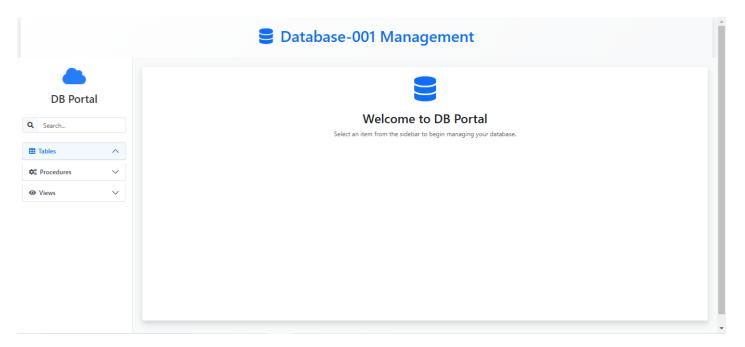
Database Project Step 4 Report: Web Interface

1. Introduction

In this phase of the project, we will design a user-friendly web interface to effectively use the database we created in phase 3. In this way, the changes we make in our interface are instantly reflected in our company database thanks to 20 procedures and these are displayed instantly with the help of tables in the web interface. In addition, from the views tab, you can access the total, average, maximum and minimum values of data such as company, employees, items, service status. Finally, you can easily reach the table, procedure or view you want to reach with the search bar.

2. Web Interface

When you first access the user interface it looks as follows. You can access current company database tables and information from the tables and views section on the left..



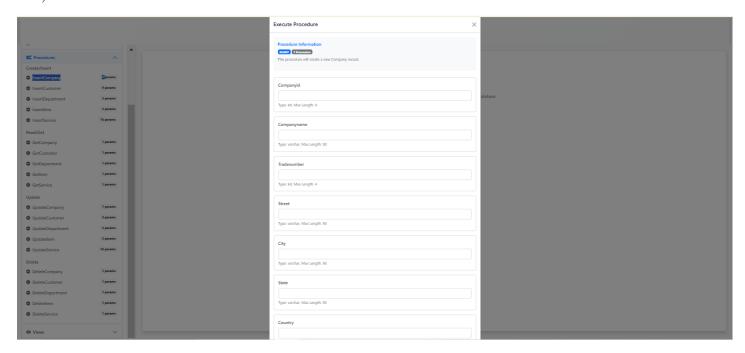
The procedures section contains procedures designed to perform a specific task or process for the company. These procedures are divided into 4 as Create/Insert, Read/Get, Update and Delete.

2.1 Create/Insert Procedures

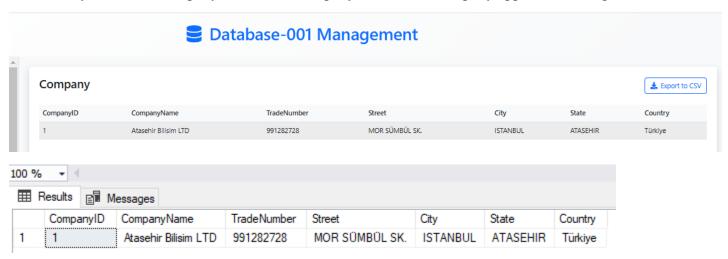
These procedures are used when creating or adding something to the company database.

2.1.1 InsertCompany

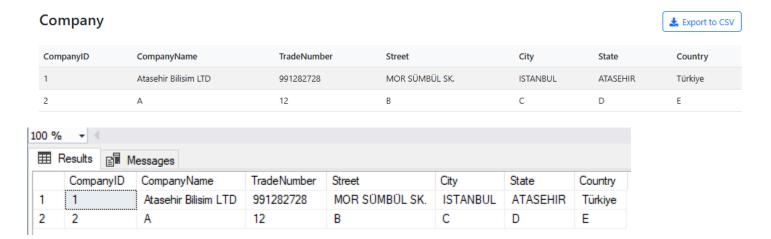
In InsertCompany procedure, we ask the company for 7 parameters(Companyid, Companyname, Tradenumber, Street, City, State, Country) and add a new company to the company database. The web interface image is as follows;



Without any additional company entries, the company table of the company appears in the figures below;

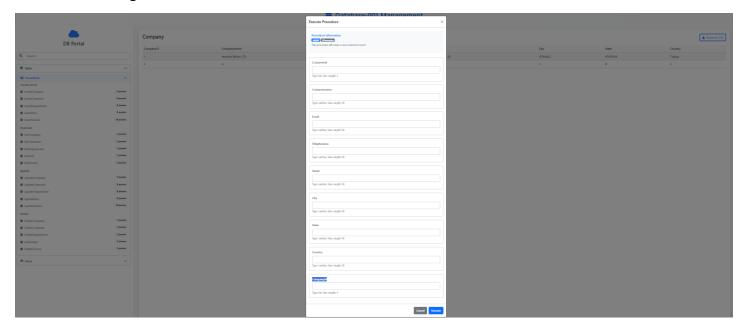


If a new company is added with the information Companyid=2, Companyname=A, Tradenumber=12, Street=B, City=C, State=D, Country=E, the new display in the database will be as follows;



2.1.2 InsertCustomer

In InsertCustomer procedure, we ask the customer for 9 parameters(Customerid, Customername, Email, Telephoneno, Street, City, State, Country, Companyid) and add a new customer to the company database. The web interface image is as follows;



Before any customer registers to the system, the database looks like this:

Customer ▲ Export to CSV CustomerID CustomerName TelephoneNo City State Country CompanyID Ahmet Yilmaz ahmet.yilmaz@gmail.com +90 532 123 4567 Atatürk Bulvari Çankaya Ankara Türkiye No:45 D:3 2 +90 532 987 6543 Konak Mahallesi Inönü Caddesi No:12 Türkiye Ayse Kaya ayse.kaya@hotmail.com Izmir 3 Fatma Demir fatma.demir@yahoo.com +90 531 456 7890 Liman Mahallesi Lara Caddesi No:8 Antalya Türkiye 4 huseyin.sahin@outlook.com Hüseyin Sahin +90 534 123 9876 Heykel Meydani 1 Osmangazi Bursa Türkiye Türkiye 5 Murat Çelik murat.celik@gmail.com +90 535 654 3210 Bagdat Caddesi Kadiköy Istanbul No:56 +90 530 112 2334 6 Zeynep Arslan Kalkinma Mahallesi Farabi Sokak No:7 1 zeynep.arslan@icloud.com Trabzon Türkiye Burak Özkan Turgut Özal Bulvari burak.ozkan@gmail.com +90 536 998 7654 Seyhan Adana Türkiye No:89 8 Emine Kara emine.kara@yahoo.com +90 532 445 6677 Mevlana Caddesi Selçuklu Konya Türkiye No:34 9 Sevgi Günes sevgi.gunes@gmail.com +90 531 765 4321 Akdeniz Mahallesi Atatürk Caddesi No:22 Mersin Türkiye 10 Ali Polat ali.polat@outlook.com +90 530 567 1234 Kale Mahallesi Cumhuriyet Caddesi Samsun Türkiye No:3 100 % + 4 ⊞ Results Messages CustomerID CustomerName Email Telephone No Street City State Country CompanyID Ahmet Yilmaz +90 532 123 4567 Türkiye ahmet.yilmaz@gmail.com Atatürk Bulvari No:45 D:3 Çankaya Ankara 2 2 Ayse Kaya ayse.kaya@hotmail.com +90 532 987 6543 Konak Mahallesi Inönü Caddesi No:12 Izmir Türkiye 3 3 Fatma Demir fatma.demir@yahoo.com +90 531 456 7890 Liman Mahallesi Lara Caddesi No:8 Antalya Türkiye 1 Heykel Meydani 4 4 Hüseyin Sahin huseyin.sahin@outlook.com +90 534 123 9876 Osmangazi Bursa Türkiye 1 5 5 Murat Çelik murat.celik@gmail.com +90 535 654 3210 Bagdat Caddesi No:56 Kadiköy Istanbul Türkiye 6 6 Zeynep Arslan zeynep.arslan@icloud.com +90 530 112 2334 Kalkinma Mahallesi Farabi Sokak No:7 Trabzon Türkiye 1 7 7 Burak Özkan burak.ozkan@gmail.com +90 536 998 7654 Turgut Özal Bulvari No:89 Seyhan Adana Türkiye 1 8 8 Emine Kara emine.kara@yahoo.com +90 532 445 6677 Mevlana Caddesi No:34 Selçuklu Konya Türkiye 1 9 9 Sevgi Günes +90 531 765 4321 Akdeniz Mahallesi Atatürk Caddesi N... Mersin Türkiye sevgi.gunes@gmail.com 1 10 10 Ali Polat ali.polat@outlook.com +90 530 567 1234 Kale Mahallesi Cumhuriyet Cadde... Samsun Türkiye

