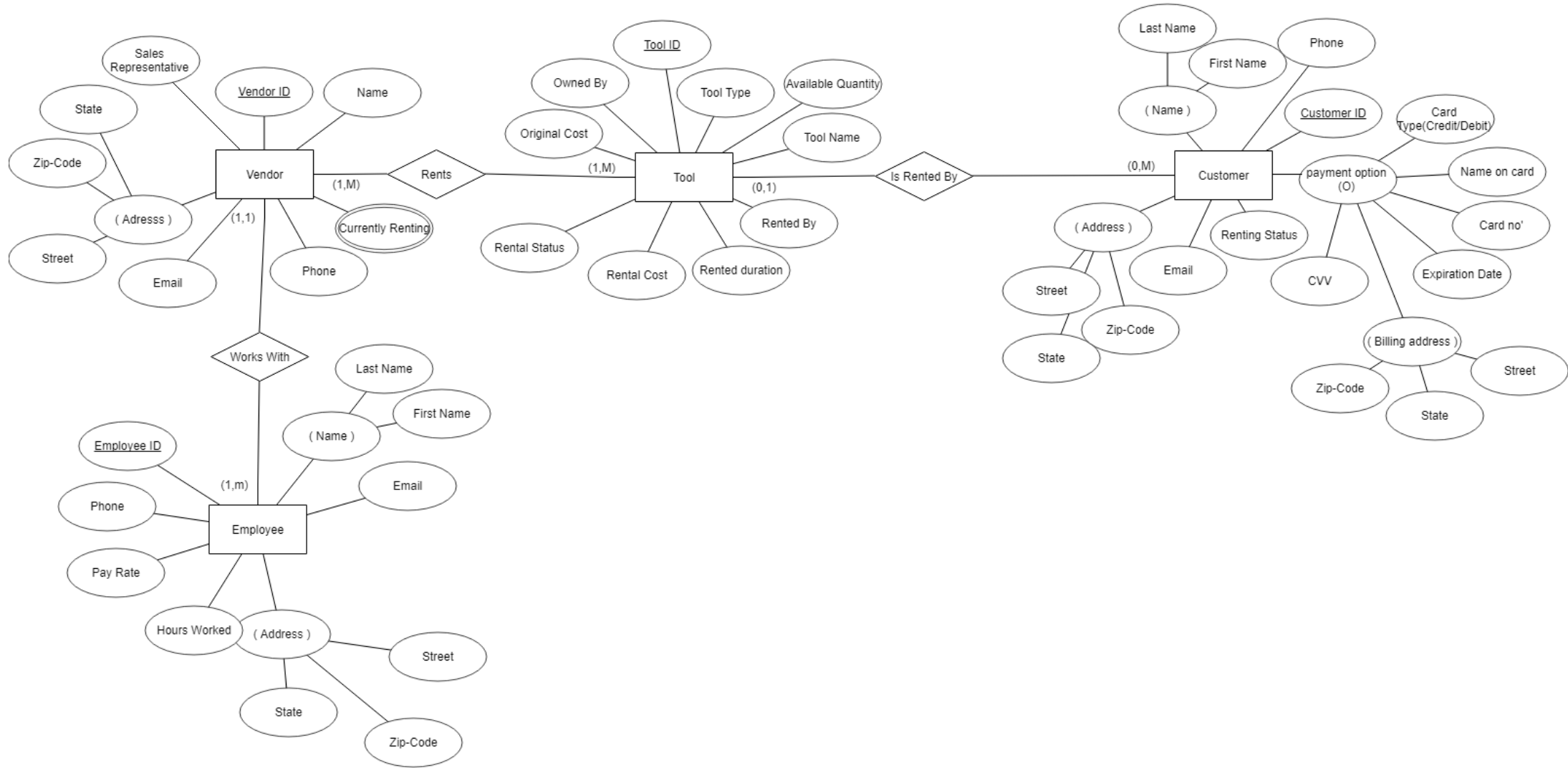


ENTITY - RELATIONSHIP DIAGRAM FOR TOOL FOR YOU



Entity, Attribute & Relationship List for “Tool For You”

