Generate Hibernate Mapping for Oracle Database

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Hibernate is a popular and high performance object/relational persistence Java development framework. Visual Paradigm provides comprehensive development environment for Java developers to design and generate persistence layer. This tutorial shows you how to transform database design, which is the ERD, to class diagram, and eventually generate source files and Hibernate mapping layer from it.

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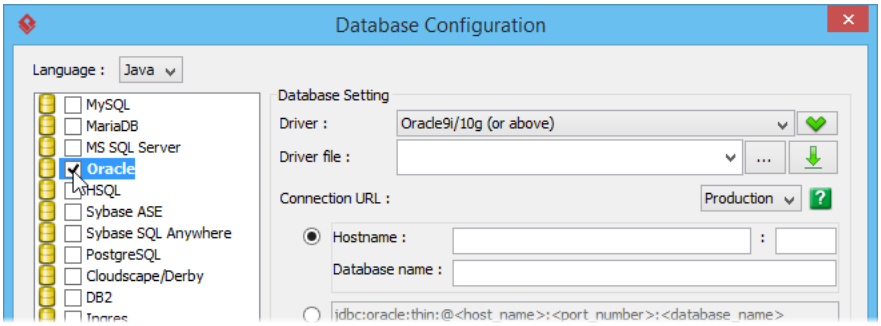
Creating object model from entity model

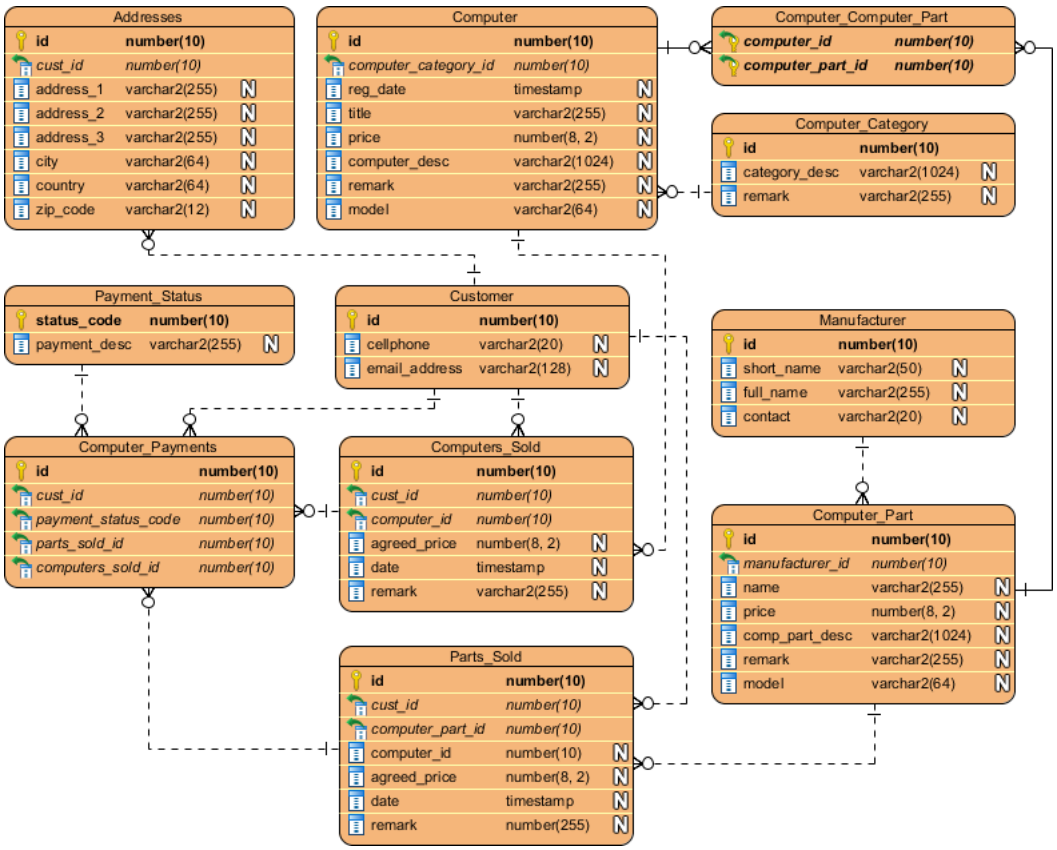
1. Download Computer Sales.vpp. You can also find this file at the bottom of this tutorial, under the **Resources** section.