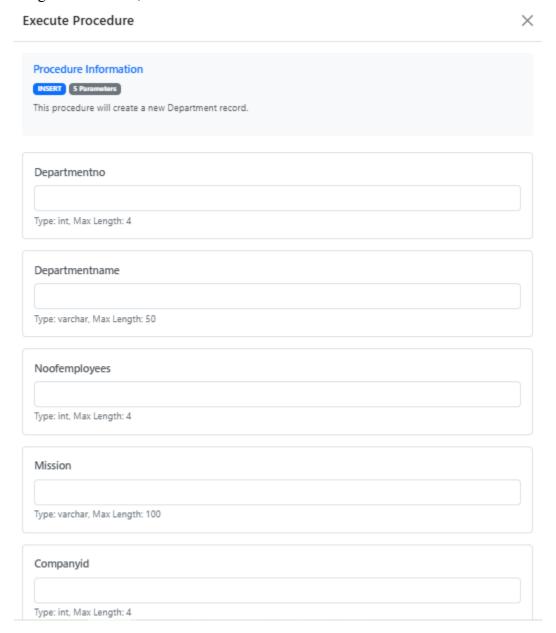
If a new customer is register with the information Customerid=0, Customername=A, Email=B, Telephoneno=C, Street=D, City=E, State=F, Country=G, Companyid=1, the new display in the database will be as follows;

Customer							±	Export to CSV
CustomerID	CustomerName	Email	TelephoneNo	Street	City	State	Country	CompanyID
0	Α	В	С	D	E	F	G	1
1	Ahmet Yilmaz	ahmet.yilmaz@gmail.com	+90 532 123 4567	Atatürk Bulvari No:45 D:3	Çankaya	Ankara	Türkiye	1
2	Ayse Kaya	ayse.kaya@hotmail.com	+90 532 987 6543	Konak Mahallesi	Inönü Caddesi No:12	Izmir	Türkiye	1
3	Fatma Demir	fatma.demir@yahoo.com	+90 531 456 7890	Liman Mahallesi	Lara Caddesi No:8	Antalya	Türkiye	1
4	Hüseyin Sahin	huseyin.sahin@outlook.com	+90 534 123 9876	Heykel Meydani	Osmangazi	Bursa	Türkiye	1
5	Murat Çelik	murat.celik@gmail.com	+90 535 654 3210	Bagdat Caddesi No:56	Kadiköy	Istanbul	Türkiye	1
6	Zeynep Arslan	zeynep.arslan@icloud.com	+90 530 112 2334	Kalkinma Mahallesi	Farabi Sokak No:7	Trabzon	Türkiye	1
7	Burak Özkan	burak.ozkan@gmail.com	+90 536 998 7654	Turgut Özal Bulvari No:89	Seyhan	Adana	Türkiye	1
8	Emine Kara	emine.kara@yahoo.com	+90 532 445 6677	Mevlana Caddesi No:34	Selçuklu	Konya	Türkiye	1
9	Sevgi Günes	sevgi.gunes@gmail.com	+90 531 765 4321	Akdeniz Mahallesi	Atatürk Caddesi No:22	Mersin	Türkiye	1
10	Ali Polat	ali.polat@outlook.com	+90 530 567 1234	Kale Mahallesi	Cumhuriyet Caddesi No:3	Samsun	Türkiye	1

100 %	•								
▦	Results 🗐 N	Messages							
	CustomerID	CustomerName	Email	TelephoneNo	Street	City	State	Country	CompanyID
1	0	Α	В	С	D	E	F	G	1
2	1	Ahmet Yilmaz	ahmet.yilmaz@gmail.com	+90 532 123 4567	Atatürk Bulvari No:45 D:3	Çankaya	Ankara	Türkiye	1
3	2	Ayse Kaya	ayse.kaya@hotmail.com	+90 532 987 6543	Konak Mahallesi	Inönü Caddesi No:12	Izmir	Türkiye	1
4	3	Fatma Demir	fatma.demir@yahoo.com	+90 531 456 7890	Liman Mahallesi	Lara Caddesi No:8	Antalya	Türkiye	1
5	4	Hüseyin Sahin	huseyin.sahin@outlook.com	+90 534 123 9876	Heykel Meydani	Osmangazi	Bursa	Türkiye	1
6	5	Murat Çelik	murat.celik@gmail.com	+90 535 654 3210	Bagdat Caddesi No:56	Kadiköy	Istanbul	Türkiye	1
7	6	Zeynep Arslan	zeynep.arslan@icloud.com	+90 530 112 2334	Kalkinma Mahallesi	Farabi Sokak No:7	Trabzon	Türkiye	1
8	7	Burak Özkan	burak.ozkan@gmail.com	+90 536 998 7654	Turgut Özal Bulvari No:89	Seyhan	Adana	Türkiye	1
9	8	Emine Kara	emine.kara@yahoo.com	+90 532 445 6677	Mevlana Caddesi No:34	Selçuklu	Konya	Türkiye	1
10	9	Sevgi Günes	sevgi.gunes@gmail.com	+90 531 765 4321	Akdeniz Mahallesi	Atatürk Caddesi No:22	Mersin	Türkiye	1
11	10	Ali Polat	ali.polat@outlook.com	+90 530 567 1234	Kale Mahallesi	Cumhuriyet Caddesi No:3	Samsun	Türkiye	1

2.1.3 InsertDepartment

In InsertDepartment procedure, we ask the department for 5 parameters(Departmentno, Departmentname, Noofemployees, Mission, Companyid) and add a new department to the company database. The web interface image is as follows;



Before any other departments registers to the system, the database looks like this:

Department



DepartmentNo	DepartmentName	NoOfEmployees	Mission	CompanyID
1	Administration	10	To oversee daily operations and coordination	1
2	Cloud Services	50	To provide reliable cloud-based solutions and support	1
3	Network Management	40	To maintain and optimize network infrastructure	1
4	Software Repair	30	To troubleshoot and fix software-related issues	1
5	Hardware Repair	25	To repair and maintain hardware devices	1
6	Security Systems	35	To ensure robust security and protection against threats	1
7	Software Development	45	To design and build innovative software solutions	1
8	Data Analytics	20	To analyze data for insights and decision-making	1
9	Customer Support	50	To assist customers with their technical and service-related issues	1
10	Testing and Quality Assurance	25	To test and ensure the quality of services and products	1
11	Research and Development	15	To innovate and develop next-generation technologies	1
12	Human Resources	10	To manage and support the company's workforce	1
13	Finance and Accounting	5	To handle financial transactions and reporting	1
14	Marketing and Sales	15	To promote and sell the company's products and services	1
15	Legal and Compliance	5	To ensure legal compliance and protect the company's interests	1

III	Results 📲 Mes	sages			
	Department No	Department Name	NoOfEmployees	Mission	CompanyID
1	1	Administration	10	To oversee daily operations and coordination	1
2	2	Cloud Services	50	To provide reliable cloud-based solutions and supp	1
3	3	Network Management	40	To maintain and optimize network infrastructure	1
4	4	Software Repair	30	To troubleshoot and fix software-related issues	1
5	5	Hardware Repair	25	To repair and maintain hardware devices	1
6	6	Security Systems	35	To ensure robust security and protection against th	1
7	7	Software Development	45	To design and build innovative software solutions	1
8	8	Data Analytics	20	To analyze data for insights and decision-making	1
9	9	Customer Support	50	To assist customers with their technical and servic	1
10	10	Testing and Quality Assurance	25	To test and ensure the quality of services and prod	1
11	11	Research and Development	15	To innovate and develop next-generation technolo	1
12	12	Human Resources	10	To manage and support the company's workforce	1
13	13	Finance and Accounting	5	To handle financial transactions and reporting	1
14	14	Marketing and Sales	15	To promote and sell the company's products and s	1
15	15	Legal and Compliance	5	To ensure legal compliance and protect the comp	1

If a new department is register with the Departmentno=0, Departmentname=A, Noofemployees=5, Mission=B, Companyid=1, the new display in the database will be as follows;

