphoebe@gmail.com
                                                          358-340-1801
                                                                                  Wayfair
                                                                                                   Data Scientist
                                                                                                                                          Masters
                                                                                                                                                        Rice University
                                                                                                                                                                                         160.00
                  Shano
                            Phoebe
                                                                                                                     Data
                                                                                                                                                                           Marketing
     17
                  Bo
                            Ruth
                                       bruth@gmail.com
                                                          357-676-5845
                                                                          3
                                                                                  Amazon
                                                                                                   Marketing Analyst
                                                                                                                     Marketing
                                                                                                                                          Masters
                                                                                                                                                        Cornell University
                                                                                                                                                                                         130.00
8
     18
                  Nai
                            Lauren
                                       nlauren@gmail.com
                                                          544-221-2988
                                                                                  Amex
                                                                                                  Supply Chain Analyst Supply Chain
                                                                                                                                          Bachelors
                                                                                                                                                       Lehigh University
                                                                                                                                                                           Supply Chain
                                                                                                                                                                                         170.00
Query executed successfully
                                                                                                                   ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19 00:00:00 8 rows
```

3. Teaching Assistant:

```
INSERT INTO Teaching_Assistant
('T1','She','Samantha','ssamantha@gmail.com','582-344-8831','Bachelors','University at
Buffalo', 'Finance&Accounting', 20.00),
('T2','Mou','Nikolai','mnikolai@gmail.com','321-766-6554','Bachelors','Purdue
University','Analytics',20.00),
('T3','Shang','Emma','semma@gmail.com','257-264-1163','Bachelors','University of
Florida', 'Marketing', 18.00),
('T4','Qin','Bayley','qbayley@gmail.com','551-282-2938','Bachelors','Binghamton
University','Accounting',18.00);
SELECT*FROM Teaching Assistant
   INSERT INTO Teaching_Assistant
    VALUES
    ('T1','She','Samantha','ssamantha@gmail.com','582-344-8831','Bachelors','University at Buffalo','Finance&Accounting',20.00),
    ('T2','Mou','Nikolai','mnikolai@gmail.com','321-766-6554','Bachelors','Purdue University','Analytics',20.00),
    ('T3','Shang','Emma','semma@gmail.com','257-264-1163','Bachelors','University of Florida','Marketing',18.00)
    ('T4','Qin','Bayley','qbayley@gmail.com','551-282-2938','Bachelors','Binghamton University','Accounting',18.00);
    SELECT*FROM Teaching_Assistant
100 %
🔳 Results 🔓 Messages
    TA.
         TA Lna.
                 TA Fna...
                         TA Email
                                        TA Phone
                                                  TA Edu
                                                          TA School
                                                                         TA Major
                                                                                       TA HourlySal.
                                                                         Finance&Accounting
                                        582-344-8831
    T1
         She
                 Samantha ssamantha@gmail.com
                                                  Bachelors University at Buffalo
                                                                                      20.00
                         mnikolai@gmail.com
                                                  Bachelors Purdue University
    T2
         Mou
                 Nikolai
                                        321-766-6554
                                                                         Analytics
                                                                                      20.00
    Т3
                         semma@gmail.com
                                        257-264-1163 Bachelors University of Florida
         Shang
                 Emma
                                                                         Marketing
                                                                                       18.00
    T4
         Qin
                 Bayley
                         qbayley@gmail.com
                                        551-282-2938 Bachelors Binghamton University
                                                                                       18.00
                                                                                      ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
Query executed successfully
```

4. Student:

```
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S1', 'Zhao', 'Paige', 'zpaige@gmail.com', '315-418-0126', 'Bachelors', '1', 'Syracuse
University', 'Business Analytics', 'C2')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student_Major,Consult
ant Id)
VALUES ('S2', 'Qian', 'David', 'qdavid@gmail.com', '774-404-5943', 'Masters', '2', 'New York
University', 'Data Science', 'C1')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S3', 'Sun', 'Chris', 'schris@gmail.com', '350-260-2518', 'PhD', '3', 'Columbia
University', 'Information Management', 'C5')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student_Major,Consult
ant Id)
VALUES ('S4','Li', 'Brad', 'lbrad@gmail.com','977-878-4346', 'Bachelors','3', 'Northwestern
Uni', 'Accounting', 'C3')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
VALUES ('S5', 'Zhou', 'Alex', 'zalex@gmail.com', '980-794-9628', 'Bachelors', '2', 'Dartmouth
College', 'Computer Science', 'C4')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
VALUES ('S6','Wu', 'Ben', 'wben@gmail.com','221-734-9453', 'Bachelors','4', 'Boston College',
'Computer Science', 'C2')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student_Email, Student_Phone, Student_Edu, Student_SchoolYr, Student_School, Student_Major, Consult
VALUES ('S7','Zheng', 'Carl', 'zcarl@gmail.com','938-122-5322', 'PhD', '2', 'Tufts
University', 'Finance', 'C1')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student_Phone, Student_Edu, Student_SchoolYr, Student_School, Student_Major, Consult
ant Id)
VALUES ('S8', 'Zheng', 'Chuck', 'zchuck@gmail.com', '316-234-0281', 'MBA', '1', 'Wake Forest
Uni', 'Business Analytics', 'C2')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S9', 'Zhang', 'Clay', 'zclay@gmail.com', '418-243-9982', 'MBA', '2', 'Uni of N
Carolina', 'Information Management', 'C3')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S10', 'Wang', 'Connie', 'wconnie@gmail.com', '726-163-4523', 'MBA', '2', 'Uni of
Rochester', 'Supply Chain Management', 'C3')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School, Student Major, Consultant Id)
VALUES ('S11', 'Wang', 'Dan', 'wdan@gmail.com', '235-203-9923', 'Graduated', 'Uni of Florida',
'Business Analytics', 'C1')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School, Student Major, Consultant Id)
```

```
VALUES ('S12','Li', 'Daron', 'ldaron@gmail.com','732-436-4999', 'Graduated', 'Uni of
Cincinnati', 'Information Management', 'C4')
INSERT INTO Student (Student_Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S13', 'He', 'Alina', 'halina@gmail.com', '422-525-9263', 'Bachelors', '3', 'Syracuse
University', 'Computer Science', 'C2')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S14','Wu', 'Laura', 'wlaura@gmail.com','822-562-5325', 'Masters','2', 'College of
William and Mary', 'Accounting', 'C3')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student_Major,Consult
ant Id)
VALUES ('S15', 'Dong', 'Steve', 'dsteve@gmail.com', '923-423-6326', 'Masters', '2', 'Suffolk
University', 'Marketing', 'C1')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student_Email,Student_Phone,Student_Edu,Student_School,Student_Major,Consultant_Id)
VALUES ('S16', 'Han', 'Vincent', 'hvincent@gmail.com', '252-634-6357', 'Graduated', 'University
of Rochester', 'Data Science', 'C1')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S17', 'Yang', 'Austin', 'yaustin@gmail.com', '513-643-7532', 'Bachelors', '3', 'Utica
College', 'Business Analytics', 'C5')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S18','Jiang', 'Dylan', 'jdylan@gmail.com','643-754-7754', 'Masters','2', 'University of Illinois at Urbana-Champaign', 'Marketing', 'C3')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email Student Phone Student Edu Student School Yr Student School Student Major Consult
ant Id)
VALUES ('S19', 'Shen', 'Ananti', 'sananti@gmail.com', '644-752-8765', 'MBA', '2', 'Villanova
University', 'Data Science', 'C4')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S20', 'Fan', 'Ezichi', 'fezichi@gmail.com', '548-264-2366', 'PhD', '4', 'University
of Rochester', 'Information Management', 'C2')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S21', 'Wang', 'Christina', 'wchristina@gmail.com', '724-164-4753', 'MBA', '1',
'University of Miami', 'Supply Chain Management', 'C1')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School, Student Major, Consultant Id)
VALUES ('S22', 'Yang', 'Sahil', 'ysahil@gmail.com', '264-643-7352', 'Graduated', 'University of
Cincinnati', 'Business Analytics', 'C2')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School, Student Major, Consultant Id)
VALUES ('S23', 'Luo', 'Adeeso', 'ladeeso@gmail.com', '522-423-4765', 'Graduated', 'University
of Southern California', 'Information Management', 'C3')
```

```
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S24', 'Zhang', 'Gustavo', 'zgustavo@gmail.com', '924-263-6736', 'Bachelors', '3',
'Tufts University', 'Computer Science', 'C2')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student_Major,Consult
ant Id)
VALUES ('S25', 'Fang', 'Aby', 'faby@gmail.com', '952-642-3342', 'Masters', '2', 'Suffolk
University', 'Accounting', 'C1')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student_Major,Consult
ant Id)
VALUES ('S26', 'Zhu', 'Caitlin', 'zcaitlin@gmail.com', '523-623-8653', 'Masters', '2', 'New York
University', 'Marketing', 'C4')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School, Student Major, Consultant Id)
VALUES ('S27', 'Zuo', 'Nikhil', 'znikhil@gmail.com', '248-655-3356', 'Graduated', 'Tulane
University', 'Data Science', 'C5')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email Student Phone Student Edu Student School Yr Student School Student Major Consult
ant Id)
VALUES ('S28','Liu', 'Danny', 'ldanny@gmail.com','923-456-2456', 'Bachelors', '4', 'Lehigh
University', 'Business Analytics', 'C1')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S29','Li', 'Tyler', 'ltyler@gmail.com','755-452-3562', 'Masters','1', 'University of
Washington', 'Marketing', 'C2')
INSERT INTO Student (Student Id, Student Lname, Student Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S30','Xu', 'Adam', 'xadam@gmail.com','432-345-3754', 'MBA','1', 'George Washington
University', 'Finance', 'C3')
INSERT INTO Student (Student_Id, Student_Lname, Student_Fname,
Student Email, Student Phone, Student Edu, Student School Yr, Student School, Student Major, Consult
ant Id)
VALUES ('S31', 'Huang', 'Andy', 'handy@gmail.com', '643-865-2657', 'PhD', '2', 'University of
Connecticut', 'Information Management', 'C4')
SELECT*FROM Student
```