2. Open the downloaded project file in Visual Paradigm. You can open a project by selecting **Project > Open** from the application toolbar.

3. Before we continue, there is one important point to note here. In this tutorial, we are going to generate ORM code and Hibernate mapping that can work with an Oracle database. It is important to configure database setting by selecting **Oracle** as your database. Let's check. Select **Tools > DB > Database Configuration...** from the application toolbar. We have selected **Oracle** for you in the **Database Configuration** window. Do remember to do this yourself in real case. Besides, make sure you have entered the connection details as well in real usage. But to complete this tutorial, we can leave the connection settings unfilled. Let's close the **Database Configuration** now.

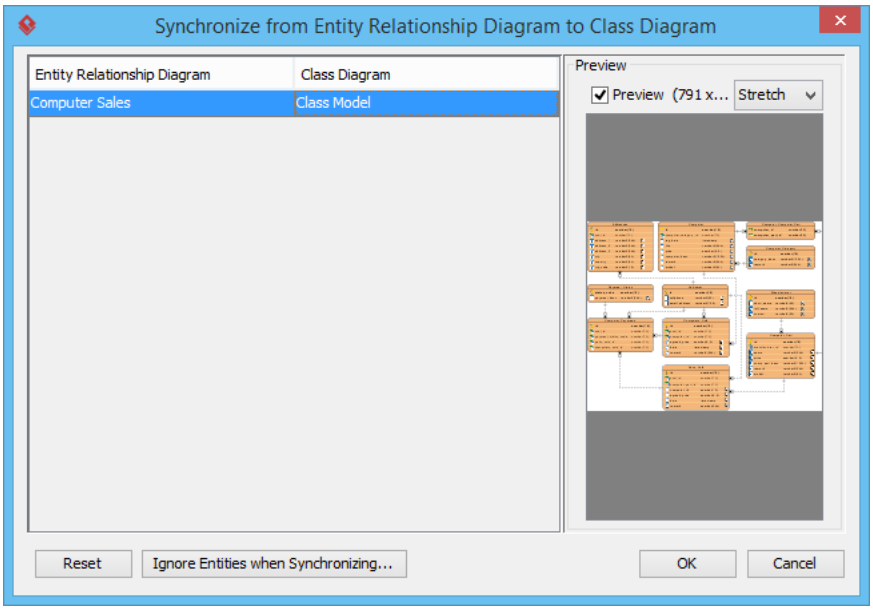


4. Open the Entity Relationship Diagram (ERD) *Computer Sales* and take a look. The diagram contains a number of entities related to an ordering system designed for storing computer sales records.

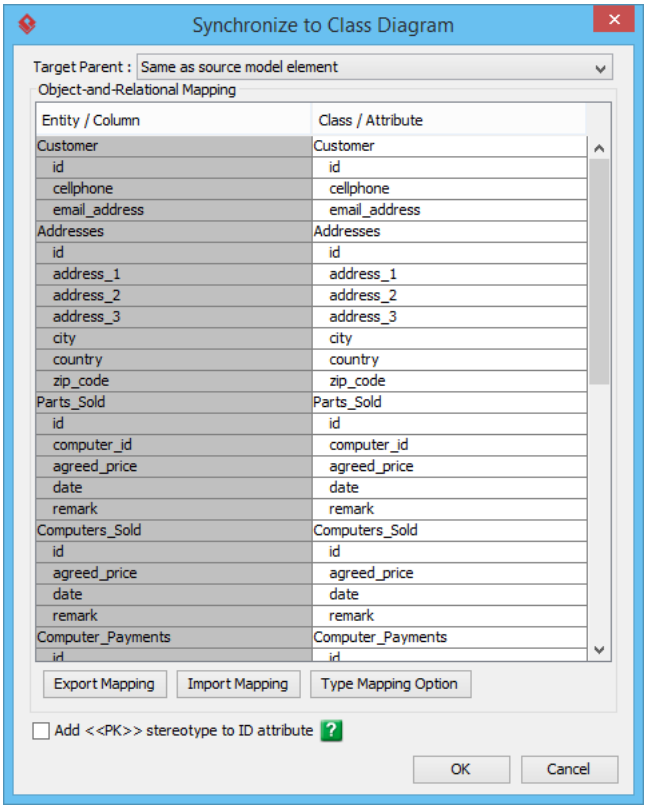


5. In order to generate the Hibernate mapping and ORM source files, you need to synchronize the ERD and class diagram first. Right-click on the ERD and select **Synchronize to Class Diagram**.