Department

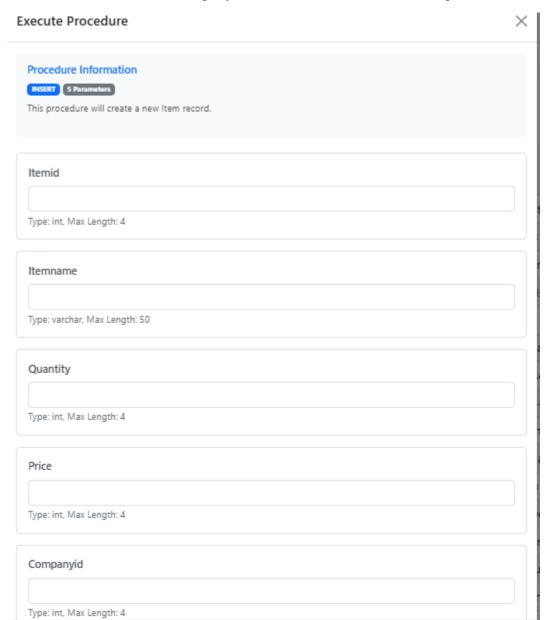
≜ Export to CSV

Administration 10 To oversee daily operations and coordination 1 Cloud Services 50 To provide reliable cloud-based solutions and support 1 Network Management 40 To maintain and optimize network infrastructure 1 Network Management 40 To maintain and optimize network infrastructure 1 Hardware Repair 30 To troubleshoot and fix software-related issues 1 Finance and Accounting 5 To nesure robust security and protection against threats 1 Customer Support 50 To easist customers with their technical and service-related issues 1 To assist customers with their technical and service-related issues 1 Human Resources 10 To manage and support the company's workforce 1 Marketing and Sales 15 To pomote and sell the company's products and services 1 Marketing and Compliance 5 To ensure legal compliance and protect the company's interests 1	DepartmentNo	DepartmentName	NoOfEmployees	Mission	CompanyID
Cloud Services 50 To provide reliable cloud-based solutions and support 1 Network Management 40 To maintain and optimize network infrastructure 1 Software Repair 30 To troubleshoot and fix software-related issues 1 Hardware Repair 25 To repair and maintain hardware devices 1 Security Systems 35 To ensure robust security and protection against threats 1 Software Development 45 To design and build innovative software solutions 1 Software Development 50 To analyze data for insights and decision-making 1 Customer Support 50 To assist customers with their technical and service-related issues 1 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 Research and Development 15 To innovate and develop next-generation technologies 1 Human Resources 10 To manage and support the company's workforce 1 Marketing and Sales 15 To handle financial transactions and reporting 1 Marketing and Sales 15 To promote and sell the company's products and services 1	0	A	5	В	1
Network Management 40 To maintain and optimize network infrastructure 1 4 Software Repair 30 To troubleshoot and fix software-related issues 1 5 Hardware Repair 25 To repair and maintain hardware devices 1 6 Security Systems 35 To ensure robust security and protection against threats 1 7 Software Development 45 To design and build innovative software solutions 1 8 Data Analytics 20 To analyze data for insights and decision-making 1 9 Customer Support 50 To assist customers with their technical and service-related issues 1 10 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 11 Research and Development 15 To innovate and develop next-generation technologies 1 12 Human Resources 10 To manage and support the company's workforce 1 13 Finance and Accounting 5 To handle financial transactions and reporting 1 14 Marketing and Sales 15 To promote and sell the company's products and services 1	1	Administration	10	To oversee daily operations and coordination	1
4 Software Repair 30 To troubleshoot and fix software-related issues 1 5 Hardware Repair 25 To repair and maintain hardware devices 1 6 Security Systems 35 To ensure robust security and protection against threats 1 7 Software Development 45 To design and build innovative software solutions 1 8 Data Analytics 20 To analyze data for insights and decision-making 1 9 Customer Support 50 To assist customers with their technical and service-related issues 1 10 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 11 Research and Development 15 To innovate and develop next-generation technologies 1 12 Human Resources 10 To manage and support the company's workforce 1 13 Finance and Accounting 5 To handle financial transactions and reporting 1 14 Marketing and Sales 15 To promote and sell the company's products and services 1	2	Cloud Services	50	To provide reliable cloud-based solutions and support	1
Hardware Repair 25 To repair and maintain hardware devices 1 Security Systems 35 To ensure robust security and protection against threats 1 Software Development 45 To design and build innovative software solutions 1 Data Analytics 20 To analyze data for insights and decision-making 1 Customer Support 50 To assist customers with their technical and service-related issues 1 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 Research and Development 15 To innovate and develop next-generation technologies 1 Human Resources 10 To manage and support the company's workforce 1 Marketing and Sales 15 To handle financial transactions and reporting 1 Marketing and Sales 15 To promote and sell the company's products and services 1	3	Network Management	40	To maintain and optimize network infrastructure	1
6 Security Systems 35 To ensure robust security and protection against threats 1 7 Software Development 45 To design and build innovative software solutions 1 8 Data Analytics 20 To analyze data for insights and decision-making 1 9 Customer Support 50 To assist customers with their technical and service-related issues 1 10 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 11 Research and Development 15 To innovate and develop next-generation technologies 1 12 Human Resources 10 To manage and support the company's workforce 1 13 Finance and Accounting 5 To handle financial transactions and reporting 1 14 Marketing and Sales 15 To promote and sell the company's products and services 1	4	Software Repair	30	To troubleshoot and fix software-related issues	1
7 Software Development 45 To design and build innovative software solutions 1 8 Data Analytics 20 To analyze data for insights and decision-making 1 9 Customer Support 50 To assist customers with their technical and service-related issues 1 10 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 11 Research and Development 15 To innovate and develop next-generation technologies 1 12 Human Resources 10 To manage and support the company's workforce 1 13 Finance and Accounting 5 To handle financial transactions and reporting 1 14 Marketing and Sales 15 To promote and sell the company's products and services 1	5	Hardware Repair	25	To repair and maintain hardware devices	1
B Data Analytics 20 To analyze data for insights and decision-making 1 Customer Support 50 To assist customers with their technical and service-related issues 1 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 Research and Development 15 To innovate and develop next-generation technologies 1 Human Resources 10 To manage and support the company's workforce 1 Finance and Accounting 5 To handle financial transactions and reporting 1 Marketing and Sales 15 To promote and sell the company's products and services 1	6	Security Systems	35	To ensure robust security and protection against threats	1
9 Customer Support 50 To assist customers with their technical and service-related issues 1 10 Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 11 Research and Development 15 To innovate and develop next-generation technologies 1 12 Human Resources 10 To manage and support the company's workforce 1 13 Finance and Accounting 5 To handle financial transactions and reporting 1 14 Marketing and Sales 15 To promote and sell the company's products and services 1	7	Software Development	45	To design and build innovative software solutions	1
Testing and Quality Assurance 25 To test and ensure the quality of services and products 1 Research and Development 15 To innovate and develop next-generation technologies 1 Human Resources 10 To manage and support the company's workforce 1 Finance and Accounting 5 To handle financial transactions and reporting 1 Marketing and Sales 15 To promote and sell the company's products and services 1	8	Data Analytics	20	To analyze data for insights and decision-making	1
11 Research and Development 15 To innovate and develop next-generation technologies 1 12 Human Resources 10 To manage and support the company's workforce 1 13 Finance and Accounting 5 To handle financial transactions and reporting 1 14 Marketing and Sales 15 To promote and sell the company's products and services 1	9	Customer Support	50	To assist customers with their technical and service-related issues	1
Human Resources 10 To manage and support the company's workforce 1 To manage and support the company's workforce 1 To handle financial transactions and reporting 1 Marketing and Sales 15 To promote and sell the company's products and services 1	10	Testing and Quality Assurance	25	To test and ensure the quality of services and products	1
13 Finance and Accounting 5 To handle financial transactions and reporting 1 14 Marketing and Sales 15 To promote and sell the company's products and services 1	11	Research and Development	15	To innovate and develop next-generation technologies	1
14 Marketing and Sales 15 To promote and sell the company's products and services 1	12	Human Resources	10	To manage and support the company's workforce	1
	13	Finance and Accounting	5	To handle financial transactions and reporting	1
15 Legal and Compliance 5 To ensure legal compliance and protect the company's interests 1	14	Marketing and Sales	15	To promote and sell the company's products and services	1
	15	Legal and Compliance	5	To ensure legal compliance and protect the company's interests	1

	DepartmentNo	Department Name	NoOfEmployees	Mission	CompanyID
1	0	Α	5	В	1
2	1	Administration	10	To oversee daily operations and coordination	1
3	2	Cloud Services	50	To provide reliable cloud-based solutions and support	1
4	3	Network Management	40	To maintain and optimize network infrastructure	1
5	4	Software Repair	30	To troubleshoot and fix software-related issues	1
6	5	Hardware Repair	25	To repair and maintain hardware devices	1
7	6	Security Systems	35	To ensure robust security and protection against thr	1
8	7	Software Development	45	To design and build innovative software solutions	1
9	8	Data Analytics	20	To analyze data for insights and decision-making	1
10	9	Customer Support	50	To assist customers with their technical and service	1
11	10	Testing and Quality Assurance	25	To test and ensure the quality of services and prod	1
12	11	Research and Development	15	To innovate and develop next-generation technolo	1
13	12	Human Resources	10	To manage and support the company's workforce	1
14	13	Finance and Accounting	5	To handle financial transactions and reporting	1
15	14	Marketing and Sales	15	To promote and sell the company's products and se	1
16	15	Legal and Compliance	5	To ensure legal compliance and protect the compa	1