```
|INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student
     VALUES ('S1','Zhao', 'Paige', 'zpaige@gmail.com','315-418-0126', 'Bachelors','1', 'Syracuse University', 'Business Analytics',
    INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student
     VALUES ('S2','Qian', 'David', 'qdavid@gmail.com','774-404-5943', 'Masters', '2', 'New York University', 'Data Science', 'C1')
     INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student
                                     "schris@gmail.com"," 350-260-2518", "PhD", "3", "Columbia University", \\
     VALUES ('S3', 'Sun', 'Chris',
                                                                                                                    'Information Management'
     INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student_
     VALUES ('S4','Li', 'Brad', 'lbrad@gmail.com','977-878-4346', 'Bachelors','3', 'Northwestern Uni', 'Accounting',
                                                                                                                                 'C3'
    INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student_
                                     'zalex@gmail.com','980-794-9628', 'Bachelors','2', 'Dartmouth College', 'Computer Science'
     INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student
     VALUES ('S6','Wu', 'Ben', 'wben@gmail.com','221-734-9453', 'Bachelors','4', 'Boston College', 'Computer Science', 'C2'
     INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student
     VALUES ('S7', 'Zheng',
                             'Carl', 'zcarl@gmail.com','938-122-5322', 'PhD',
                                                                                    '2', 'Tufts University', 'Finance', 'C1')
    INSERT INTO Student (Student Id, Student Lname, Student Fname, Student Email,Student Phone,Student Edu,Student SchoolYr,Student School,Student
     VALUES ('S8', 'Zheng', 'Chuck', 'zchuck@gmail.com', '316-234-0281', 'MBA', '1', 'Wake Forest Uni', 'Business Analytics', 'C2')
   INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student
     VALUES ('S9','Zhang', 'Clay', 'zclay@gmail.com','418-243-9982', 'MBA','2', 'Uni of N Carolina', 'Information Management',
    INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_SchoolYr,Student_School,Student
     VALUES ('S10','Wang', 'Connie', 'wconnie@gmail.com','726-163-4523', 'MBA','2', 'Uni of Rochester', 'Supply Chain Management',
     INSERT INTO Student (Student_Id, Student_Lname, Student_Fname, Student_Email,Student_Phone,Student_Edu,Student_Student_Student_Major,Consultant,
100 %
Results 🔓 Messages
     Student_..
             Student Lna...
                          Student Fna...
                                      Student Email
                                                      Student Pho...
                                                                  Student E...
                                                                            Student School... Student School
                                                                                                                         Student Major
                                                                                                                                             Consultant Id
     S1
             Zhao
                                                      315-418-0126
                                                                                                                         Business Analytics
                          Paige
                                      zpaige@gmail.com
                                                                  Bachelors
                                                                                          Syracuse University
                                                      726-163-4523
                                                                  MBA
                                                                                          Uni of Rochester
                                                                                                                         Supply Chain Management
                                                                                                                                             C3
     S10
              Wang
                          Connie
                                      wconnie@gmail.com
              Wang
                                      wdan@gmail.com
     S11
                          Dan
                                                      235-203-9923
                                                                  Graduated
                                                                                                                         Business Analytics
                                                                                                                                             C1
                                                      732-436-4999
     S12
                                      ldaron@gmail.com
                                                                  Graduated
                                                                            NULL
                                                                                          Uni of Cincinnati
                                                                                                                         Information Manage
                                                                                                                                             C4
     S13
              He
                          Alina
                                      halina@gmail.com
                                                      422-525-9263
                                                                  Bachelors
                                                                                          Syracuse University
                                                                                                                         Computer Science
                                                                                                                                             C2
     S14
              Wu
                          Laura
                                      wlaura@gmail.com
                                                      822-562-5325
                                                                  Masters
                                                                                          College of William and Mary
                                                                                                                         Accounting
                                                                                                                                             C3
     S15
             Dong
                          Steve
                                      dsteve@gmail.com
                                                      923-423-6326
                                                                  Masters
                                                                                          Suffolk University
                                                                                                                         Marketing
                                                                                                                                             C1
     S16
                          Vincent
                                                      252-634-6357
                                                                  Graduated
                                                                            NULL
                                                                                          University of Rochester
             Han
                                      hvincent@gmail.com
                                                                                                                         Data Science
                                                                                                                                             C<sub>1</sub>
              Yang
                                      yaustin@gmail.com
                                                      513-643-7532
                                                                                          Utica College
                                                                                                                                             C5
                          Austin
                                                                  Bachelors
                                                                                                                         Business Analytics
     S18
              Jiang
                                      idvlan@gmail.com
                                                      643-754-7754
                                                                  Masters
                                                                                          University of Illinois at Urbana-Champaign Marketing
                                                                                                                                             С3
                                                                                                  ist-s-students.syr.edu (12.... | AD\yxiao19 (75) | IST659_M004_yxiao19 | 00:00:00 | 31 rows
Query executed successfully
```

5. Payment:

```
INSERT INTO Payment (Payment Id, Student Id, Payment Date, Payment Amount, Payment Method)
('P1','S1','2018-06-07 00:00:00.000',500.00,'Cash'),
('P2','S2','2018-12-24 00:00:00.000',1000.00,'Credit Card'),
('P3','S5','2018-11-07 00:00:00.000',800.00,'Debit Card'),
('P4','S6','2018-10-11 00:00:00.000',100.00,'Debit Card'),
('P5','S9','2018-12-20 00:00:00.000',1000.00,'Credit Card'),
('P6', 'S11', '2018-10-10 00:00:00.000', 100.00, 'Cash'),
      'S13','2019-02-20 00:00:00.000',500.00,'E-Check'),
('P8','S15','2018-12-21 00:00:00.000',1500.00,'Credit Card'),
('P9','S18','2018-12-19 00:00:00.000',2000.00,'Credit Card'),
      ,'S9','2018-11-09 00:00:00.000',800.00,'E-Check'),
('P11','S11','2018-10-07 00:00:00.000',100.00,'Cash'),
('P12', 'S12', '2019-01-05 00:00:00.000', 1000.00, 'Credit Card'),
       'S15','2018-11-07 00:00:00.000',800.00,'Debit Card'),
('P14','S16','2018-10-10 00:00:00.000',100.00,'Debit Card'),
('P15','S19','2019-01-02 00:00:00.000',1000.00,'Credit Card'),
('P16','S20','2019-01-16 00:00:00.000',500.00,'Cash'),
('P17','S23','2018-11-08 00:00:00.000',800.00,'E-Check'),
('P18','S25','2019-01-05 00:00:00.000',1500.00,'Credit Card'),
       'S28','2019-03-15 00:00:00.000',1800.00,'Credit Card'),
('P20','S29','2019-04-07 00:00:00.000',800.00,'E-Check'),
('P21','S3','2019-04-07 00:00:00.000',800.00,'Credit Card'),
('P22','S4','2019-04-06 00:00:00.000',800.00,'Credit Card'),
('P23','S7','2019-04-09 00:00:00.000',800.00,'Credit Card'),
('P24','S8','2019-04-08 00:00:00.000',800.00,'Debit Card'),
```

```
('P25','S10','2019-04-08 00:00:00.000',800.00,'Debit Card'),
('P26', 'S14', '2019-04-09 00:00:00.000', 800.00, 'Debit Card'),
('P27','S16','2019-04-10 00:00:00.000',800.00,'Debit Card'),
         'S17','2019-04-12 00:00:00.000',1000.00,'Credit Card'),
('P29','S21','2019-04-13 00:00:00.000',1000.00,'Debit Card'),
('P30','S22','2019-04-13 00:00:00.000',2000.00,'Debit Card'),
('P31','S24','2019-04-12 00:00:00.000',3000.00,'Credit Card'),
('P32','S26','2019-04-14 00:00:00.000',500.00,'Debit Card'),
('P33','S27','2019-04-11 00:00:00.000',1500.00,'Debit Card'),
         'S30','2019-04-10 00:00:00.000',500.00,'Credit Card'),
('P35','S31','2019-04-10 00:00:00.000',500.00,'Debit Card');
SELECT*FROM Payment

□INSERT INTO Payment (Payment_Id, Student_Id, Payment_Date,Payment_Amount,Payment_Method)

   ('P1','S1','2018-06-07 00:00:00.000',500.00,'Cash'),
   ('P2','S2','2018-12-24 00:00:00.000',1000.00,'Credit Card'),
   .
('P3','S5','2018-11-07 00:00:00.000',800.00,'Debit Card'),
   ('P4','S6','2018-10-11 00:00:00.000',100.00,'Debit Card'),
   ('P5','S9','2018-12-20 00:00:00.000',1000.00,'Credit Card'),
   ('P6','S11','2018-10-10 00:00:00.000',100.00,'Cash'),
   ('P7','S13','2019-02-20 00:00:00.000',500.00,'E-Check')
   ('P8','S15','2018-12-21 00:00:00.000',1500.00,'Credit Card'),
   ('P9','S18','2018-12-19 00:00:00.000',2000.00,'Credit Card'),
   ('P10','S9','2018-11-09 00:00:00.000',800.00,'E-Check'),
   ('P11','S11','2018-10-07 00:00:00.000',100.00,'Cash'),
   ('P12','S12','2019-01-05 00:00:00.000',1000.00,'Credit Card'),
   ('P13','S15','2018-11-07 00:00:00.000',800.00,'Debit Card'),
   ('P14','S16','2018-10-10 00:00:00.000',100.00,'Debit Card')
   ('P15','S19','2019-01-02 00:00:00.000',1000.00,'Credit Card'),
   ('P16','S20','2019-01-16 00:00:00.000',500.00,'Cash'),
   ('P17','S23','2018-11-08 00:00:00.000',800.00,'E-Check')
   ('P18','S25','2019-01-05 00:00:00.000',1500.00,'Credit Card'),
   ('P19','S28','2019-03-15 00:00:00.000',1800.00,'Credit Card'),
00 %
    - (
Results 🔓 Messages
   Payment Id Student... Payment Date
                                    Payment Amo...
                                                Payment Meth...
  P1
           S1
                   2018-06-07 00:00:00 000 500 00
                                                Cash
   P10
                   2018-11-09 00:00:00.000 800.00
                                                E-Check
            S9
   P11
                   2018-10-07 00:00:00.000 100.00
            S11
                                                Cash
   P12
                   2019-01-05 00:00:00.000 1000.00
                                                Credit Card
   P13
                   2018-11-07 00:00:00.000 800.00
           S15
                                                Debit Card
   P14
           S16
                   2018-10-10 00:00:00.000 100.00
                                                Debit Card
   P15
            S19
                   2019-01-02 00:00:00.000 1000.00
                                                Credit Card
   P16
            S20
                   2019-01-16 00:00:00.000 500.00
                                                Cash
   P17
            S23
                   2018-11-08 00:00:00.000 800.00
                                                E-Check
  P18
           S25
                   2019-01-05 00:00:00.000 1500.00
                                                Credit Card
Query executed successfully.
                                                                                    ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
```

6. Service:

