Using Visio to draw Entity Relationship Diagrams

1. Start the Visio program.

Select:
All Programs
Microsoft Office
Visio
Software and Database
Database Model Diagram

On the left hand side of the screen is the stencil of shapes that you can use in your diagram. On the right hand side is the drawing page you will put the shapes on.

2. Add tables:

Drag an **entity** shape onto the drawing page for each table you require.

3. Add columns (fields):

Double-click the table to which you want to add columns.

In the Database Properties window, click Columns.

Click the **Physical Name** field of a blank line and type in the name of the column.

Press the **ENTER** or **DOWN ARROW** key and repeat for each additional column that you want to add to the table.

4. To set the data type for a column:

 Firstly, check that you are using the Microsoft SQL Server driver set (the closest to MySQL):

Select:

Database

Options

Drivers

Select Microsoft SQL Server from the list

Click on the OK button

- b. Secondly, check that the Physical Data Type radio button is selected
- c. Now you can set the data type:

Click the column's Data Type field.

Select a data type from the list, or simply begin typing the data type, including any parameters, and press **ENTER**.

For example, you can type decimal(8,2) or char(30).

d. Specify that a column is a primary key by selecting the **PK** checkbox.

5. The data types may not be shown in the diagram. To do this:

Select:
Database
Options
Document
Click on the Table tab.
Click on the Show Physical radio button.
Click on the OK button.

6. To show relationships between tables:

a. Check that you are using the crows feet notation:

Select:

Database

Options

Document

Click on the **Relationship** tab.

Click on the Crow's Feet check box in the 'Show' column.

Click on the OK button.

b. For each relationship:

Drag the **Relationship** shape onto the drawing page.

Click and drag the + over the center of the parent table so that the table is outlined in red. Release the mouse button.

Click and drag the \times over the center of the child table so that the table is outlined in red. Release the mouse button.

Both connection points appear red, and any primary keys in the parent table are added as foreign keys to the child table.

7. Add a title to the page:

Click the **Text** tool **A** on the **Standard** toolbar.

Double-click anywhere on the drawing page, or click and drag until the text block is the size you want.

Type the text.

When you start typing, Visio creates a text-only shape and, depending on your settings and the font size, zooms in on the text block.

When you finish typing, press ESC or click outside the text block.

8. Save your diagram