2.1.4 InsertItem

In InsertItem procedure, we want the 5 parameters from item(Itemid, Itemname, Quantity, Price Companyid) and add a new item to the company database. The web interface image is as follows;



Without any additional item entries, the items table of the company appears in the figures below;

Item					≛ Export to CSV
ItemID	ItemName	Quantity	Price	CompanyID	
1	Laptop	10	1200	1	
2	Smartphone	20	800	1	
3	Monitor	15	300	1	
4	Keyboard	50	20	1	
5	Mouse	60	15	1	
6	Printer	12	150	1	
7	Router	25	75	1	
8	External Hard Drive	18	90	1	
9	Tablet	30	250	1	
10	Headphones	40	50	1	

	ItemID	ltemName	Quantity	Price	CompanyID
1	1	Laptop	10	1200	1
2	2	Smartphone	20	800	1
3	3	Monitor	15	300	1
4	4	Keyboard	50	20	1
5	5	Mouse	60	15	1
6	6	Printer	12	150	1
7	7	Router	25	75	1
8	8	External Hard Drive	18	90	1
9	9	Tablet	30	250	1
10	10	Headphones	40	50	1

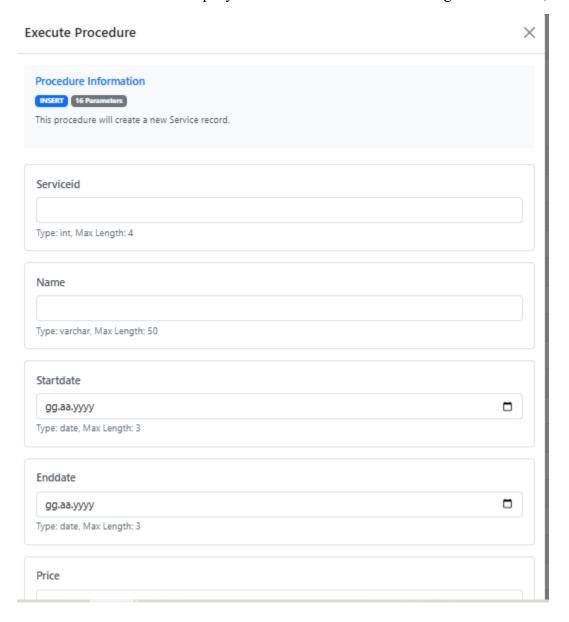
If a new item is register with the information with Itemid=0, Itemname=A, Quantity=5, Price=10 and Companyid=1, the new display in the database will be as follows;

Item				≛ Export to CSV
ItemID	ItemName	Quantity	Price	CompanyID
0	A	5	10	1
1	Laptop	10	1200	1
2	Smartphone	20	800	1
3	Monitor	15	300	1
4	Keyboard	50	20	1
5	Mouse	60	15	1
6	Printer	12	150	1
7	Router	25	75	1
8	External Hard Drive	18	90	1
9	Tablet	30	250	1
10	Headphones	40	50	1

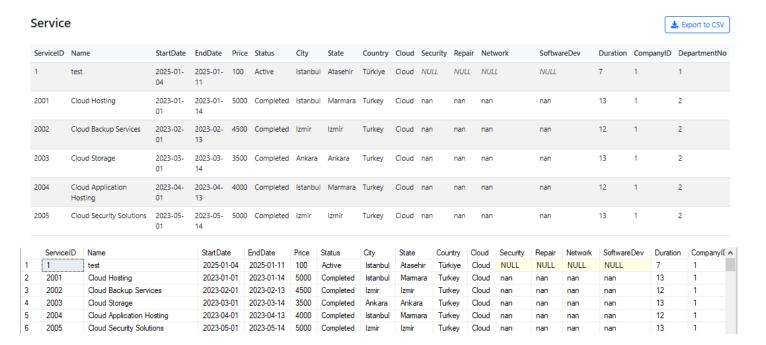
	ItemID	ltemName	Quantity	Price	CompanyID
1	0	Α	5	10	1
2	1	Laptop	10	1200	1
3	2	Smartphone	20	800	1
4	3	Monitor	15	300	1
5	4	Keyboard	50	20	1
6	5	Mouse	60	15	1
7	6	Printer	12	150	1
8	7	Router	25	75	1
9	8	External Hard Drive	18	90	1
10	9	Tablet	30	250	1

2.1.5 InsertService

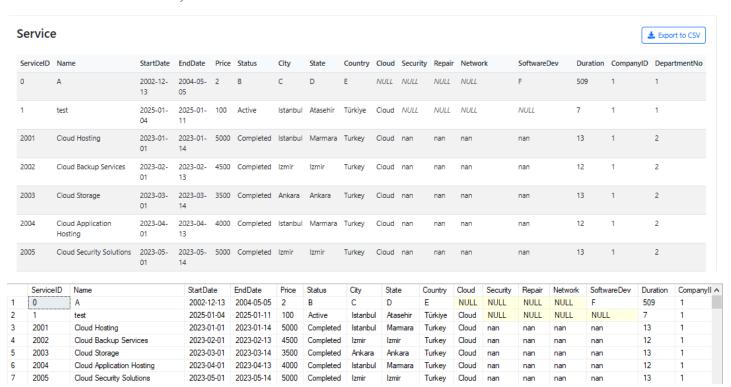
In InsertService procedure, we want the service for 16 parameters(Serviceid, Name, Startdate, Enddate, Price, Status, City, State, Country, Cloud, Security, Repair, Network, Softwaredev, Companyid, Departmentno) and add a new service to the company database. The web interface image is as follows;



Without any additional services entries, the services table of the company appears in the figures below;



If a new services is register with the information Serviceid=0, Name=A, Startdate=13.12.2002, Enddate=05.05.2004, Price=2, Status=B, City=C, State=D, Country=E, Cloud=NULL, Security=NULL, Repair=NULL, Network=NULL, Softwaredev=F, Companyid=1, Departmentno=1, the new display in the database will be as follows;

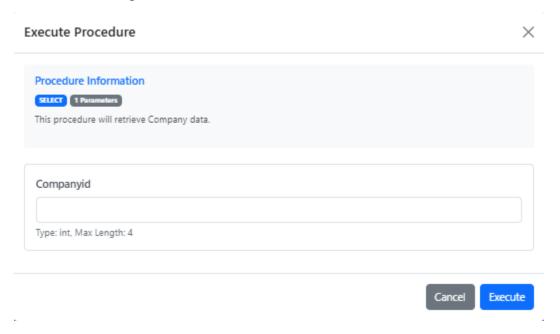


2.2 Read/Get Procedures

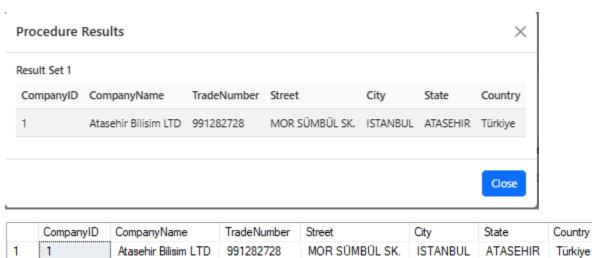
A stored procedure that performs a specific task on a database and is usually read-only.

2.2.1 GetCompany

In GetCompany procedure, we ask the company just for 1 parameters(Companyid) and show the company. The web interface image is as follows;

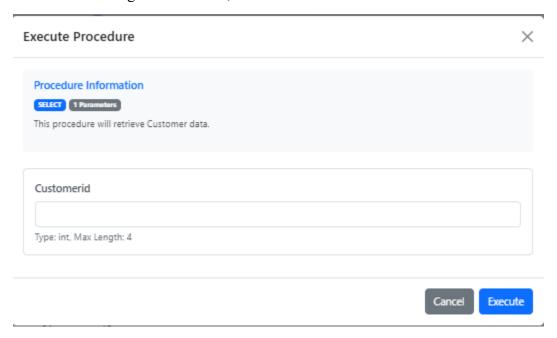


If a company with CompanyID number 1 is displayed, we get the following image;

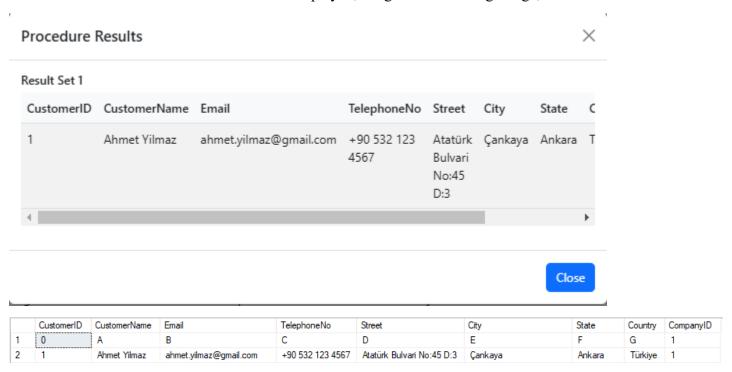


2.2.2 GetCustomer

In GetCostomer procedure, we ask the customer just for 1 parameters(Customerid) and show the company. The web interface image is as follows;