```
INSERT INTO Service
VALUES
('SER1','Resume Revision','Completed','P1','2018-06-07 00:00:00.000','2018-06-09
00:00:00.00.000','Career Coaching',500.00),
('SER2','SQL','Completed','P2','2018-12-24 00:00:00.000','2019-01-02 00:00:00.000','Project
Course',1000.00),
('SER3','Case Interview','Completed','P3','2018-11-10 00:00:00.000','2018-11-20
00:00:00.000','Skills Enhancement',800.00),
('SER4','Finance','Completed','P4','2018-10-12 00:00:00.000','2018-10-13
00:00:00.000','Industry Expertise Speech',100.00),
('SER5','SQL','Completed','P5','2018-12-24 00:00:00.000','2019-01-02 00:00:00.000','Project
Course',1000.00),
('SER6','Finance','Completed','P6','2018-10-12 00:00:00.000','2018-10-13
00:00:00.000','Industry Expertise Speech',100.00),
```

```
('SER7', 'Behavioral Mock Interview', 'Completed', 'P7', '2019-02-21 00:00:00.000', '2019-02-22
00:00:00.000', 'Career Coaching', 500.00),
('SER8', 'SQL', 'Completed', 'P8', '2018-12-24 00:00:00.000', '2019-01-02 00:00:00.000', 'Project
Course',1000.00),
('SER9','Resume Revision','Completed','P8','2019-01-03 00:00:00.000','2019-01-04
00:00:00.000', 'Career Coaching', 500.00),
('SER10','SQL','Completed','P9','2018-12-24 00:00:00.000','2019-01-02 00:00:00.000','Project
Course',1000.00),
('SER11','Resume Revision','Completed','P9','2019-01-04 00:00:00.000','2019-01-05
00:00:00.000', 'Career Coaching', 500.00),
('SER12', 'Technical Interview Prep', 'Completed', 'P9', '2019-01-06 00:00:00.000', '2019-01-07
00:00:00.000', 'Career Coaching', 500.00),
('SER13','Case Interview','Completed','P10','2018-11-10 00:00:00.000','2018-11-20
00:00:00.000', 'Skills Enhancement', 800.00),
('SER14','Finance','Completed','P11','2018-10-12 00:00:00.000','2018-10-13
00:00:00.000', 'Industry Expertise Speech', 100.00),
('SER15','Python for Finance','Completed','P12','2019-01-07 00:00:00.000','2019-01-20
00:00:00.000', 'Project Course', 1000.00),
('SER16','Case Interview','Completed','P13','2018-11-10 00:00:00.000','2018-11-20
00:00:00.000', 'Skills Enhancement', 800.00),
('SER17','Finance','Completed','P14','2018-10-12 00:00:00.000','2018-10-13
00:00:00.000', 'Industry Expertise Speech', 100.00),
('SER18','Python for Finance','Completed','P15','2019-01-07 00:00:00.000','2019-01-20
00:00:00.000', 'Project Course', 1000.00),
('SER19','Cover Letter Review','Completed','P16','2019-01-17 00:00:00.000','2019-01-18
00:00:00.000', 'Career Coaching', 500.00),
('SER20','Case Interview','Completed','P17','2018-11-10 00:00:00.000','2018-11-20
00:00:00.000', 'Skills Enhancement', 800.00),
('SER21','Python for Finance','Completed','P18','2019-01-07 00:00:00.000','2019-01-20
00:00:00.000', 'Project Course', 1000.00),
('SER22','Resume Revision','Completed','P18','2019-01-21 00:00:00.000','2019-01-22
00:00:00.000', 'Career Coaching', 500.00),
('SER23','Job Search Plan','Completed','P19','2019-03-20 00:00:00.000','2019-03-21
00:00:00.000', 'Career Coaching', 500.00),
('SER24','Networking Techniques','Completed','P19','2019-03-24 00:00:00.000','2019-03-25
00:00:00.000', 'Career Coaching', 500.00);
INSERT INTO Service
(Service Id, Service Name, Service Progress, Payment Id, Service Startdate, Service Type, Service P
rice)
VALUES
('SER25', 'Advanced Excel', 'In Progress', 'P19', '2019-04-10 00:00:00.000', 'Skills
Enhancement',800.00),
('SER26','Advanced Excel','In Progress','P20','2019-04-10 00:00:00:000','Skills
Enhancement',800.00),
('SER27','Advanced Excel','In Progress','P21','2019-04-10 00:00:00.000','Skills
Enhancement',800.00),
('SER53','Advanced Excel','In Progress','P22','2019-04-10 00:00:00.000','Skills
Enhancement',800.00),
('SER28','Advanced Excel','In Progress','P23','2019-04-10 00:00:00.000','Skills
Enhancement',800.00),
('SER29','Advanced Excel','In Progress','P24','2019-04-10 00:00:00.000','Skills
Enhancement',800.00),
('SER30','Advanced Excel','In Progress','P25','2019-04-10 00:00:00.000','Skills
Enhancement',800.00),
('SER31','Advanced Excel','In Progress','P26','2019-04-10 00:00:00:000','Skills
Enhancement',800.00),
```

```
Enhancement',800.00);
INSERT INTO Service
(Service Id, Service Name, Service Progress, Payment Id, Service Type, Service Price)
VALUES
('SER33', 'Resume Revision', 'Not Started', 'P28', 'Career Coaching', 800.00),
   SER34', 'Cover Letter Review', 'Not Started', 'P28', 'Career Coaching', 500.00),
('SER35','Cover Letter Review','Not Started','P29','Career Coaching',500.00),
('SER36', 'Resume Revision', 'Not Started', 'P29', 'Career Coaching', 500.00),
('SER37','Resume Revision','Not Started','P30','Career Coaching',500.00),
('SER38','Cover Letter Review','Not Started','P30','Career Coaching',500.00),
('SER39', 'LinkedIn Profile Edit', 'Not Started', 'P30', 'Career Coaching', 500.00),
('SER40','Networking Techniques','Not Started','P30','Career Coaching',500.00), ('SER41','Resume Revision','Not Started','P31','Career Coaching',500.00),
('SER42','Cover Letter Review','Not Started','P31','Career Coaching',500.00),
('SER43', 'Networking Techniques', 'Not Started', 'P31', 'Career Coaching', 500.00),
('SER44', 'Behavioral Interview Prep', 'Not Started', 'P31', 'Career Coaching', 500.00),
('SER45', 'Behavioral Mock Interview', 'Not Started', 'P31', 'Career Coaching', 500.00),
('SER46','Technical Interview Prep','Not Started','P31','Career Coaching',500.00), ('SER47','Technical Interview Prep','Not Started','P32','Career Coaching',500.00),
('SER48', 'Technical Interview Prep', 'Not Started', 'P33', 'Career Coaching', 500.00),
('SER49', 'Behavioral Interview Prep', 'Not Started', 'P33', 'Career Coaching', 500.00),
('SER50','Job Search Plan ','Not Started','P33','Career Coaching',500.00),
('SER51','Technical Mock Interview ','Not Started','P34','Career Coaching',500.00),
('SER52','Technical Mock Interview ','Not Started','P35','Career Coaching',500.00);
SELECT*FROM Service
    □INSERT INTO Service
     VALUES
      ('SER1','Resume Revision','Completed','P1','2018-06-07 00:00:00.000','2018-06-09 00:00:00.000','Career Coaching',500.00),
      ('SER2','SQL','Completed','P2','2018-12-24 00:00:00.000','2019-01-02 00:00:00.000','Project Course',1000.00),
      ('SER3','Case Interview','Completed','P3','2018-11-10 00:00:00.000','2018-11-20 00:00:00.000','Skills Enhancement',800.00),
     ('SER4','Finance','Completed','P4','2018-10-12 00:00:00.000','2018-10-13 00:00:00.000','Industry Expertise Speech',100.00),
      ('SER5','SQL','Completed','P5','2018-12-24 00:00:00.000','2019-01-02 00:00:00.000','Project Course',1000.00),
       'SER6','Finance','Completed','P6','2018-10-12 00:00:00.000','2018-10-13 00:00:00.000','Industry Expertise Speech',100.00),
      ('SER7','Behavioral Mock Interview','Completed','P7','2019-02-21 00:00:00.000','2019-02-22 00:00:00.000','Career Coaching',500.00)
     ('SER8','SQL','Completed','P8','2018-12-24 00:00:00.000','2019-01-02 00:00:00.000','Project Course',1000.00), ('SER9','Resume Revision','Completed','P8','2019-01-03 00:00:00.000','2019-01-04 00:00:00.000','Career Coaching',500.00),
 100 %
 Results 🔓 Messages
     Service_...
             Service Name
                                Service_Progre...
                                            Payment_... Service_Startdate
                                                                        Service_Enddate
                                                                                           Service_Type
                                                                                                              Service_Price
                                            P1
     SER1
              Resume Revision
                                Completed
                                                     2018-06-07 00:00:00.000 2018-06-09 00:00:00.000 Career Coaching
                                                                                                              500.00
                                            P9
      SER10
                                Completed
                                                     2018-12-24 00:00:00.000 2019-01-02 00:00:00.000
                                                                                           Project Course
                                                                                                              1000.00
              Resume Revision
                                Completed
                                                     2019-01-04 00:00:00.000 | 2019-01-05 00:00:00.000 | Career Coaching
                               Completed
                                                     2019-01-06 00:00:00.000 2019-01-07 00:00:00.000 Career Coaching
      SER12
              Technical Interview Prep
 5
     SER13
              Case Interview
                                Completed
                                            P10
                                                     2018-11-10 00:00:00.000 2018-11-20 00:00:00.000 Skills Enhancement
                                                                                                              800.00
 6
                                            P11
                                                     2018-10-12 00:00:00.000 | 2018-10-13 00:00:00.000 | Industry Expertise Speech
      SER14
                                Completed
                                                                                                              100.00
              Finance
 7
     SER15
              Python for Finance
                                Completed
                                            P12
                                                     2019-01-07 00:00:00.000 | 2019-01-20 00:00:00.000 | Project Course
                                                                                                              1000.00
 8
      SFR16
              Case Interview
                                Completed
                                            P13
                                                     2018-11-10 00:00:00.000 | 2018-11-20 00:00:00.000 | Skills Enhancement
                                                                                                              800 00
 9
     SER17
              Finance
                                Completed
                                            P14
                                                     2018-10-12 00:00:00.000 | 2018-10-13 00:00:00.000 | Industry Expertise Speech
                                                                                                              100.00
 10
     SER18
              Python for Finance
                                Completed
                                            P15
                                                     2019-01-07 00:00:00.000 2019-01-20 00:00:00.000 Project Course
                                                                                                              1000.00
 11
      SER19
              Cover Letter Review
                                Completed
                                            P16
                                                     2019-01-17 00:00:00.000 | 2019-01-18 00:00:00.000 | Career Coaching
                                                                                                              500.00
                                Completed
                                                     1000.00
     SER2
              SQL
                                            P2
 12
 13
     SER20
              Case Interview
                                Completed
                                            P17
                                                     2018-11-10 00:00:00.000 | 2018-11-20 00:00:00.000 | Skills Enhancement
                                                                                                              800.00
 14
     SER21
              Python for Finance
                                Completed
                                            P18
                                                     2019-01-07 00:00:00.000 2019-01-20 00:00:00.000 Project Course
                                                                                                              1000.00
 15
     SER22
              Resume Revision
                                Completed
                                            P18
                                                     2019-01-21 00:00:00.000 | 2019-01-22 00:00:00.000 | Career Coaching
                                                                                                              500.00
 16
     SER23
              Job Search Plan
                                Completed
                                            P19
                                                     2019-03-20 00:00:00.000 | 2019-03-21 00:00:00.000 | Career Coaching
                                                                                                              500.00
 17
     SER24
              Networking Techniques
                                Completed
                                            P19
                                                     2019-03-24 00:00:00.000 2019-03-25 00:00:00.000 Career Coaching
                                                                                                              500.00
 18
      SER25
              Advanced Excel
                                In Progress
                                            P19
                                                     2019-04-10 00:00:00.000
                                                                                           Skills Enhancement
                                                                                                              800.00
              Advanced Excel
 19
     SER26
                                In Progress
                                            P20
                                                     2019-04-10 00:00:00.000 NULL
                                                                                           Skills Enhancement
                                                                                                              800.00
     SER27
                                            P21
                                                     2019-04-10 00:00:00.000 NULL
 20
              Advanced Excel
                                In Progress
                                                                                           Skills Enhancement
                                                                                                              800.00
 21
     SFR28
              Advanced Excel
                                In Progress
                                            P23
                                                     2019-04-10 00:00:00.000 NULL
                                                                                           Skills Enhancement
                                                                                                              800.00
Query executed successfully.
                                                                                               ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
```

('SER32','Advanced Excel','In Progress','P27','2019-04-10 00:00:00.000','Skills

7. Service Type Career Coaching:

