

SQL SERVER 2016 Project

House Utility Service Provider Database

Project Scenario

You have to design a database normalized to 3NF based on the description below.

A company provides various utility services like electric repair, plumbing, insect/mouse control etc. The company has a pool of workers in agreement based on working skills and experience in certain work areas. Each worker works at an hourly pay rate.

When a customer creates an order for service, a set of workers are contacted and assigned for the service. After the service is completed the customer is billed and workers' payment is calculated.

For a whole day's work 10-hour payment is charged. Work start time is at 10:00AM. Work completion time must be kept so that worker payment can be calculated accurately.

A sample data is available for better understanding

Worker record

Worker Name	Work Area	Pay Rate	Phone
Rahmat Ali	Plumbing, Pipe fitting	120.00	01934675987
Abul Kashem	Electrical works	120.00	01934612612
Azad Ahmed	General labor, insect control	90.00	01751123123

Work contract record

Id	Customer	Address	Work area	Work description	Start date	End Date/time	Workers
1	Rahmatullah Muzahid	12, Gulshan-1	Plumbing	Swage pipe replacement	2020-12-01	2020-12-04 12:30 PM	Rahmat Ali, Mannan Mia, Sumon
2	Abul Kashem	45, Mirpur-13	Electric works	Garage electric wiring	2020-12-01	2020-12-01	Abul Kashem, Asgar Ali

Worker payment

Work id	Worker	Total work hour	Total payable
1	Rahmat Ali	32.5	3900.00

1	Mannan Mia	32.5	3250.00
1	Sumon	32.5	2925.00

Some key implementation requirements:

- A worker is to be inserted with skills/experience using procedure
- New work is to be inserted with workers using procedure
- A procedure to set a work to be completed and the procedure must complete workers' payment.
- A function to get a work details with worker list

You must use views, stored procedures, all types of UDF, triggers.