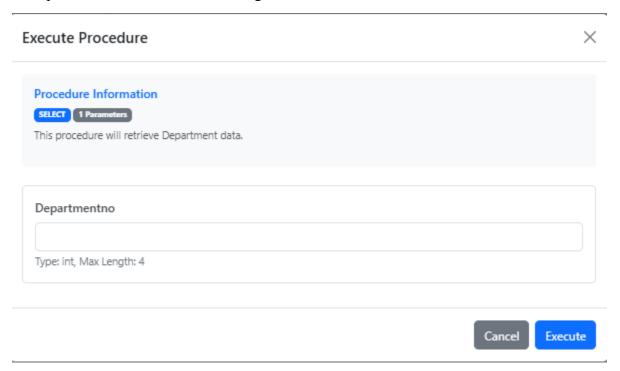


If a customer with CustomerID number 1 is displayed, we get the following image;

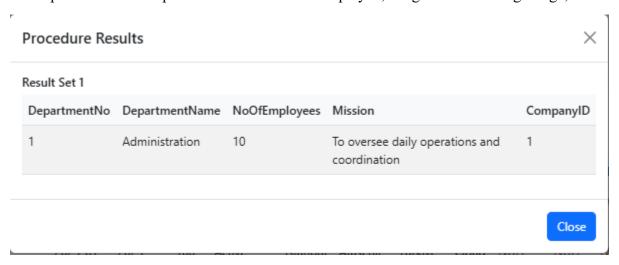


2.2.3 GetDepartment

In GetDepartment procedure, we ask the department just for 1 parameters(Departmentid) and show thedepartment. The web interface image is as follows;



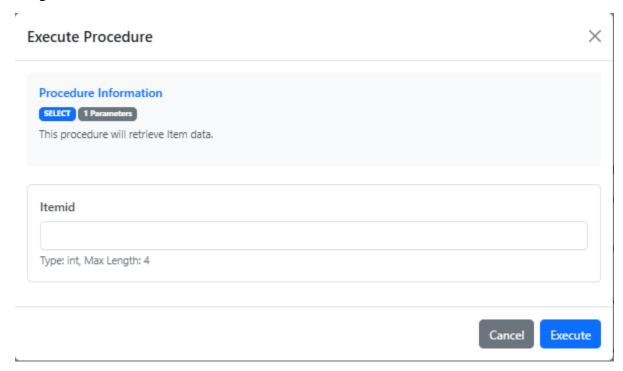
If a department with DepartmentID number 1 is displayed, we get the following image;



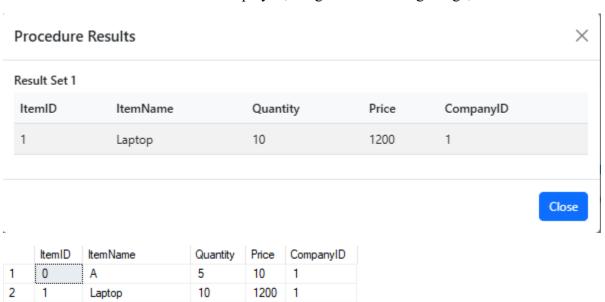
	DepartmentNo	Department Name	NoOfEmployees	Mission	CompanyID
1	0	A	5	В	1
2	1	Administration	10	To oversee daily operations and coordination	1

2.2.4 GetItem

In GetItem procedure, we want the item just for 1 parameters(Itemid) and show the item. The web interface image is as follows;

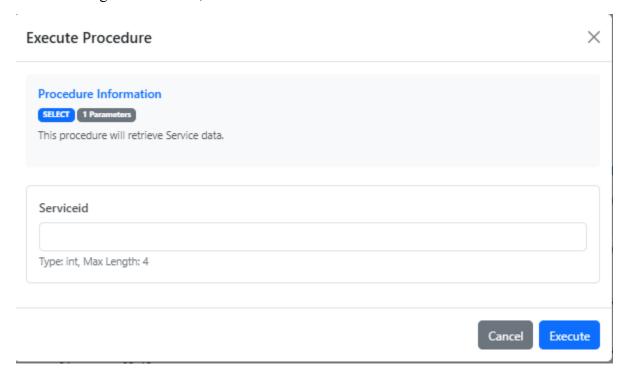


If a item with ItemID number 1 is displayed, we get the following image;

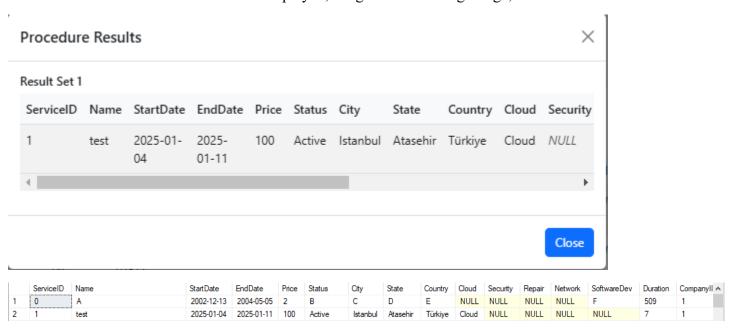


2.2.5 GetService

In GetService procedure, we want the item just for 1 parameters(Serviceid) and show the service. The web interface image is as follows;



If a service with ServiceID number 1 is displayed, we get the following image;

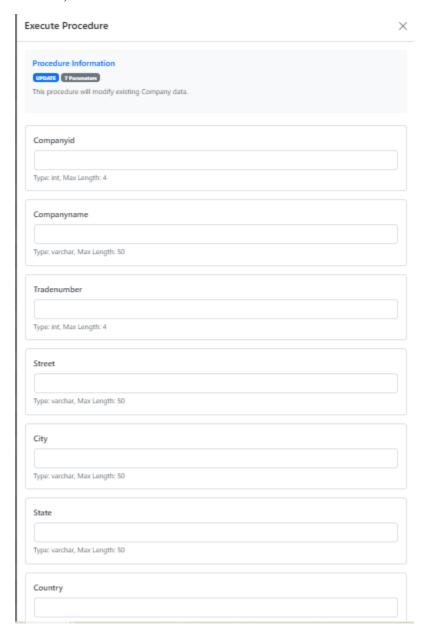


2.3 Update Procedures

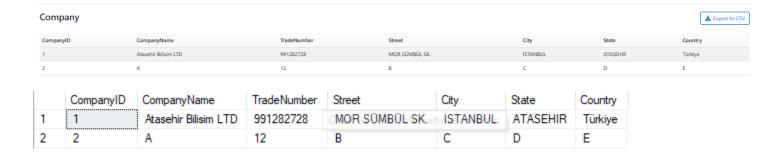
Creates update procedures for incorrect or incomplete data entered in the update procedure

2.3.1 UpdateCompany

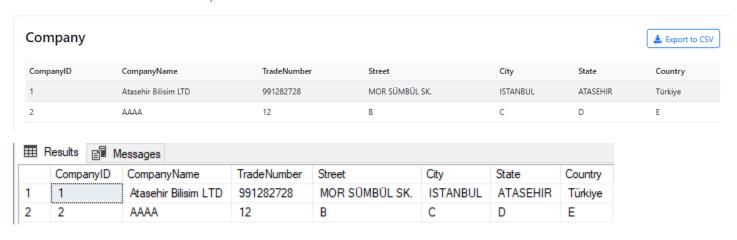
In UpdateCompany, we ask the company for 7 parameters(Companyid, Companyname, Tradenumber, Street, City, State, Country) and update information a company to the company database. The web interface image is as follows;



Without any additional company uptades, the company table of the company appears in the figures below;

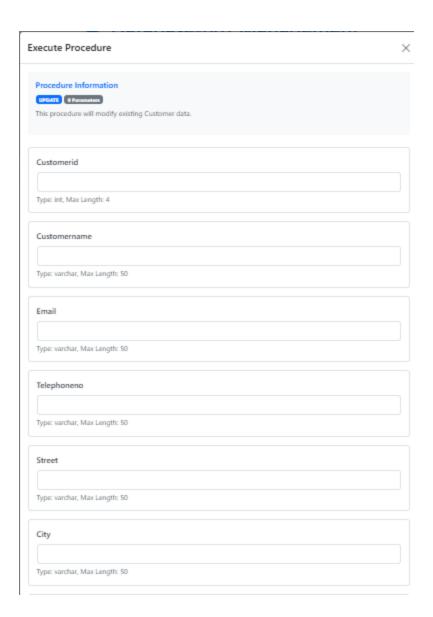


If we update the company name of the company with CompanyID number 2 to AAAA, the new display in the database will be as follows;