```
INSERT INTO Service_Type_Career_Coaching
VALUES
('SER1','I2'),
('SER7','I3'),
('SER9','I4'),
('SER11','I5'),
('SER12','I1'),
('SER19','I1'),
('SER22','I6'),
('SER23','I7'),
('SER24','I8'),
('SER33','I1'),
('SER34','I3'),
('SER35','I5'),
('SER36','I8'),
('SER37','I2'),
('SER38','I1'),
('SER39','I6'),
('SER40','I4'),
('SER41','I6'),
('SER42','I8'),
('SER43','I1'),
('SER44','I3'),
('SER45','I5'),
('SER46','I2'),
('SER47','I4'),
('SER48','I2'),
('SER49','I8'),
('SER50','I8'),
('SER51','I7'),
('SER52','I6');
SELECT*FROM Service_Type_Career_Coaching
```

```
□INSERT INTO Service_Type_Career_Coaching
     VALUES
     ('SER1','I2'),
('SER7','I3'),
('SER9','I4'),
('SER11','I5'),
     ('SER12','I1'),
     ('SER19','I1'),
     ('SER22','I6'),
     ('SER23','I7'),
     ('SER24','I8'),
('SER33','I1'),
     ('SER34','I3'),
     ('SER35','I5'),
     ('SER36','I8'),
     ('SER37','I2'),
     ('SER38','I1'),
('SER39','I6'),
     ('SER40','I4'),
     ('SER41','I6'),
100 % - <
🔳 Results 🔓 Messages
     Service_ld Instructor_ld
     SER1
                 12
     SER11
                 15
     SER12
                 11
     SER19
                 11
5
     SER22
                 16
6
     SER23
                 17
     SER24
      SER33
                 11
     SER34
                 13
10
     SER35
                 15
                                                                                                                   ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
```

8. Service_Type_Skills_Enhancement:

```
INSERT INTO Service_Type_Skills_Enhancement
VALUES
('SER3','I4','T3'),
('SER13','I4','T3'),
('SER16','I4','T3'),
('SER20','I4','T3'),
('SER25','I2','T4'),
('SER25','I2','T4'),
('SER27','I2','T4'),
('SER28','I2','T4'),
('SER29','I2','T4'),
('SER30','I2','T4'),
('SER30','I2','T4'),
('SER31','I2','T4'),
('SER31','I2','T4'),
('SER32','I2','T4'),
('SER53','I2','T4');
SELECT*FROM Service_Type_Skills_Enhancement
```

```
□INSERT INTO Service_Type_Skills_Enhancement
       VALUES
       ('SER3','I4','T3'),
      ('SER13','I4','T3'),
('SER16','I4','T3'),
('SER20','I4','T3'),
      ('SER25','I2','T4'),
('SER26','I2','T4'),
('SER27','I2','T4'),
      ('SER28','I2','T4'),
('SER28','I2','T4'),
('SER29','I2','T4'),
('SER30','I2','T4'),
('SER31','I2','T4'),
      ('SER32','I2','T4'),
('SER53','I2','T4');
      SELECT*FROM Service_Type_Skills_Enhancement
       ~ <
100 %
🔳 Results 🔒 Messages
       Service_... Instructor_ld TA... SER13 I4 T3
      SER13
       SER16
                                  T3
       SER20
                                  T3
       SER25
       SER26
                                  T4
6
       SER27
                   12
                                  T4
       SER28
                   12
                                  T4
8
       SFR29
                   12
                                  T4
       SER3
                                  Т3
                   14
10
       SER30
                   12
                                  T4
       SER31
                                  T4
       SER32
                                  T4
 13
       SER53
                                                                                                                                             ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
Query executed successfully.
```

9. Service_Type_Project_Course:

```
INSERT INTO Service_Type_Project_Course
VALUES
('SER2','T2'),
('SER5','T2'),
('SER8','T2'),
('SER10','T2'),
('SER15','T1'),
('SER18','T1'),
('SER21','T1')
SELECT*FROM Service_Type_Project_Course
```

```
☐INSERT INTO Service_Type_Project_Course
     VALUES
     ('SER2','T2'),
('SER5','T2'),
('SER8','T2'),
('SER10','T2'),
     ('SER15','T1'),
('SER18','T1'),
('SER21','T1')
     SELECT*FROM Service_Type_Project_Course
100 % - <
Results 🔓 Messages
      Service_... TA...
               T2
     SER10
      SER15
                 T1
3
      SFR18
                T1
      SER2
                 T2
      SER21
                T1
      SER5
                 T2
      SER8
                                                                                                                              ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
Query executed successfully.
```

10. Project_Instructor:

```
INSERT INTO Project_Instructor
VALUES
('SER2','I1'),
('SER5','I1'),
('SER8','I1'),
('SER10','I1'),
('SER15','I1'),
('SER18','I1'),
('SER21','I1'),
('SER21','I6'),
('SER5','I6'),
('SER8','I6'),
('SER10','I6'),
('SER10','I6'),
('SER10','I3'),
('SER18','I3'),
('SER21','I3');
SELECT*FROM Project_Instructor
```

```
□INSERT INTO Project_Instructor
      VALUES
      ('SER2','I1'),
('SER5','I1'),
('SER8','I1'),
     ('SER10','I1'),
('SER15','I1'),
('SER18','I1'),
      ('SER21','I1'),
('SER2','I6'),
('SER5','I6'),
      ('SER8','I6'),
      ('SER10','I6'),
('SER15','I3'),
('SER18','I3'),
      ('SER21','I3');
      SELECT*FROM Project_Instructor
100 % ▼ <
🖽 Results 🔓 Messages
      Service_... Instructor_ld
SER10 I1
      SER10
       SER10
                 16
3
       SER15
                  11
       SER15
5
       SER18
                  11
6
       SER18
                 13
       SER2
                  11
8
       SER2
                  16
9
       SER21
                  11
 10
      SER21
                  13
       SER5
 12
       SER5
       SER8
 13
                  11
      SER8
 14
                  16
Query executed successfully.
                                                                                                                                      ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
```

11. Service_Type_Industry_Expertise_Speech:

```
INSERT INTO Service_Type_Industry_Expertise_Speech
VALUES
('SER4','I3','T4'),
('SER6','I3','T4'),
('SER14','I3','T4'),
('SER17','I3','T4');
SELECT*FROM Service_Type_Industry_Expertise_Speech
   □INSERT INTO Service_Type_Industry_Expertise_Speech
     VALUES
     ('SER4','I3','T4'),
     ('SER6','I3','T4'),
     ('SER14','I3','T4'),
('SER17','I3','T4');
    SELECT*FROM Service_Type_Industry_Expertise_Speech
100 %
🔳 Results 🔒 Messages
     Service_... Instructor_ld TA..
    SER14 I3
                      T4
     SER17
             13
                      T4
     SER6
             13
Query executed successfully.
                                                                                            ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
```

12. Student_Service_Registration:

```
INSERT INTO Student_Service_Registration
VALUES
('S1','SER1','C2'),
('S2','SER2','C1'),
('S3','SER27','C5'),
('S4','SER53','C3'),
('S5', 'SER3', 'C4'),
('S6', 'SER4', 'C2'),
('S7','SER28','C1'),
('S8','SER29','C2'),
('S9', 'SER5', 'C3'),
('S9', 'SER13', 'C3'),
('S10', 'SER30', 'C3'),
('S11','SER6','C1'),
('S11','SER14','C1'),
('S12','SER15','C4'),
('S13', 'SER7', 'C2'),
('S14','SER31','C3'),
('S15','SER8','C1'),
('S15', 'SER9', 'C1'),
('S15','SER16','C1'),
('S16','SER17','C1'),
('S16', 'SER32', 'C1'),
('S17','SER33','C5'),
('S17','SER34','C5'),
('S18','SER10','C3'),
('S18','SER11','C3'),
('S18','SER12','C3'),
('S19','SER18','C4'),
('S20','SER19','C2'),
('S21','SER35','C1'),
('S21', 'SER36', 'C1'),
('S22','SER37','C2'),
('S22','SER38','C2'),
('S22', 'SER39', 'C2'),
('S22', 'SER40', 'C2'),
('S23','SER20','C3'),
('S24', 'SER41', 'C2'),
('S24','SER42','C2'),
('S24', 'SER43', 'C2'),
('S24', 'SER44', 'C2'),
('S24','SER45','C2'),
('S24','SER46','C2'),
('S25', 'SER21', 'C1'),
('S25','SER22','C1'),
('S26', 'SER47', 'C4'),
('S27', 'SER48', 'C5'),
('S27','SER49','C5'),
('S27','SER50','C5'),
('S28', 'SER23', 'C1'),
('S28','SER24','C1'),
('S28','SER25','C1'),
('S29', 'SER26', 'C2'),
('S30', 'SER51', 'C3'),
```

