### Working with Databases and Objects

#### Getting Started Window
- **To Create a Database:** Click a template category in the list and click the template you want to use. Click Create. Or, click the Blank desktop database button.
- **To Open an Existing Database:** Click the Open tab and click a database in the Recent list or click Browse and browse for it.

#### Access 2016 Screen

#### Database Objects
- **Tables** store related data in rows (records) and columns (fields).
- **Queries** view, filter, calculate, change, sort, and examine the data stored in tables.
- **Forms** are custom screens that provide an easy way to enter and view data in a table.
- **Reports** present data from a table or query in a printed format.
- **Macros** automate common tasks and can be run by clicking a button or pressing a shortcut key.
- **Modules** are groups of procedures written in Visual Basic and used to automate tasks.

**Page** objects have been replaced by Windows SharePoint Services. Pages in old databases can still be viewed—but not edited—in Internet Explorer.
- **To Open an Object:** Double-click the object in the Navigation Pane.

#### Keystroke Shortcuts

#### General
- **Open a Database**  
  Ctrl + O
- **Close a Database**  
  Ctrl + W
- **Print Current View**  
  Ctrl + P
- **Delete**  
  Delete
- **Undo**  
  Ctrl + Z
- **Help**  
  F1
- **Delete Record**  
  Ctrl + -
- **Cancel Changes**  
  Esc
- **Insert Date**  
  Ctrl + ;
- **Insert Time**  
  Shift + Ctrl + :
- **Insert Value from Same Field in Previous Record**  
  Ctrl + ‘

#### Navigation
- **Next Field**  
  Tab
- **Previous Field**  
  Shift + Tab
- **Next Screen**  
  Page Down
- **Previous Screen**  
  Page Up
- **First Record**  
  Ctrl + ↑
- **Last Record**  
  Ctrl + ↓
- **Toggle Navigation Pane**  
  F11

#### Editing
- **Cut**  
  Ctrl + X
- **Copy**  
  Ctrl + C
- **Paste**  
  Ctrl + V
- **Find**  
  Ctrl + F
- **Replace**  
  Ctrl + H
- **Select All**  
  Ctrl + A

#### Design View
- **Properties**  
  Alt + Enter
- **Open object in Design View**  
  Ctrl + Enter
- **Save Object**  
  Ctrl + S
Creating Table Relationships

Linking Tables
Access how two tables are related to each other. The

1. Click the Database Tools tab on the Ribbon and click the
   Relationships button in the Relationships group.
2. If necessary, click the Design tab and then click the Show Table
   button. In the Show Table window, select a table you want to link,
   click the Add button, and repeat for each table. Click Close.
3. Drag a field from one table and drop it on the related field in the second
   table. (Optional) Check the Enforce Referential Integrity box. Click
   Create.

Working with Table Data

- Database information can be directly added and modified from tables
  and some queries and forms.
- To Add a Field to a Table: Enter data in the cell below the Field Name
  column header. Or, in Datasheet View, click a Data Type option from
  the Fields tab under Table Tools. Your field will be added and you can
  give it a name.
- To Add a New Record: Enter data in the bottom row of the table.

Field Data Types

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Text</td>
<td>Stores text, numbers, or a combination of both,</td>
</tr>
<tr>
<td></td>
<td>up to 255 characters long.</td>
</tr>
<tr>
<td>Long Text</td>
<td>Stores long text entries—up to 64,000 characters</td>
</tr>
<tr>
<td></td>
<td>long.</td>
</tr>
<tr>
<td>Number</td>
<td>Stores numbers that can be used in calculations.</td>
</tr>
<tr>
<td>Date/Time</td>
<td>Stores dates, times, or both.</td>
</tr>
<tr>
<td>Currency</td>
<td>Stores numbers and symbols that represent money.</td>
</tr>
<tr>
<td>AutoNumber</td>
<td>Automatically fills in a unique number for each</td>
</tr>
<tr>
<td></td>
<td>record.</td>
</tr>
<tr>
<td>Yes/No</td>
<td>Stores only one of two values, such as Yes or No.</td>
</tr>
<tr>
<td>OLE Object</td>
<td>Stores objects created in other programs, such as</td>
</tr>
<tr>
<td></td>
<td>a graphic, Excel spreadsheet, or Word document.</td>
</tr>
<tr>
<td>Hyperlink</td>
<td>Stores clickable links to Web pages on the Internet</td>
</tr>
<tr>
<td></td>
<td>or files on a network.</td>
</tr>
<tr>
<td>Lookup Wizard</td>
<td>A wizard that helps you create a field whose</td>
</tr>
<tr>
<td></td>
<td>values are selected from another table, query,</td>
</tr>
<tr>
<td></td>
<td>or list of values.</td>
</tr>
<tr>
<td>Attachment</td>
<td>Allows you to attach files and images to your</td>
</tr>
<tr>
<td></td>
<td>database.</td>
</tr>
</tbody>
</table>

Working with Queries

To add a field to the query, click and drag it from the table down to the design grid.

- To Select a Record: Click the Record selector (grey square) to the left
  of the result.
- To Delete a Record: Select the record, click the Home tab on the
  Ribbon and click the Delete button in the Records group. Click Yes.
- To Spell Check: Click the Home tab on the Ribbon and click the
  Spelling button in the Records group, or press F7.
- To Find Information: Place the cursor in the field that contains the
  value you want to search for, click the Home tab on the Ribbon and
  click the Find button in the Find group or press Ctrl + F. Type the
  value you want to search for in the Find What box and click Find Next.
- To Replace Information: Place the cursor in the field that contains the
  value you want to replace, click the Home tab on the Ribbon and click the
  Replace button in the Find group or press Ctrl + H. Type the value the
  you want to search for in the Find What box and the new value in the
  Replace With box. Click Find Next until you've found what you're
  looking for, then click Replace or Replace All to replace every instance
  of the value.
- To Sort Information: Place the cursor in the field that you want to sort
  by, click the Home tab and click either the Ascending or Descending
  button in the Sort & Filter group. Or, right-click on the field and select
  the sort context from the contextual menu.
- To Filter Information: Place the cursor in the field that contains the
  values you want to filter by, click the Home tab on the Ribbon and click the
  Filter button in the Sort & Filter group. Check the boxes for the
  values you want to filter for.
- To Remove a Filter: Click the Toggle Filter button in the Sort & Filter
  group.
- To Change a Field's Data Type: Select the field you want to change,
  click the Datasheet tab on the Ribbon, and click the Field Data Type list
  arrow in the Data Type & Formatting group. Select a data type.

Criteria Example | Description                                      |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;London&quot;</td>
<td>Displays records where the field equals &quot;London.&quot;</td>
</tr>
<tr>
<td>Between 1/1/00 and 12/31/00</td>
<td>Displays records where the date is between 1/1/00 and 12/31/00.</td>
</tr>
<tr>
<td>NOT &quot;USA&quot; or ***</td>
<td>Displays records where the field does not contain the text &quot;USA&quot; and is not blank.</td>
</tr>
<tr>
<td>Like &quot;S**&quot;</td>
<td>Displays records where the field text starts with an &quot;S.&quot;</td>
</tr>
<tr>
<td>IS NULL</td>
<td>Displays records where the field is blank.</td>
</tr>
<tr>
<td>IS NOT NULL</td>
<td>Displays records where the field is not blank.</td>
</tr>
<tr>
<td>100</td>
<td>Displays records where the field value is greater than 100.</td>
</tr>
</tbody>
</table>