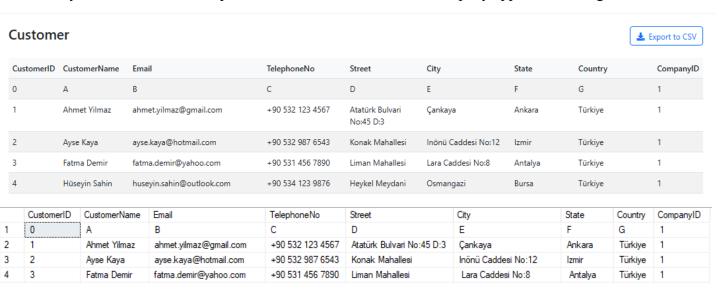


2.3.2 UpdateCustomer

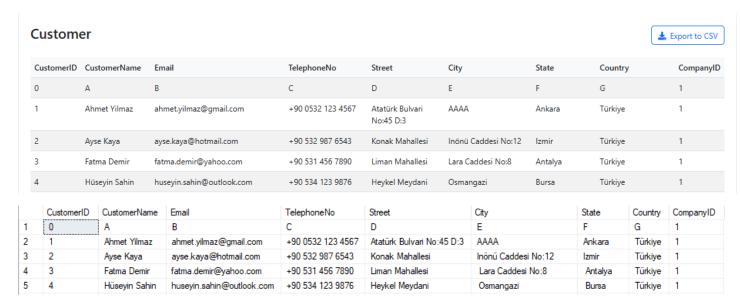
In UpdateCustomer procedure, we ask the customer for 9 parameters(Customerid, Customername, Email, Telephoneno, Street, City, State, Country, Companyid) and update information a customer to the company database.. The web interface image is as follows;



Without any additional customer uptades, the customer table of the company appears in the figures below;

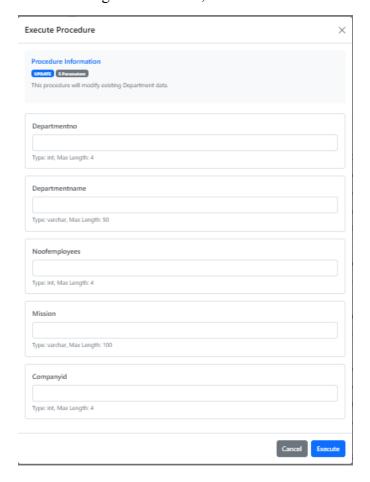


If we update the customer city of the customer with CompanyID number 1 to AAAA, the new display in the database will be as follows;



2.3.3 UpdateDepartment

In UpdateDepartment procedure, we ask the customer 5 parameters(Departmentno, Departmentname, Noofemployees, Mission, Companyid) and update information a department to the company database. The web interface image is as follows;



Without any additional department uptades, the department table of the company appears in the figures below;

Department 🚣 Export to CSV DepartmentName NoOfEmployees Mission CompanyID DepartmentNo 0 5 В Α 1 10 Administration To oversee daily operations and coordination 2 50 To provide reliable cloud-based solutions and support **Cloud Services** 3 Network Management 40 To maintain and optimize network infrastructure 4 Software Repair 30 To troubleshoot and fix software-related issues

	DepartmentNo	Department Name	NoOfEmployees	Mission	CompanyID
1	0	A	5	В	1
2	1	Administration	10	To oversee daily operations and coordination	1
3	2	Cloud Services	50	To provide reliable cloud-based solutions and support	1
4	3	Network Management	40	To maintain and optimize network infrastructure	1
5	4	Software Repair	30	To troubleshoot and fix software-related issues	1

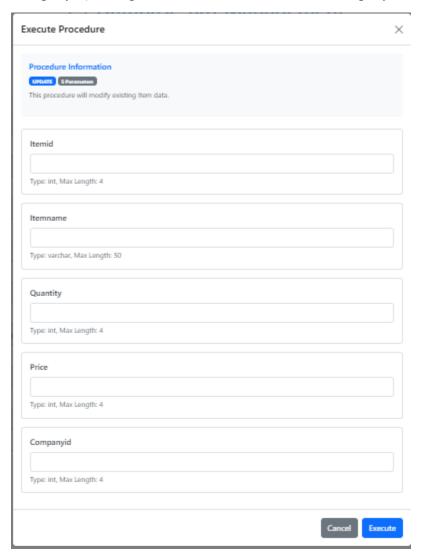
If we update the DepartmentName of the customer with DepartmentID number 0 to AAAA, the new display in the database will be as follows;

Department ▲ Export to CSV CompanyID DepartmentNo DepartmentName NoOfEmployees Mission AAAA 1 1 Administration 10 To oversee daily operations and coordination 2 50 To provide reliable cloud-based solutions and support **Cloud Services** 3 1 Network Management 40 To maintain and optimize network infrastructure Software Repair To troubleshoot and fix software-related issues

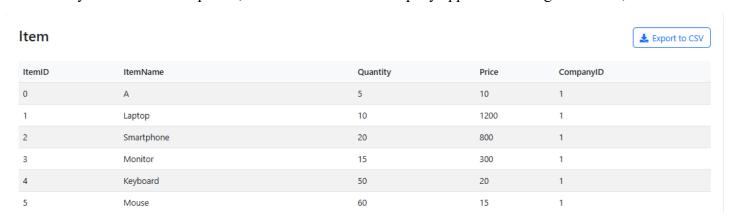
	Department No	Department Name	NoOfEmployees	Mission	CompanyID
1	0	AAAA	5	В	1
2	1	Administration	10	To oversee daily operations and coordination	1
3	2	Cloud Services	50	To provide reliable cloud-based solutions and support	1
4	3	Network Management	40	To maintain and optimize network infrastructure	1
5	4	Software Repair	30	To troubleshoot and fix software-related issues	1

2.3.4 UpdateItem

In UpdateItem procedure, we ask the customer 5 parameters from item(Itemid, Itemname, Quantity, Price Companyid) and update information a item to the company database.. The web interface image is as follows;



Without any additional item uptades, the item table of the company appears in the figures below;



	ItemID	ltemName	Quantity	Price	CompanyID
1	0	Α	5	10	1
2	1	Laptop	10	1200	1
3	2	Smartphone	20	800	1
4	3	Monitor	15	300	1
5	4	Keyboard	50	20	1
6	5	Mouse	60	15	1

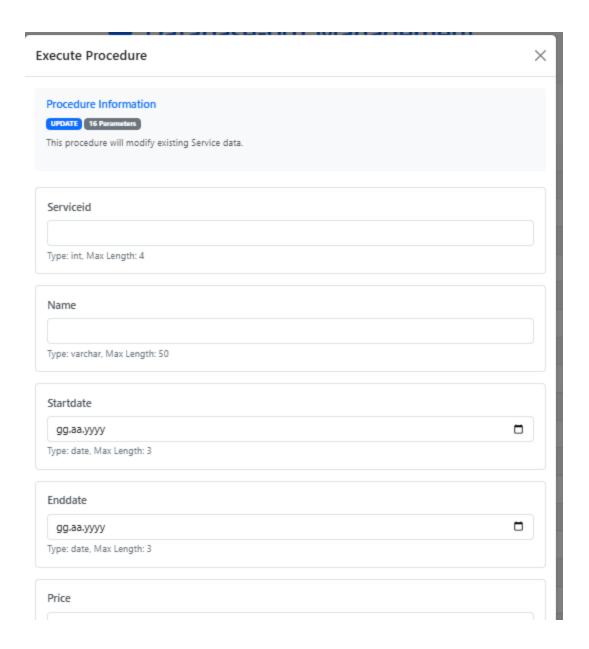
If we update the ItemName of the customer with ItemID number 0 to AAAA, the new display in the database will be as follows;

ltem				📥 Export to CSV
ItemID	ItemName	Quantity	Price	CompanyID
0	AAAA	5	10	1
1	Laptop	10	1200	1
2	Smartphone	20	800	1
3	Monitor	15	300	1
4	Keyboard	50	20	1
5	Mouse	60	15	1

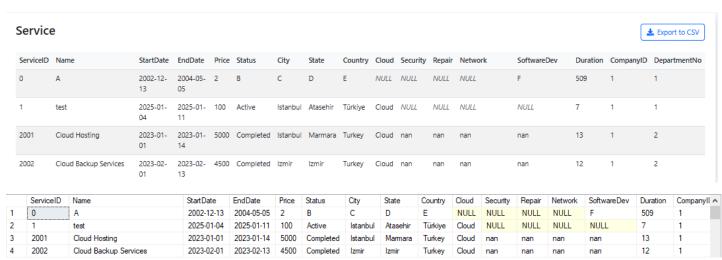
	ItemID	ltemName	Quantity	Price	CompanyID
1	0	AAAA	5	10	1
2	1	Laptop	10	1200	1
3	2	Smartphone	20	800	1
4	3	Monitor	15	300	1
5	4	Keyboard	50	20	1
6	5	Mouse	60	15	1