```
('S31','SER52','C4');
SELECT*FROM Student_Service_Registration
```

```
□ INSERT INTO Student_Service_Registration
      VALUES
      ('S1','SER1','C2'),
     ('S2','SER2','C1'),
('S3','SER27','C5'),
('S4','SER53','C3'),
('S5','SER3','C4'),
     ('S6','SER4','C2'),
('S7','SER28','C1'),
('S8','SFR29','C2').
100 %
🗏 Results 🔓 Messages
      Student_ld Service_ld Consultant_ld
     S1
                  SER1
                             C2
                  SER30
                             C3
      S10
3
      S11
                  SER14
                             C1
                  SER6
      S11
                             C1
      S12
                  SER15
                             C4
6
      S13
                  SER7
                             C2
      S14
                  SER31
                             C3
      S15
                  SER16
                             C1
8
9
                  SER8
                             C1
      S15
 10
      S15
                  SER9
                             C1
 11
      S16
                  SER17
                             C1
      S16
                  SER32
                             C1
 13
      S17
                  SER33
                             C5
      S17
                  SER34
                             C5
 14
 15
                  SER10
                             C3
      S18
 16
      S18
                  SER11
                             C3
 17
      S18
                  SER12
                             C3
 18
      S19
                  SER18
                             C4
                             C1
20
      S20
                  SER19
                             C2
      S21
                  SER35
                             C1
21
                  SER36
22
      S21
                             C<sub>1</sub>
Query executed successfully.
                                                                                                                         ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19
```

Supertype-Subtype Tables

1. Create a Table that shows the supertype-subtype of "Service":

A. Service Career Coaching:

```
SELECT
ser.Service_Id,Service_Name,Service_Progress,Payment_Id,Service_Startdate,Service_Enddate,Ser
vice Type,cc.Instructor Id,Service Price
INTO Service_Career_Coaching
FROM Service ser
FULL JOIN Service Type Career Coaching cc
ON ser.Service_Id=cc.Service_Id
WHERE ser.Service Type='Career Coaching';
SELECT*FROM Service_Career_Coaching
    dSELECT ser.Service_Id,Service_Name,Service_Progress,Payment_Id,Service_Startdate,Service_Enddate,Service_Type,cc.Instructor_Id,Service_Price
      INTO Service_Career_Coaching
      FROM Service ser
      FULL JOIN Service_Type_Career_Coaching cc
      ON ser.Service Id=cc.Service Id
      WHERE ser.Service_Type='Career Coaching';
      SELECT*FROM Service_Career_Coaching
100 %
 Results 🖟 Messages
      Service_...
               Service_Name
                                   Service_Progre...
                                                 Payment_...
                                                            Service_Startdate
                                                                                 Service_Enddate
                                                                                                      Service_Type
                                                                                                                    Instructor_Id Service_Price
     SER1
              Resume Revision
                                   Completed
                                                            2018-06-07 00:00:00.000 2018-06-09 00:00:00.000 Career Coaching | 12
                                    Completed
                                                  P9
                                                            2019-01-04 00:00:00.000
                                                                                 2019-01-05 00:00:00.000
                                                                                                      Career Coaching
                                                                                                                               500.00
               Technical Interview Prep
                                                                                                      Career Coaching
      SER12
                                   Completed
                                                  P9
                                                            2019-01-06 00:00:00.000 2019-01-07 00:00:00.000
                                                                                                                    11
                                                                                                                               500.00
                                                                                                      Career Coaching
      SER19
               Cover Letter Review
                                   Completed
                                                  P16
                                                            2019-01-17 00:00:00.000 2019-01-18 00:00:00.000
                                                                                                                               500.00
                                                                                                      Career Coaching
      SER22
               Resume Revision
                                   Completed
                                                  P18
                                                            2019-01-21 00:00:00.000 | 2019-01-22 00:00:00.000
                                                                                                                               500.00
      SER23
               Job Search Plan
                                   Completed
                                                  P19
                                                            2019-03-20 00:00:00.000 | 2019-03-21 00:00:00.000 | Career Coaching | 17
                                                                                                                               500.00
      SER24
                                                  P19
                                                            2019-03-24 00:00:00.000 2019-03-25 00:00:00.000
                                                                                                      Career Coaching
                                                                                                                               500.00
               Networking Techniques
                                   Completed
      SER33
                                                  P28
                                                                                                      Career Coaching I1
                                                                                                                               500.00
               Resume Revision
                                   Not Started
      SER34
               Cover Letter Review
                                   Not Started
                                                  P28
                                                                                 NULL
                                                                                                      Career Coaching 13
                                                                                                                               500.00
      SER35
               Cover Letter Review
                                                                                                      Career Coaching 15
      SER36
               Resume Revision
                                   Not Started
                                                  P29
                                                            NULL
                                                                                 NULL
                                                                                                      Career Coaching
                                                                                                                               500.00
      SER37
               Resume Revision
                                   Not Started
                                                  P30
                                                                                 NULL
                                                                                                      Career Coaching
                                                                                                                               500.00
                                                            NULL
 13
      SER38
               Cover Letter Review
                                   Not Started
                                                  P30
                                                            NULL
                                                                                 NULL
                                                                                                      Career Coaching
                                                                                                                               500.00
                                                                                                      Career Coaching
 14
      SFR39
               LinkedIn Profile Edit
                                   Not Started
                                                  P30
                                                            NULL
                                                                                 NULL
                                                                                                                               500.00
 15
      SER40
               Networking Techniques
                                   Not Started
                                                  P30
                                                            NULL
                                                                                 NULL
                                                                                                      Career Coaching
                                                                                                                               500.00
      SER41
                                                  P31
                                                                                 NULL
                                                                                                                               500.00
 16
               Resume Revision
                                   Not Started
                                                            NULL
                                                                                                      Career Coaching
      SER42
                                                  P31
                                                                                                                               500.00
 17
               Cover Letter Review
                                                                                 NULL
                                                                                                      Career Coaching 18
                                   Not Started
                                                            NULL
      SER43
                                                                                                                               500.00
 18
               Networking Techniques
                                                  P31
                                                            NULL
                                                                                 NULL
                                                                                                      Career Coaching I1
                                   Not Started
      SER44
               Behavioral Interview Pr...
                                                                                 NULL
                                                                                                      Career Coaching 13
                                   Not Started
 20
      SER45
               Behavioral Mock Interv...
                                                                                 NULL
                                                                                                      Career Coaching
                                                                                                                               500.00
      SER46
               Technical Interview Prep
                                                                                 NULL
                                                                                                      Career Coaching 12
                                                                                                                               500.00
      SER47
                                                  P32
                                                                                                      Career Coaching
                                                                                                                               500.00
 22
               Technical Interview Prep
                                   Not Started
                                                            NULL
                                                                                 NULL
               Technical Interview Prep
                                                                                                      Career Coaching
      SER48
                                                  P33
                                                            NULL
                                                                                 NULL
                                                                                                                               500.00
 23
                                   Not Started
 24
      SER49
               Behavioral Interview Pr...
                                   Not Started
                                                  P33
                                                            NULL
                                                                                 NULL
                                                                                                      Career Coaching 18
                                                                                                                               500.00
Query executed successfully
                                                                                                          ist-s-students.syr.edu (12.... AD\yxiao19 (105) IST659_M004_yxiao19 00:00:00 29 rov
```

B. Service Skills Enhancement:

SELECT

```
ser.Service_Id,Service_Name,Service_Progress,Payment_Id,Service_Startdate,Service_Enddate,Ser
vice_Type,se.Instructor_Id,se.TA_Id,Service_Price
INTO Service_Skills_Enhancement
FROM Service ser
```

FULL JOIN Service_Type_Skills_Enhancement se
ON ser.Service_Id=se.Service_Id
WHERE ser.Service_Type='Skills Enhancement';
SELECT*FROM Service Skills Enhancement

```
∃SELECT ser.Service Id,Service Name,Service Progress,Payment Id,Service Startdate,Service Enddate,Service Type,se.Instructor Id,se.TA Id,Servic
     INTO Service_Skills_Enhancement
     FROM Service ser
     FULL JOIN Service_Type_Skills_Enhancement se
     ON ser.Service_Id=se.Service_Id
     WHERE ser.Service_Type='Skills Enhancement';
     SELECT*FROM Service_Skills_Enhancement
100 %
Results 🚨 Messages
                               Service_Progre...
                                               Payment_...
     Service
                Service Name
                                                          Service Startdate
                                                                                 Service Enddate
                                                                                                         Service_Type
                                                                                                                          Instructor Id TA.
                                                                                                                                            Service Price
     SER13
                                                          2018-11-10 00:00:00.000
                                                                                 2018-11-20 00:00:00.000
                                                                                                                                             800.00
                Case Interview
                               Completed
                                               P10
                                                                                                        Skills Enhancement 14
                                                                                                                                      T3
                                               P13
                                                                                 2018-11-20 00:00:00.000
                                                                                                                                             800.00
     SER16
                Case Interview
                               Completed
                                                          2018-11-10 00:00:00.000
                                                                                                        Skills Enhancement 14
                                                                                                                                      Т3
                                                          2018-11-10 00:00:00.000
                                                                                 2018-11-20 00:00:00.000
                                                                                                                                             800.00
     SER20
                Case Interview
                               Completed
                                                                                                        Skills Enhancement 14
                                                                                                                                      T3
                                                          2019-04-10 00:00:00.000
                                                                                                                                            800.00
     SER25
                Advanced Excel
                               In Progress
                                               P19
                                                                                                         Skills Enhancement 12
     SER26
                Advanced Excel
                               In Progress
                                               P20
                                                          2019-04-10 00:00:00.000
                                                                                 NULL
                                                                                                        Skills Enhancement 12
                                                                                                                                      T4
                                                                                                                                            800.00
6
     SER27
                Advanced Excel
                               In Progress
                                               P21
                                                          2019-04-10 00:00:00.000
                                                                                 NULL
                                                                                                        Skills Enhancement 12
                                                                                                                                      T4
                                                                                                                                            800.00
                                                                                                                                      T4
                                                                                                                                            800.00
     SER28
                Advanced Excel
                               In Progress
                                               P23
                                                          2019-04-10 00:00:00.000
                                                                                 NULL
                                                                                                        Skills Enhancement 12
                                                                                                                                            800.00
     SER29
                Advanced Excel
                               In Progress
                                               P24
                                                          2019-04-10 00:00:00.000 NULL
                                                                                                        Skills Enhancement 12
                                                                                                                                      T4
                                                                                                        Skills Enhancement 14
     SER3
                Case Interview
                                               P3
                                                          2018-11-10 00:00:00.000
                                                                                 2018-11-20 00:00:00.000
                                                                                                                                      ТЗ
                                                                                                                                             800.00
                               Completed
                               In Progress
     SER30
                Advanced Excel
                                                          2019-04-10 00:00:00.000
                                                                                                         Skills Enhancement 12
                                                                                                                                             800.00
     SER31
                                                                                                                                      T4
                Advanced Excel
                               In Progress
                                               P26
                                                          2019-04-10 00:00:00.000
                                                                                 NULL
                                                                                                        Skills Enhancement 12
                                                                                                                                             800.00
                Advanced Excel
     SFR32
                               In Progress
                                               P27
                                                          2019-04-10 00:00:00 000
                                                                                                        Skills Enhancement 12
                                                                                                                                      ТΔ
                                                                                                                                             800 00
                                                                                 NULL
                              In Progress
13
     SER53
                Advanced Excel
                                               P22
                                                          2019-04-10 00:00:00.000
                                                                                 NULL
                                                                                                        Skills Enhancement 12
                                                                                                                                      T4
                                                                                                                                             800.00
Query executed successfully
                                                                                                                   ist-s-students.syr.edu (12.... AD\yxiao19 (105) IST659_M004_yxiao19 00:00:00 13 rows
```

C. Service_Project_Course:

SELECT