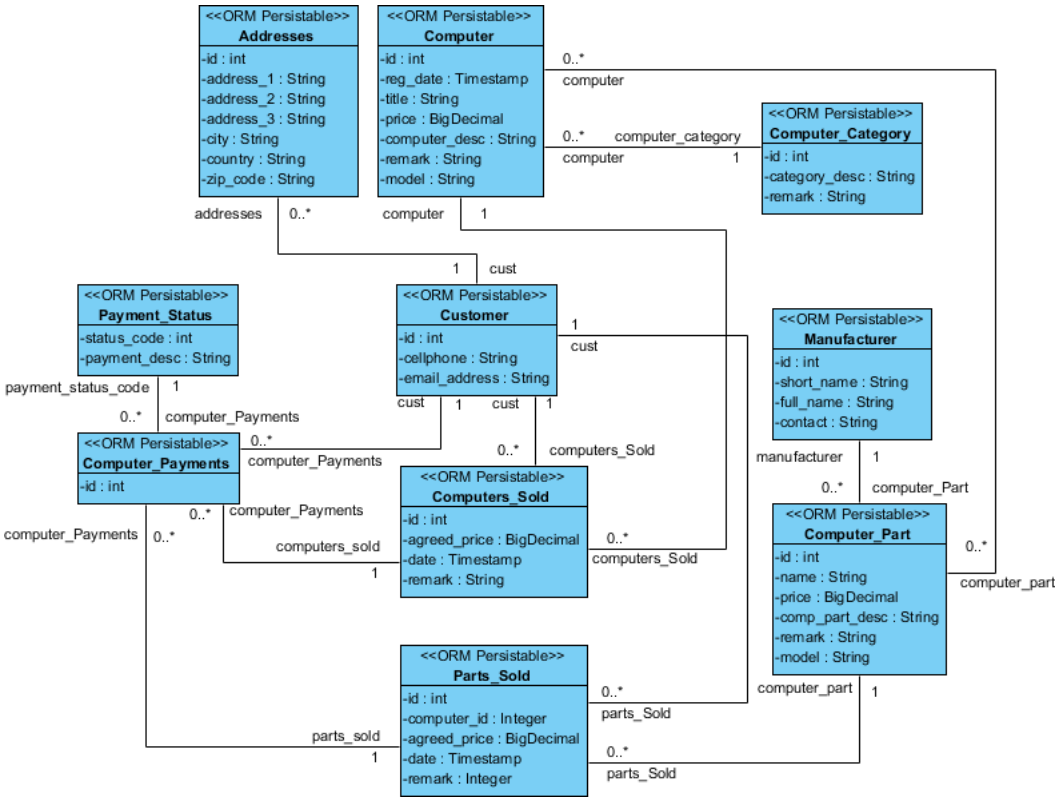
6. The **Synchronize from Entity Relationship Diagram to Class Diagram** window appear. Enter *Class Model* as the class diagram name and click **OK**.



7. The **Synchronize to Class Diagram** screen appear. We just keep the class and attribute names as suggested. Click **OK** to continue.



8. A class diagram is produced, based on the ERD.

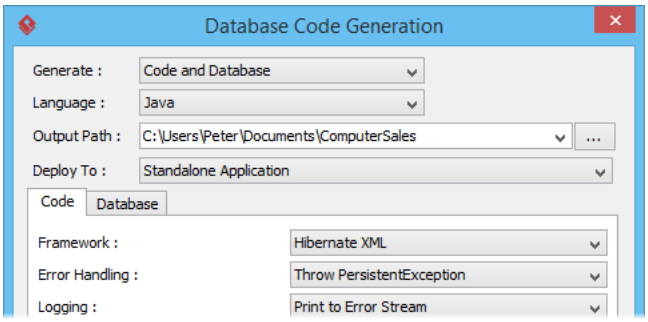


Generating ORM Source and Hibernate Mapping

1. There is a package header on top of the diagram, on the left hand side. The package header specifies the package where the classes under this diagram are stored. It affects both the structuring of model and the generated code. Without specifying any package header there, classes will all be placed at root, both in model and in generated code. Let's enter a package name. Double click on the package header and enter *com.computersales* as package header.