2.3.5 UpdateService

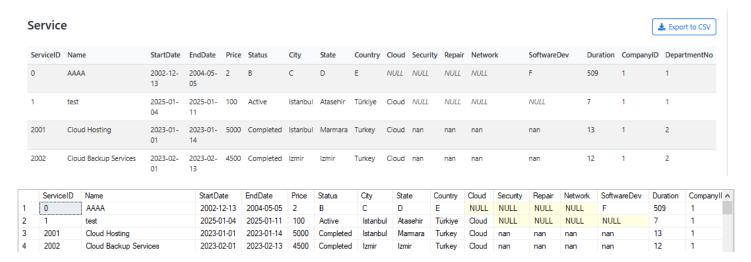
In UpdateService procedure, we ask the service 16 parameters(Serviceid, Name, Startdate, Enddate, Price, Status, City, State, Country, Cloud, Security, Repair, Network, Softwaredev, Companyid, Departmentno) and update information a service to the company database.. The web interface image is as follows;



Without any additional service uptades, the service table of the company appears in the figures below;



If we update the ServiceName of the service with ServiceID number 0 to AAAA, the new display in the database will be as follows;

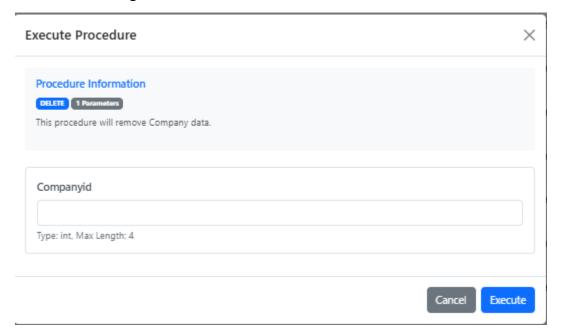


2.4 Delete Procedures

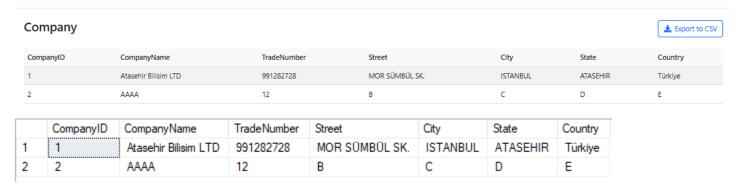
These procedures are used to delete data from the company database.

2.4.1 DeleteCompany

In DeleteCompany procedure, we ask the company just 1 parameters(Companyid) and delete the company. The web interface image is as follows;



Before deletion, the company class looks like this;

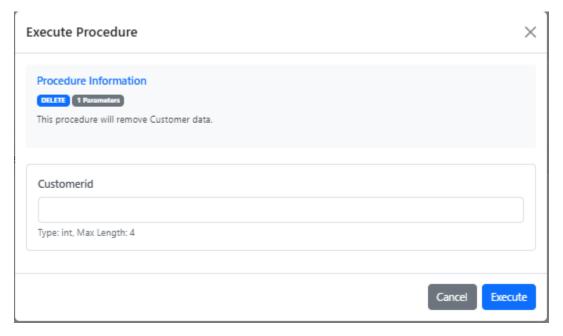


When you delete the company with companyID equal 2, the tables appear as follows;

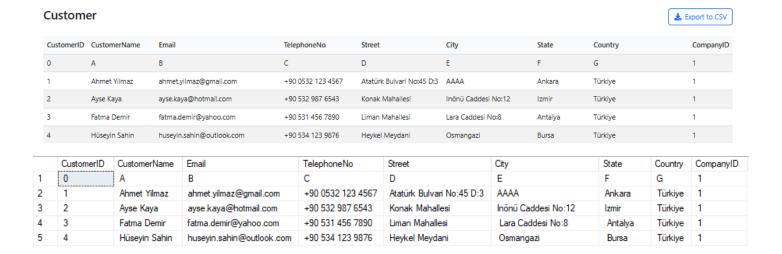


2.4.2 DeleteCustomer

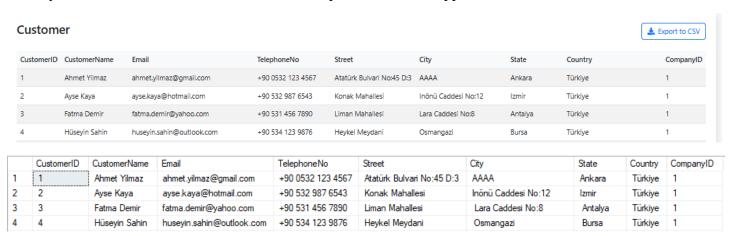
In DeleteCustomer procedure, we ask the customer just 1 parameters(Customerid) and delete the customer. The web interface image is as follows;



Before deletion, the customer class looks like this;

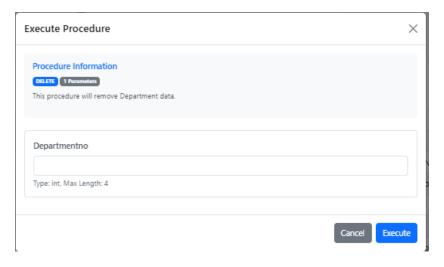


When you delete the customer with customerID equal 0, the tables appear as follows;



2.4.3 DeleteDepartment

In DeleteDepartment procedure, we ask the department just 1 parameters(Departmentid) and delete the department. The web interface image is as follows;

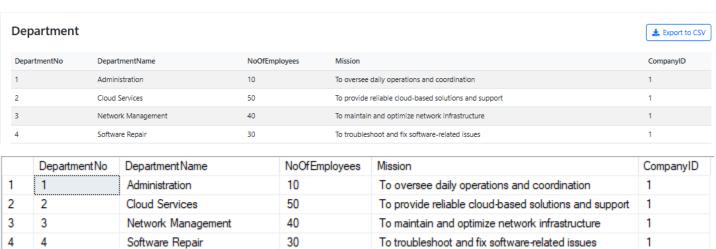


Before deletion, the department class looks like this;

DepartmentNo	DepartmentName	partmentName NoOfEmployees		Mission		
0	AAAA 5		В	В		
1	Administration	10	To oversee da	ly operations and coordination	1	
2	Cloud Services	50	To provide rel	able cloud-based solutions and support	1	
3	Network Management	40	To maintain ar	d optimize network infrastructure	1	
4	Software Repair	30	To troublesho	ot and fix software-related issues	1	
D-	L. IN. D. L. IN.	N	015	W	CID	
Depa	artmentNo DepartmentName	INO	OfEmployees	Mission	CompanyID	
1 0	AAAA	5		В	1	

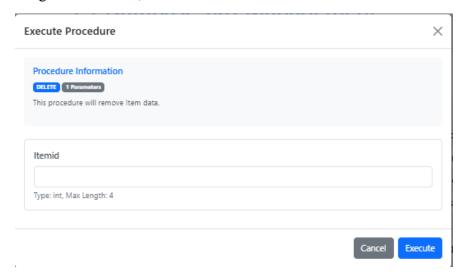
	Department No	DepartmentName	NoOfEmployees	Mission	CompanyID
1	0	AAAA	5	В	1
2	1	Administration	10	To oversee daily operations and coordination	1
3	2	Cloud Services	50	To provide reliable cloud-based solutions and support	1
4	3	Network Management	40	To maintain and optimize network infrastructure	1

When you delete the department with DepartmentNo equal 0, the tables appear as follows;



2.4.4 DeleteItem

In DeleteItem procedure, we ask the item just 1 parameters(Itemtid) and delete the item. The web interface image is as follows;



Before deletion, the item class looks like this;

Item					≛ Export to CSV
ItemID	ItemName	Quantity	Price	CompanyID	
0	AAAA	5	10	1	
1	Laptop	10	1200	1	
2	Smartphone	20	800	1	
3	Monitor	15	300	1	
4	Keyboard	50	20	1	

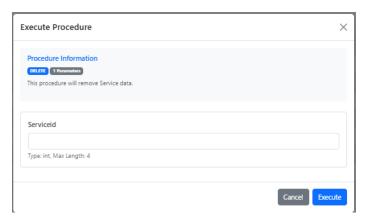
	ItemID	ltemName	Quantity	Price	CompanyID
1	0	AAAA	5	10	1
2	1	Laptop	10	1200	1
3	2	Smartphone	20	800	1
4	3	Monitor	15	300	1
5	4	Keyboard	50	20	1