```
ser.Service_Id,Service_Name,Service_Progress,Payment_Id,Service_Startdate,Service_Enddate,Ser
vice_Type,pin.Instructor_Id,pc.TA_Id,Service_Price
INTO Service_Project_Course
FROM Service ser
FULL JOIN Service_Type_Project_Course pc
ON ser.Service_Id=pc.Service_Id
FULL JOIN Project_Instructor pin
ON pc.Service_Id=pin.Service_Id
WHERE ser.Service_Type='Project Course'
SELECT*FROM Service_Project_Course
```

```
⇔SELECT ser.Service_Id,Service_Name,Service_Progress,Payment_Id,Service_Startdate,Service_Enddate,Service_Type,pin.Instructor_Id,pc.TA_Id,Servi
     INTO Service_Project_Course
     FROM Service ser
     FULL JOIN Service_Type_Project_Course pc
     ON ser.Service_Id=pc.Service_Id
     FULL JOIN Project Instructor pin
     ON pc.Service Id=pin.Service Id
     WHERE ser Service_Type='Project Course'
     SELECT*FROM Service_Project_Course
100 %
🔳 Results 🔓 Messages
     Service
               Service Name
                                Service Progre...
                                               Payment ... Service Startdate
                                                                                Service Enddate
                                                                                                       Service Type Instructor Id TA...
                                                                                                                                      Service Price
                                                          2018-12-24 00:00:00.000
                                                                                2019-01-02 00:00:00.000
                                                                                                      Project Course
     SER10
               SQL
                                                                                                                                      1000.00
                                Completed
                                                                                                                                T2
     SER10
                                Completed
                                                          2018-12-24 00:00:00.000
                                                                                2019-01-02 00:00:00.000
                                                                                                                                T2
                                                                                                                                      1000.00
               SQL
                                                                                                       Project Course
     SER15
               Python for Finance
                                Completed
                                                          2019-01-07 00:00:00.000
                                                                                2019-01-20 00:00:00.000
                                                                                                       Project Course | 11
     SER15
               Python for Finance
                                               P12
                                                          2019-01-07 00:00:00.000 2019-01-20 00:00:00.000
                                                                                                                                      1000.00
               Python for Finance
     SER18
                                Completed
                                               P15
                                                          2019-01-07 00:00:00.000
                                                                                2019-01-20 00:00:00.000
                                                                                                      Project Course 11
                                                                                                                                      1000.00
                                                                                                      Project Course 13
     SER18
               Python for Finance
                               Completed
                                               P15
                                                          2019-01-07 00:00:00.000
                                                                                2019-01-20 00:00:00.000
                                                                                                                                T1
                                                                                                                                      1000.00
     SER2
               SQL
                                Completed
                                               P2
                                                          2018-12-24 00:00:00 000
                                                                                2019-01-02 00:00:00 000
                                                                                                      Project Course 11
                                                                                                                                T2
                                                                                                                                      1000.00
     SER2
               SQL
                                Completed
                                               P2
                                                          2018-12-24 00:00:00.000
                                                                                2019-01-02 00:00:00.000 Project Course | 16
                                                                                                                                T2
                                                                                                                                      1000.00
     SER21
               Python for Finance
                                               P18
                                                          2019-01-07 00:00:00.000
                                                                                2019-01-20 00:00:00.000 Project Course | 11
                                                                                                                                      1000.00
                               Completed
                                                                                                                                T1
     SER21
                                               P18
                                                          2019-01-07 00:00:00.000
                                                                                2019-01-20 00:00:00.000
                                                                                                                                      1000.00
10
               Python for Finance
                               Completed
                                                                                                       Project Course 13
                                                                                                                                T1
     SER5
               SQL
                                Completed
                                                          2018-12-24 00:00:00.000
                                                                                2019-01-02 00:00:00.000
                                                                                                       Project Course 11
                                                                                                                                T2
                                                                                                                                      1000.00
12
     SER5
               SQL
                                Completed
                                                          2018-12-24 00:00:00.000
                                                                                2019-01-02 00:00:00.000
                                                                                                       Project Course
                                                                                                                                      1000.00
     SER8
                                Completed
                                                          2018-12-24 00:00:00.000 2019-01-02 00:00:00.000
                                                                                                       Project Course
                                                          14
     SER8
               SQL
                                Completed
                                                                                                                                      1000.00
Ouerv executed successfully
                                                                                                               ist-s-students.svr.edu (12.... AD\vxiao19 (105) IST659 M004 vxiao19 00:00:00 14 rov
```

D. Service Speech:

SELECT ser.Service_Id,Service_Name,Service_Progress,Payment_Id,Service_Startdate,Service_Enddate,Ser vice_Type,ies.Instructor_Id,ies.TA_Id,Service_Price INTO Service_Speech FROM Service ser FULL JOIN Service_Type_Industry_Expertise_Speech ies ON ser.Service_Id=ies.Service_Id WHERE ser.Service_Type='Industry Expertise Speech'; SELECT*FROM Service Speech ⊜SELECT ser.Service_Id,Service_Name,Service_Progress,Payment_Id,Service_Startdate,Service_Enddate,Service_Type,ies.Instructor_Id,ies.TA_Id,Serv INTO Service Speech FROM Service ser FULL JOIN Service_Type_Industry_Expertise_Speech ies ON ser.Service_Id=ies.Service_Id WHERE ser.Service_Type='Industry Expertise Speech'; SELECT*FROM Service_Speech 100 % ▼ < Results hessages Service_... Service_Progre... Payment_... Service_Startdate Service_Na... Service_Enddate Service_Type Instructor_ld TA.. Service_Price Finance Completed 2018-10-12 00:00:00.000 2018-10-13 00:00:00.000 Industry Expertise Speech 13 SER17 Finance Completed P14 2018-10-12 00:00:00.000 2018-10-13 00:00:00.000 Industry Expertise Speech 13 T4 100.00 Completed P4 2018-10-12 00:00:00.000 2018-10-13 00:00:00.000 Industry Expertise Speech | 13 T4 100.00 SER6 Finance Completed P6 2018-10-12 00:00:00.000 | 2018-10-13 00:00:00.000 | Industry Expertise Speech | I3 T4 100.00 Query executed successfully ist-s-students.syr.edu (12.... AD\yxiao19 (105) IST659_M004_yxiao19 00:00:00 4 rov

Answering Major Data Questions

1. What is the most popular service (based on service name)?

```
SELECT Service_Name, COUNT(ser.Service_Id)'Number of Students Taking/Took', Service_Type
FROM Service ser
JOIN Student Service Registration strg
ON ser.Service_Id=strg.Service_Id
GROUP BY Service Name, Service Type
ORDER BY COUNT(Service Name) DESC
             What is the most popular service? */
    □SELECT Service_Name,COUNT(ser.Service_Id)'Number of Students Taking/Took', Service_Type
     FROM Service ser
     JOIN Student_Service_Registration strg
     ON ser.Service_Id=strg.Service_Id
     GROUP BY Service_Name,Service_Type
     ORDER BY COUNT(Service_Name) DESC
 100 % ▼ <
 Results  Messages
     Service_Name
                       Number of Students Taking/To... Service_Type
    Advanced Excel
                                               Skills Enhancement
     Resume Revision
                       8
                                               Career Coaching
     Cover Letter Review
                                               Career Coaching
     Technical Interview Prep 4
                                               Career Coaching
 5
     Finance
                                              Industry Expertise Speech
     Case Interview
                                               Skills Enhancement
     SQL
                                              Project Course
     Networking Techniques 3
                                               Career Coaching
 8
 9
     Python for Finance
                                              Project Course
 10
     Technical Mock Intervi...
                                              Career Coaching
                                               Career Coaching
     Job Search Plan
 12
     Behavioral Interview Pr...
                                               Career Coaching
     Behavioral Mock Interv... 2
                                               Career Coaching
     LinkedIn Profile Edit
                                              Career Coaching
```

The most popular service is "Advanced Excel" under "Skills Enhancement".

2. How much revenue has the company made?

Query executed successfully.

```
SELECT SUM(Service_Price) 'Total Revenue' FROM Service SELECT SUM(Payment_Amount) 'Total Revenue' FROM Payment
```

ist-s-students.syr.edu (12.... AD\yxiao19 (75) IST659_M004_yxiao19

\$32,300.00

3. How many students has each consultant had?

```
SELECT s.Consultant_Id,c.Consultant_Lname,c.Consultant_Fname,COUNT(Student_Id)'Number og
Students'
FROM Student s
LEFT JOIN Consultant c
ON s.Consultant Id=c.Consultant Id
GROUP BY s.Consultant Id,c.Consultant Lname,c.Consultant Fname
ORDER BY COUNT(Student_Id) DESC
   /*3. How many students has each consultant had?*/
   ≒SELECT s.Consultant_Id,c.Consultant_Lname,c.Consultant_Fname,COUNT(Student_Id)'Number og Students'
    FROM Student s
    LEFT JOIN Consultant c
    ON s.Consultant_Id=c.Consultant_Id
    GROUP BY s.Consultant_Id,c.Consultant_Lname,c.Consultant_Fname
    ORDER BY COUNT(Student_Id) DESC
100 % ▼ <
Results 🐞 Messages
    Consultant_Id Consultant_Lna... Consultant_Fna...
                                      Number og Students
            Zhong
                          Karen
                                      8
    C2
             Fu
                          Reem
3
    C3
             Yan
                          Justice
    C4
             Tong
                          Thomas
                                      5
5
    C5
                          Zachary
                                      3
Query executed successfully.
                                                                                     ist-s-students.syr.edu (12.... AD\yxiao19 (63) IST659_M004_yxiao19
```

4. How many students has each service type had?