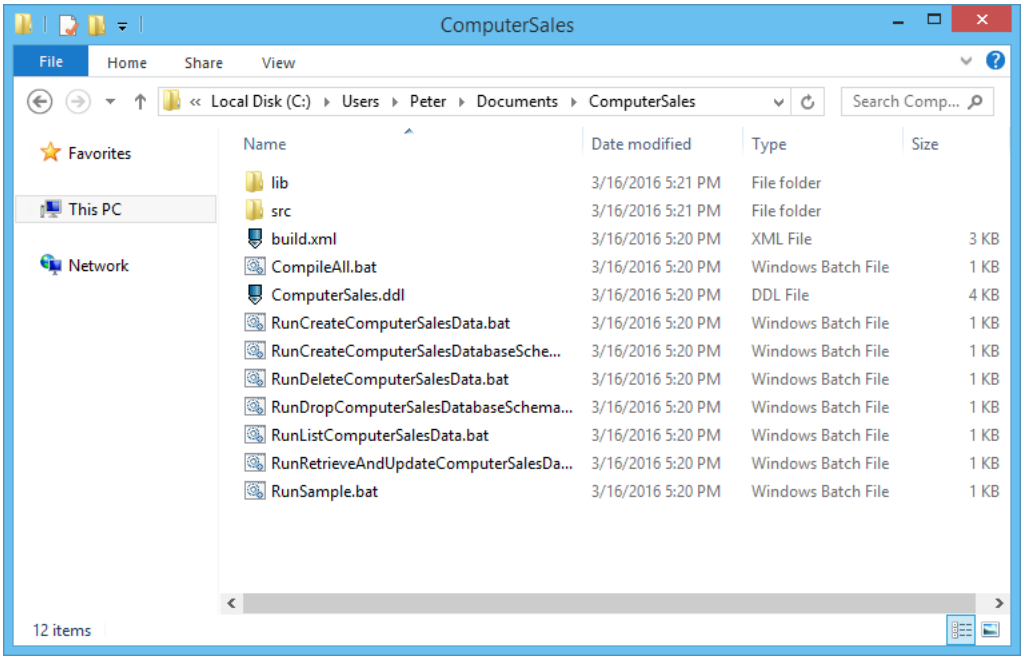
2. To generate Hibernate mapping, select **Tools > Hibernate > Generate Code...** from the application toolbar.

3. In the **Database Code Generation** window, specify the output path of source files, Hibernate mapping files, DDL and library files.