ERD

Entities

1. Entity Name : Customer				
Attribute Name		Attribute Type	More Information	Sample Data
CustomerID		Unique	This will be primary key and will be unique for every authorized customer.	C1234, C1235 , C1236
Name		Composite	This is a composite attribute having two components First Name and Last Name	Jack
First Name	Eg: Jack			Smith
Last Name	Eg: Smith			
Phone			This attribute holds the phone number of registered customer	224-201-2979
Email			This attribute holds the email address of registered customer.	Smith.jack@toolsfo ryou.com
Address		Composite	This is a composite attribute and holds the value of address of the registered customer	1501 S Wolf Road
Street	Eg: 1501 S Wolf Road			Illinois
State	Eg: Illinois			
Zip-Code	Eg: 60070			
Payment Option		Optional & Composite	This is an optional and composite attribute , holds a value if a customer/renter wishes to have their credit/debit card details stored to speed up check out process while renting a tool. It stores the card type , card holder name , card no’ expiration date, billing address (which is also a composite attribute) and CVV for a registered customer.	Credit
Card Type	Eg: Credit			Jack Smith
Name on Card	Eg: Jack Smith			4980 5678 3456
Card No’	Eg: 4980 5678 3456 2345			2345
Expiration Date	Eg: 09/21			09/21
Billing Address				1501 S Wolf Road
Street	Eg: 1501 S Wolf Road			Illinois
State	Eg: Illinois			60070
Zip-Code	Eg: 60070			867
CVV	Eg: 867			
Renting Status		Mandatory	This attribute holds the status of renting for a customer . It reflects whether a customer is currently renting any tool.	Renting

2. Entity Name : Tool

Attribute Name	Attribute Type	More Information	Sample Data
Tool-ID	Unique	This will be primary key and will be unique for every tool.	T123, T124, T125
Tool Name		This attribute holds the name of each tool	Hammers , Screw Drivers
Tool Type		This attribute holds the value for type of each tool	Small Hand Tools, Electric drill Motors
Available quantity	Mandatory	This attribute holds the quantity of tools available in Inventory . It can hold a minimum value of 0 if no tool is present or all tool searched for is rented	0,4,100
Rented By		This attribute holds the information of the renter who rented the tools .	Jack Smith
Rented Duration		This attribute holds the information about the time period for which the tool is rented in days.	5, 10 , 20
Rental Cost		This attribute holds the rental rate on which the tool is being rented to the customer.The cost is calculated in \$USD and shows the rental rate for per day .	\$1, \$5
Rental Status	Mandatory	This attribute holds the status for a tool that is whether a tool is rented or not	Rented, Available
Owned By		This attribute holds the information who owns the tool . It can be a vendor or “Tools for you” itself .	Thompson Grand Rental,
Original Cost		This attribute stores the original price of the tool rented or to be rented.	\$100, \$256

3. Entity Name : Vendor

Attribute Name	Attribute Type	More Information	Sample Data
VendorID	Unique	This will be primary key and will be unique for every authorized vendor.	V123, V124
Name		This attribute holds the name of the vendor	Thompson Grand Rental
Phone		This attribute holds the phone number of a registered vendor	
Sales Representative	Mandatory	This attribute stores the sales representative employee id which works with the vendor.	E1, E2
Currently Renting	Mandatory/ Multi-valued	This attribute holds the value/toolid of tools currently rented by the vendor.	T123, T124
Email		This attribute holds the email address of registered vendor.	thompsonrental@hotmail.com
Address	Composite	This is a composite attribute and holds the value of address of the registered vendor	1501 S Wolf Road Illinois 60070
<div>Street</div> <div>State</div> <div>Zip-Code</div>	<div>Eg: 1501 Wolf Road</div> <div>Eg: Illinois</div> <div>Eg: 60070</div>		

4. Entity Name : Employee

Attribute Name	Attribute Type	More Information	Sample Data
EmployeeID	Unique	This will be primary key and will be unique for every employee of “Tools for you”.	E1,E2
Name <div> <div>First Name</div> <div>Eg: Jack</div> <div>Last Name</div> <div>Eg: Smith</div> </div>	Composite	This is a composite attribute having two components First Name and Last Name of the employee	Jack Smith
Phone		This attribute holds the phone number of authorized employee	860-467-4321
Hours Worked	Mandatory	This is a mandatory attribute stores number of hours worked by employee in week . Value is stored in hours.	28,35
Pay Rate	Mandatory	This attribute stores pay per hour for an employee. Its stored as dollar per hour	\$10, \$50
Email		This attribute stores the email address for each employee	Jack.smith@toolsforyou.com
Address <div> <div>Street</div> <div>Eg: 1501 Wolf Road</div> <div>State</div> <div>Eg: Illinois</div> <div>Zip-Code</div> <div>Eg: 60070</div> </div>	Composite	This attribute stores the address of the registered employee.	

Relationships

Relationship Name	Relationship Between
Is Rented By	Tool , Customer
Rents	Vendor , Tool
Works With	Employee , Vendor

Assumptions:

1. Every Renter is a customer .
2. Customer Must be registered in tools for you Database system.
3. All Customer are identified by a unique CustomerID
4. A customer can rent zero to many number of tools at time.
5. A tool can be rented to either none or only one customer at a time.
6. A registered vendor with unique vendor ID can rent tools.

7. A vendor can rent one to many tools at a time.
8. Multiple vendors can have the same tool.
9. Tools for you is also a vendor .
10. A vendor works with a sales representative who is an employee of “Tools for you”.
11. A single employee can work with multiple vendors .
12. Every employee has a unique employee employeeID.