```
SELECT Service_Type, COUNT(ser.Service_Id)'Number of Students Taking/Took'
FROM Service ser
JOIN Student_Service_Registration strg
ON ser.Service_Id=strg.Service_Id
GROUP BY Service_Type
ORDER BY COUNT(ser.Service_Id) DESC
```

```
How many students has each service type had?*/
   SELECT Service_Type,COUNT(ser.Service_Id)'Number of Students Taking/Took'
    FROM Service ser
    JOIN Student_Service_Registration strg
    ON ser.Service_Id=strg.Service_Id
    GROUP BY Service_Type
    ORDER BY COUNT(ser.Service_Id) DESC
100 % -
Results  Messages
                         Number of Students Taking/To...
     Service_Type
    Career Coaching
                         29
     Skills Enhancement
                         13
3
    Project Course
    Industry Expertise Speech 4
Query executed successfully.
                                                                                                       ist-s-students.syr.edu (12.... AD\yxiao19 (63) IST659_M004_yxiao19
```

5. How many services has been completed?

```
SELECT COUNT(Service_Id)'Number of Completed Services'
FROM Service
WHERE Service_Progress='Completed'
```



6. How many services are in progress?

7. How many services have not started yet?

```
SELECT COUNT(Service_Id)'Number of Services Not Started'
FROM Service
WHERE Service_Progress='Not Started'
```

8. How many Career Coaching Services have been assigned to each instructors?



9. How many students purchased more than one service? Who are the students and how many services did they purchase?

```
SELECT p.Student_Id,COUNT(ser.Service_Id)'Number of Services'
FROM Payment p
JOIN Service ser
ON p.Payment_Id=ser.Payment_Id
GROUP BY p.Student_Id
HAVING COUNT(ser.Payment_Id)>1
```