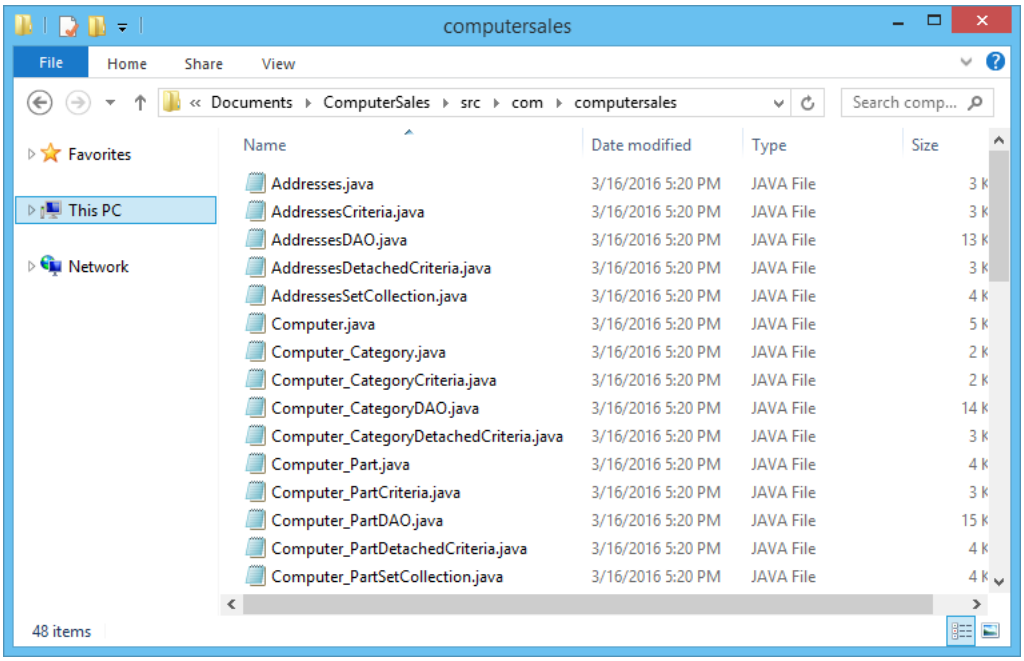


4. Click **OK** to start the generation.

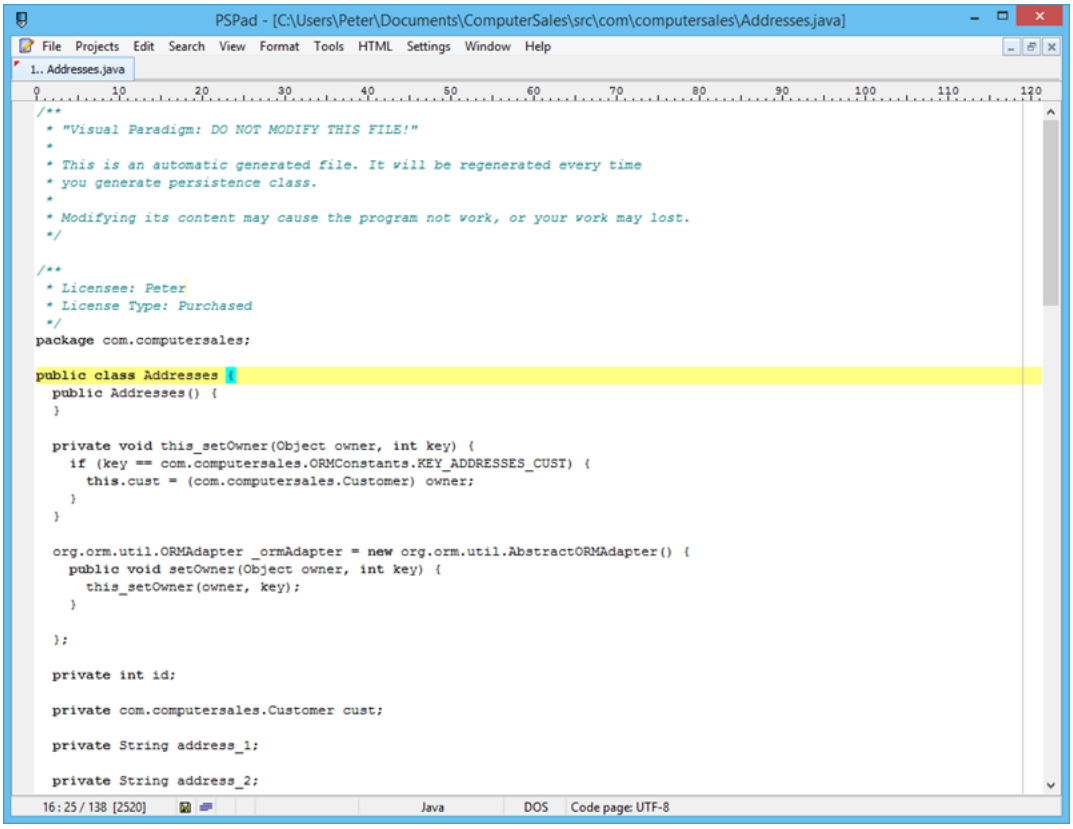
5. Let's take a look at the generated files.