When you delete the item with ItemNo equal 0, the tables appear as follows;

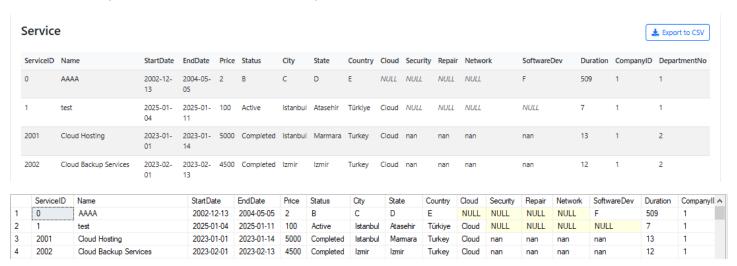
Item					≛ Export to CSV
ItemID	ItemName	Quantity	Price	CompanyID	
1	Laptop	10	1200	1	
2	Smartphone	20	800	1	
3	Monitor	15	300	1	
4	Keyboard	50	20	1	

	ItemID	ltemName	Quantity	Price	CompanyID
1	1	Laptop	10	1200	1
2	2	Smartphone	20	800	1
3	3	Monitor	15	300	1
4	4	Keyboard	50	20	1

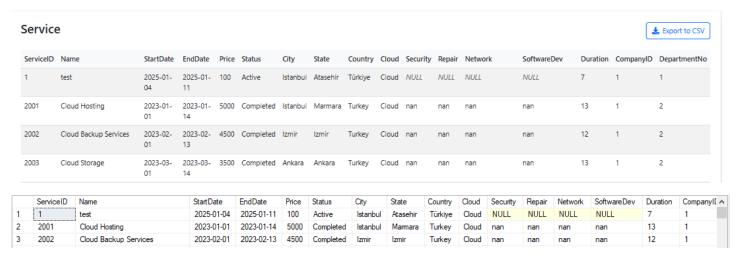
In DeleteService procedure, we ask the service just 1 parameters(Servicerid) and delete the service. The web interface image is as follows;



Before deletion, the service class looks like this;



When you delete the service with ServiceID equal 0, the tables appear as follows;



2.4 Wievs

9

10

12

Customer Support

Human Resources

Testing and Quality Assurance

Research and Development

Finance and Accounting

9

10

11 11

12

13 13

In the wiew part you can access the total, average, maximum and minimum values of data such as company, employees, items, service status. Below are images of overviews by input type;

2.4.1 CompanyOverwiev



2.4.2 DepartmentEmployeeOverwiev

Departmen	ntEmployeeOverview					(≛ Export to CSV
DepartmentNo	DepartmentName	Missi	on	TotalEmployees	AverageSalary	HighestSalary	LowestSalary
1	Administration	To ove	ersee daily operations and coordination	6	59666	70000	48000
2	Cloud Services	To pro	ovide reliable cloud-based solutions and support	4	66500	75000	62000
3	Network Management	To ma	intain and optimize network infrastructure	4	62500	67000	60000
4	Software Repair	To tro	ubleshoot and fix software-related issues	1	48000	48000	48000
5	Hardware Repair	To rep	pair and maintain hardware devices	2	61000	70000	52000
6	Security Systems	To en	sure robust security and protection against threats	4	62500	68000	58000
7	Software Development	ent To design and build innovative software solutions		13	57076	63000	50000
8	Data Analytics	To an	alyze data for insights and decision-making	5	60400	70000	52000
9	Customer Support	To ass	ist customers with their technical and service-related issues	4	57500	75000	48000
10	Testing and Quality Assurance	To tes	t and ensure the quality of services and products	2	52500	55000	50000
11	Research and Development	To inn	ovate and develop next-generation technologies	2	66000	67000	65000
12	Human Resources	To ma	inage and support the company's workforce	2	49000	50000	48000
13	Finance and Accounting	To ha	ndle financial transactions and reporting	1	45000	45000	45000
Department N	No DepartmentName		Mission	TotalEmployees	AverageSalary	Highest Salary	LowestSala
1	Administration		To oversee daily operations and coordination	6	59666	70000	48000
2	Cloud Services		To provide reliable cloud-based solutions and supp	4	66500	75000	62000
3	Network Management		To maintain and optimize network infrastructure	4	62500	67000	60000
4	Software Repair		To troubleshoot and fix software-related issues	1	48000	48000	48000
5	Hardware Repair		To repair and maintain hardware devices	2	61000	70000	52000
6	Security Systems		To ensure robust security and protection against th	4	62500	68000	58000
7	Software Development		To design and build innovative software solutions	13	57076	63000	50000
8	Data Analytics		To analyze data for insights and decision-making	5	60400	70000	52000

To assist customers with their technical and servic

To test and ensure the quality of services and prod...

To innovate and develop next-generation technolo...

To manage and support the company's workforce

To handle financial transactions and reporting

48000

50000

65000

48000

45000

75000

55000

67000

50000

45000

57500

52500

66000

49000

45000

2.4.3 DepartmentItemOverwiev

Departme	ntItemOverview									▲ Export to CSV
DepartmentNo	DepartmentName	Mission	CompanyID	CompanyName	Totalitems	AverageItemPrice	MostExpensiveItemPrice	LeastExpensiveItemPrice	MostExpensiveItemName	LeastExpensiveItemName
1	Administration	To oversee daily operations and coordination	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
2	Cloud Services	To provide reliable cloud-based solutions and support	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
3	Network Management	To maintain and optimize network infrastructure	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
4	Software Repair	To troubleshoot and fix software-related issues	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
5	Hardware Repair	To repair and maintain hardware devices	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
6	Security Systems	To ensure robust security and protection against threats	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
7	Software Development	To design and build innovative software solutions	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
8	Data Analytics	To analyze data for insights and decision-making	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
9	Customer Support	To assist customers with their technical and service-related issues	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
10	Testing and Quality Assurance	To test and ensure the quality of services and products	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
11	Research and Development	To innovate and develop next-generation technologies	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
12	Human Resources	To manage and support the company's workforce	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
13	Finance and Accounting	To handle financial transactions and reporting	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
14	Marketing and Sales	To promote and sell the company's products and services	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive
15	Legal and Compliance	To ensure legal compliance and protect the company's interests	1	Atasehir Bilisim LTD	30	350	1500	10	Refrigerator	USB Flash Drive

	Department No	Department Name	Mission	CompanyID	CompanyName	TotalItems	Average Item Price	Most Expensive Item Price	LeastEx _I ∧
1	1	Administration	To oversee daily operations and coordination	1	Atasehir Bilisim LTD	30	350	1500	10
2	2	Cloud Services	To provide reliable cloud-based solutions and support	1	Atasehir Bilisim LTD	30	350	1500	10
3	3	Network Management	To maintain and optimize network infrastructure	1	Atasehir Bilisim LTD	30	350	1500	10
4	4	Software Repair	To troubleshoot and fix software-related issues	1	Atasehir Bilisim LTD	30	350	1500	10
5	5	Hardware Repair	To repair and maintain hardware devices	1	Atasehir Bilisim LTD	30	350	1500	10
6	6	Security Systems	To ensure robust security and protection against thr	1	Atasehir Bilisim LTD	30	350	1500	10
7	7	Software Development	To design and build innovative software solutions	1	Atasehir Bilisim LTD	30	350	1500	10
8	8	Data Analytics	To analyze data for insights and decision-making	1	Atasehir Bilisim LTD	30	350	1500	10
9	9	Customer Support	To assist customers with their technical and service	1	Atasehir Bilisim LTD	30	350	1500	10
10	10	Testing and Quality Assurance	To test and ensure the quality of services and prod	1	Atasehir Bilisim LTD	30	350	1500	10
11	11	Research and Development	To innovate and develop next-generation technolo	1	Atasehir Bilisim LTD	30	350	1500	10
12	12	Human Resources	To manage and support the company's workforce	1	Atasehir Bilisim LTD	30	350	1500	10
13	13	Finance and Accounting	To handle financial transactions and reporting	1	Atasehir Bilisim LTD	30	350	1500	10
14	14	Marketing and Sales	To promote and sell the company's products and se	1	Atasehir Bilisim LTD	30	350	1500	10

2.4.4 ServiceStatusOverwiev

ServiceStatusOverview ▲ Export to CSV CompanyID CompanyName ServiceStatus TotalServices TotalServiceDuration AverageServiceDuration Atasehir Bilisim LTD Active 111 12 Atasehir Bilisim LTD Completed 202 1709 8

	CompanyID	CompanyName	ServiceStatus	TotalServices	TotalServiceDuration	AverageServiceDuration
1	1	Atasehir Bilisim LTD	Active	9	111	12
2	1	Atasehir Bilisim LTD	Completed	202	1709	8