```
SELECT p.Student_Id,COUNT(ser.Service_Id)'Number of Services'
    FROM Payment p
    JOIN Service ser
    ON p.Payment_Id=ser.Payment_Id
    GROUP BY p.Student_Id
    HAVING COUNT(ser.Payment_Id)>1
100 %
 Results 🔓 Messages
     Student_Id Number of Services
    S11
 2
     S15
 3
     S16
              2
 4
     S17
              2
 5
     S18
              3
 6
     S21
              2
 7
     S22
              4
 8
     S24
              6
 9
     S25
 10
     S27
              3
 11
     S28
              3
 12
     S9
              2
Query executed successfully.
                                                                                         ist-s-students.syr.edu (12.... | AD\yxiao19 (70) | IST659_M004_yxiao19
10. How any services have been payed in each payment method?
SELECT p.Payment_Method, COUNT(ser.Service_Id)'Number of Services'
FROM Payment p
LEFT JOIN Service ser
ON p.Payment_Id=ser.Payment_Id
GROUP BY p.Payment Method
SELECT p.Payment_Method,COUNT(ser.Service_Id)'Number of Services'
    FROM Payment p
     LEFT JOIN Service ser
    ON p.Payment_Id=ser.Payment_Id
    GROUP BY p.Payment_Method
100 %
```

Results 🛅 Messages

Cash

Credit Card

Debit Card

Query executed successfully.

E-Check

2

3

4

Payment_Method Number of Services 4

26

19

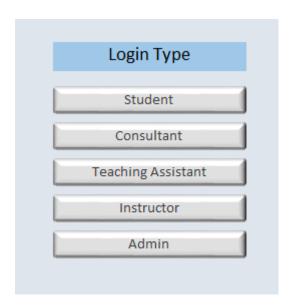
4

ist-s-students.syr.edu (12.... | AD\yxiao19 (70) | IST659_M004_yxiao19

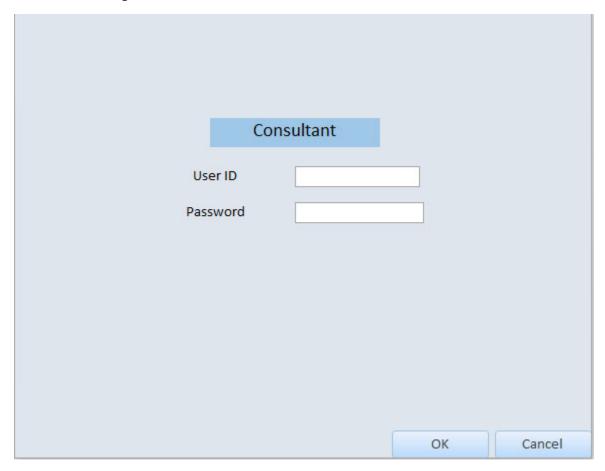
Interfaces

There are 5 types of login

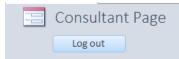
- 1) Consultant
- 2) Instructor
- 3) TA
- 4) Student
- 5) Admin



1. Consultant Login



After Successful Login, a consultant will be directed to a page, where there are options to go to a "Welcome page" and a "Option page".

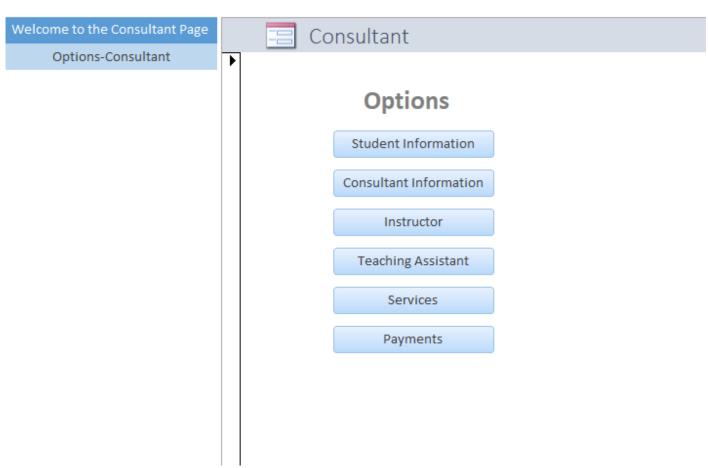


Welcome to the Consultant Page
Options-Consultant

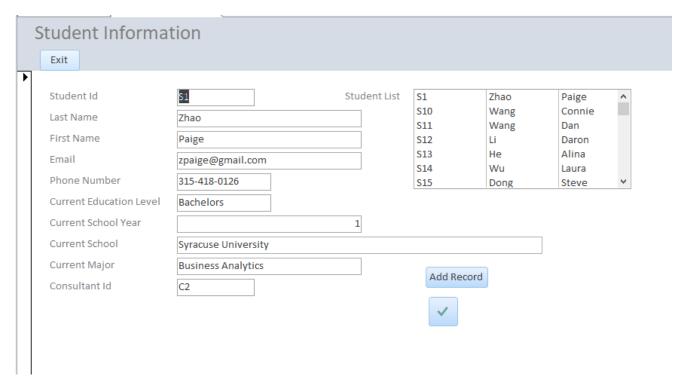
Welcome to the Consultant Page!







From the options, the consultant can view different types of information. For example, the student information:



The consultant can add records in "Student information", "Services", and "Payments". They can only view "Consultant information", "Instructor", and "Teaching Assistant".

2. Instructor Login



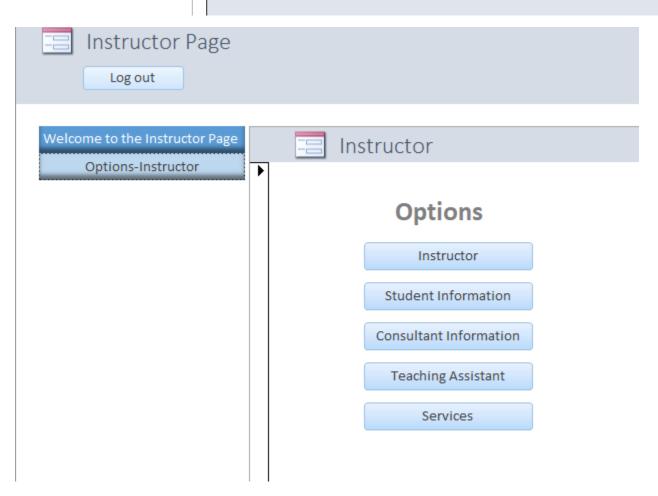
After Successful Login, an instructor will be directed to a page, where there are options to go to the "Welcome page" and "Option page".



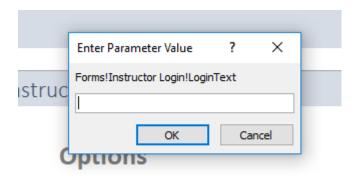
Welcome to the Instructor Page
Options-Instructor

Welcome to the Instructor Page!





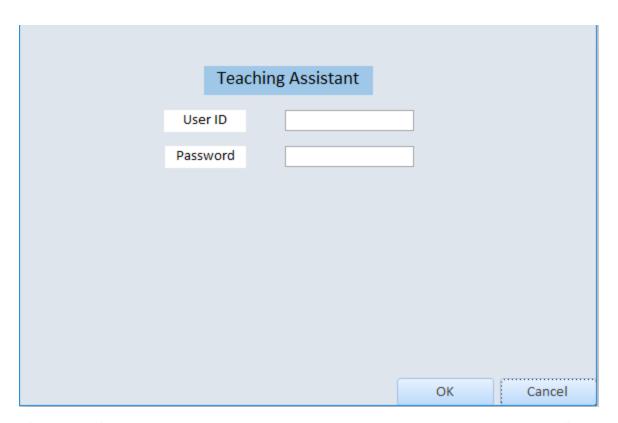
From the option page, the instructor can view all the options. If they want to view their own information (instructor), they need to specify their ID first:



Then they can view it:

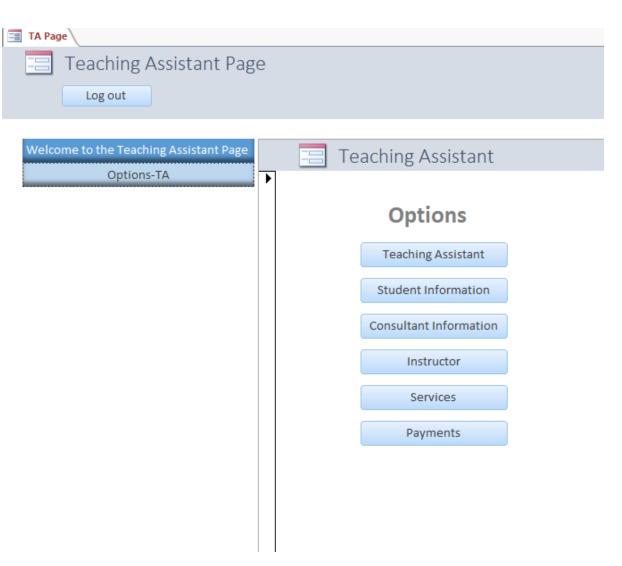
	Instructor Information					
	Exit					
Þ						
	Instructor Id					
	Last Name	Ai				
	First Name	Luke				
	Email	aluke@gmail.com				
	Phone Number	447-909-8671				
	Number of Years Worked	3				
	Current Company	Facebook				
	Current Title	Data Analyst				
	Working Industry	Data				
	Highest Eduction Level	Masters				
	Highest Eduction School	University of Chicago				
	Highest Eduction Major	Statistics				
	Hourly Salary	130				

3. TA Login

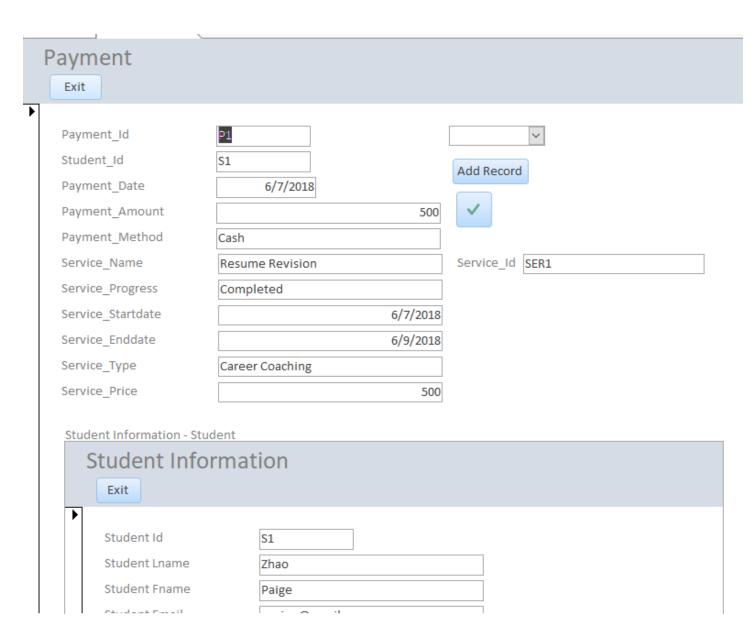


After Successful Login, a TA will be directed to a page, where there are options to go to the "Welcome page" and "Option page".

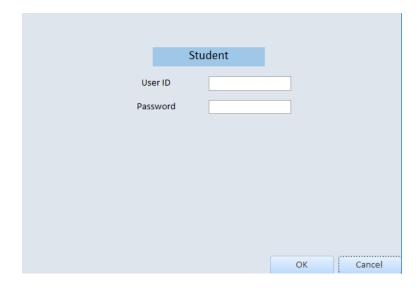




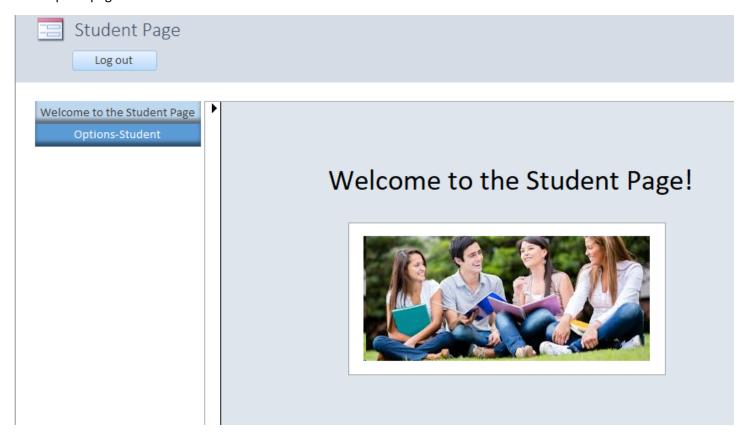
They can view "teaching assistant", "consultant information", "student information", and "instructor". They can add records and edit in "services" and "payments".

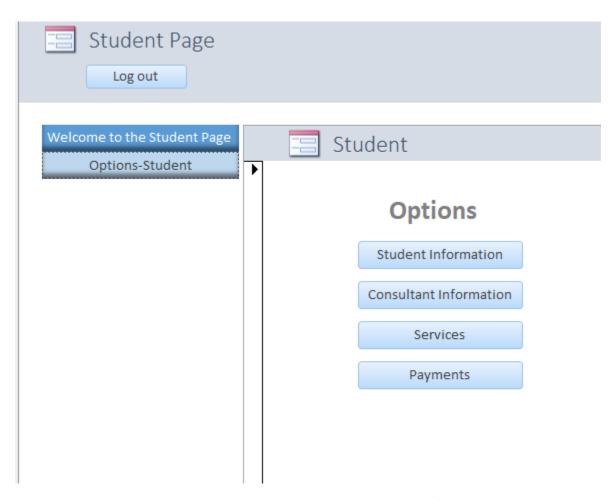


4. Student Login

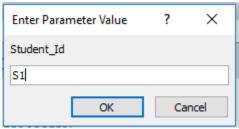


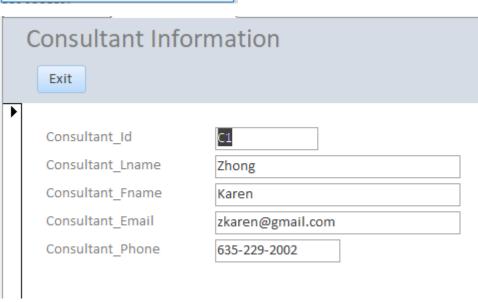
After Successful Login, a student will be directed to a page, where there are options to go to the "Welcome page" and "Option page".





The students can view the options. For each option, they have to specify their ID:



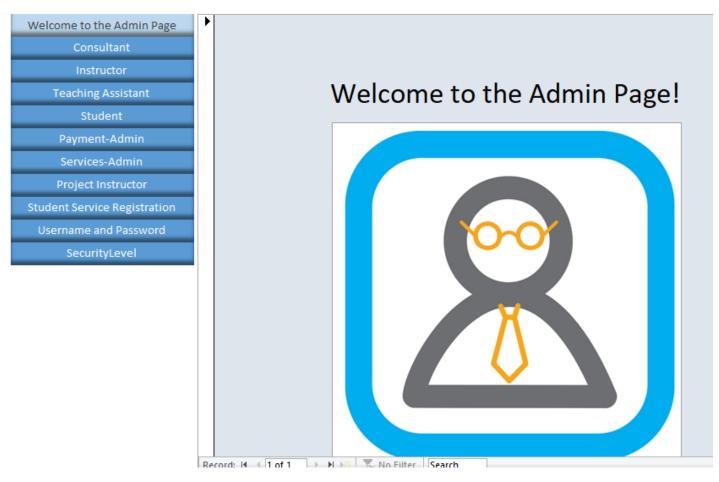


5. Admin Login



After Successful Login, an administrator will be directed to a page, where there are options to go to 11 pages.

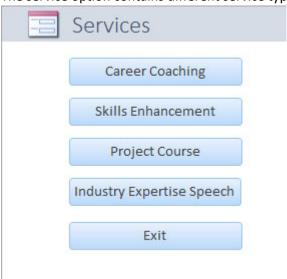




They have full access to add, delete and edit all the records.

*Services:

The service option contains different service types:



Reports

Popular Service Report

Service Name	Number of Students Taking	Service Type
Advanced Excel	9	Skills Enhancement
Resume Revision	8	Career Coaching
Cover Letter Review	5	Career Coaching
Case Interview	4	Skills Enhancement
Finance	4	Industry Expertise Speech
SQL	4	Project Course
Technical Interview Prep	4	Career Coaching
Networking Techniques	3	Career Coaching
Python for Finance	3	Project Course
Behavioral Interview Prep	2	Career Coaching
Behavioral Mock Interview	2	Career Coaching
Job Search Plan	2	Career Coaching
Technical Mock Interview	2	Career Coaching
LinkedIn Profile Edit	1	Career Coaching

Service Revenue Report				
Service Name	Service Revenue	Service Type		
Advanced Excel	7200	Skills Enhancement		
Resume Revision	4000	Career Coaching		
Case Interview	3200	Skills Enhancement		
Python for Finance	3000	Project Course		
Cover Letter Review	2500	Career Coaching		
Technical Interview Prep	2000	Career Coaching		
Networking Techniques	1500	Career Coaching		
Behavioral Interview Prep	1000	Career Coaching		
LinkedIn Profile Edit	500	Career Coaching		
Finance	400	Industry Expertise Speech		
32300				

Consultant Information Report

	Consultant ID	Last Name	First Name	Email	Phone Number	Salary	Number Of Students
	C1	Zhong	Karen	zkaren@gmail.com	635-229-2002	6000	8
	C2	Fu	Reem	freem@gmail.com	215-620-5694	5000	8
	C3	Yan	Justice	yjustice@gmail.com	850-722-1794	8000	7
	C4	Tong	Thomas	tthomas@gmail.com	403-480-8229	6000	5
	C5	Yang	Zachary	yzachary@gmail.com	854-810-5762	5000	3

Instructor Information Report

Instructor ID	Last Name	First Name	Number of Service
Ī1	Ai	Luke	5
18	Nai	Lauren	5
12	Nian	Arielle	4
16	Shang	Phoebe	4
13	Da	Victor	3
14	На	Emily	3
15	Мо	Melissa	3
17	Во	Ruth	2

Students Purchasing Report

Student ID	Last Name	First Name	Number of Services
S24	Zhang	Gustavo	6
S22	Yang	Sahil	4
S15	Dong	Steve	3
S18	Jiang	Dylan	3
S27	Zuo	Nikhil	3
S28	Liu	Danny	3
S11	Wang	Dan	2
S16	Han	Vincent	2
S17	Yang	Austin	2
S21	Wang	Christina	2
S25	Fang	Aby	2
S 9	Zhang	Clay	2
S1	Zhao	Paige	1
S10	Wang	Connie	1
S12	Li	Daron	1
S13	Не	Alina	1
S14	Wu	Laura	1
S19	Shen	Ananti	1
S2	Qian	David	1
S20	Fan	Ezichi	1.
S23	Luo	Adeeso	1
S26	Zhu	Caitlin	1
S29	Li	Tyler	1
\$3	Sun	Chris	1

Student ID	Last Name	First Name	Number of Services
S30	Xu	Adam	1
S31	Huang	Andy	1
S4	Li	Brad	1
S5	Zhou	Alex	1
S6	Wu	Ben	1
S7	Zheng	Carl	1
S8	Zheng	Chuck	1

Payment Method Report

Payment Method	Number of Services
Credit Card	26
Debit Card	19
Cash	4
E-Check	4

TA Information Report

TA ID	Last Name	First Name	Email	Phone Number	Hourly Salary
T1	She	Samantha	ssamantha@gmail.com	582-344-8831	20
T2	Mou	Nikolai	mnikolai@gmail.com	321-766-6554	20
Т3	Shang	Emma	semma@gmail.com	257-264-1163	18
Т4	Qin	Bayley	qbayley@gmail.com	551-282-2938	18