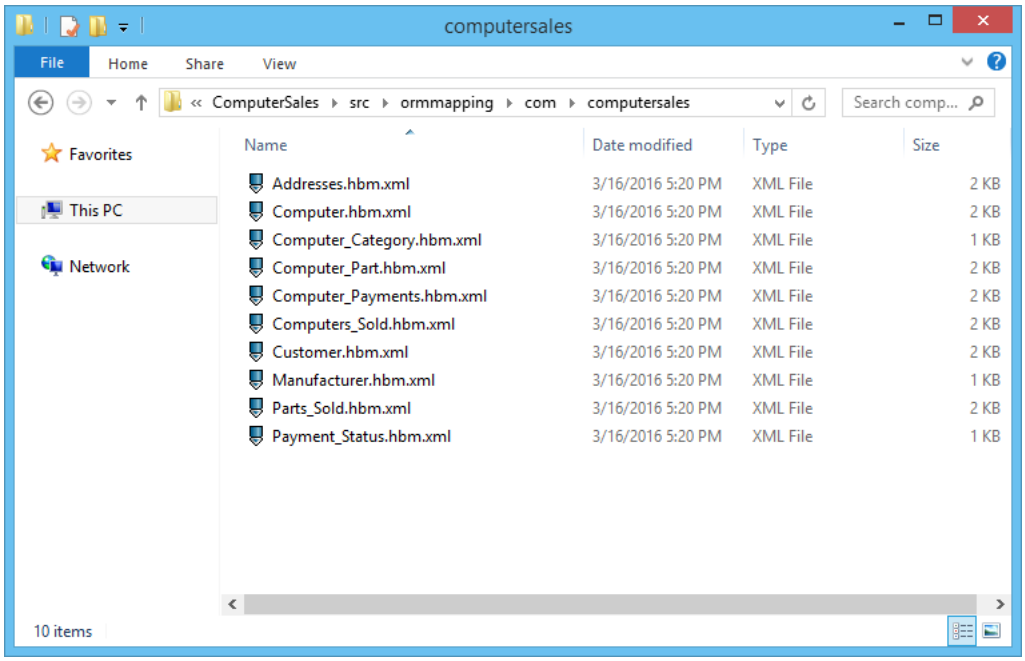
6. The source files are placed at **${outputPath}\src**.



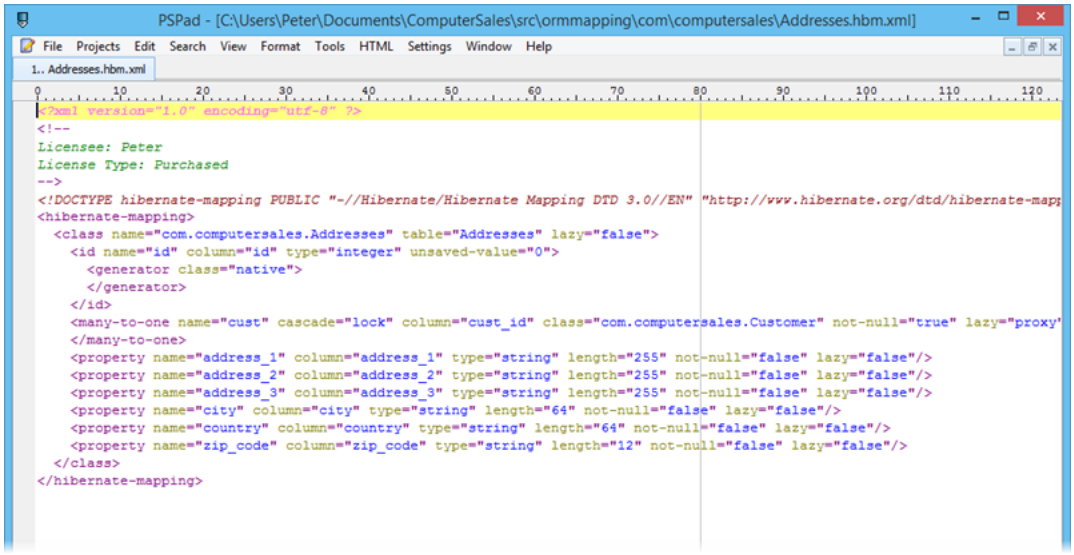
7. Let's open the generated source file.



8. The Hibernate mapping files are placed at **${outputPath}\src\ormmapping**.



9. Let's open the generated Hibernate mapping file.



Resources

1. Computer Sales.vpp

Related Links

- Tutorial - Define Custom Implementations for ORM Persistable class
- User's Guide - Generating ORM Code from Database
- More database engineering features
- What is Entity Relationship Diagram (ERD)?

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(https://www.visual-paradigm.com/)

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