FBLA: DATABASE DESIGN AND APPLICATIONS

Competency: Data Definitions/Functions
Tasks
1. Explain the principles of data analysis.
2. Evaluate and compare a variety of database programs for features and functions.
3. Determine when it is appropriate to use a database and identify the benefits derived.
4. Demonstrate correct use of database terminology.
5. Plan, design, and create a database file.
6. Construct database using appropriate inputting, formatting, and editing skills.
7. Set and modify field properties including limit field size, number formats, date/time formats, yes/no formats, validation rules, and input masks.
8. Distinguish between different field types.
9. Define and modify field names and data types.
10. Manipulate a database.
11. Import and export data into and from a database.
12. Save database objects as file types.
13. Use the Help feature of database software.
14. Compact and repair a database.
15. Produce documents integrating word processing, database, spreadsheet, and presentation files.

Competency: Query Development
Tasks
1. Use the simple query wizard.
2. Create a query in design view.
3. Search, sort, index, merge, and manipulate database for specific information.
4. Filter data (sort, find specific records, and replace).
5. Create multi-table queries.
6. Design and create action queries (make-table, update, append, and delete).
7. Design and create advanced queries (setting top values, creating calculated field, creating function query, and creating parameter query).
8. Verify accuracy of output.
Competency: Table Relationships--Include Referential Integrity
Tasks
1. Define and create table relationships.
2. Use table wizard and design view to create a table.
3. Add records to tables.
4. Apply the default values, input masks, validation rules, validation text, required fields, and lookup fields to field properties in a table in design view.
5. Understand the difference between a one-to-one, one-to-many, and many-to-many relationships.
6. Enforce referential integrity.
7. Create and modify a multi-table select inquiry.
8. Save a table, query, and forms as a Web page.
9. Import/export linked tables.

Competency: Reports and Forms--Sort, Group, Insert Graphics, Headers, Calculation
Tasks
1. Design, create, save, and modify reports for data output.
2. Create a report with the Report Wizard.
3. Enhance reports using formatting features and graphics.
4. Preview and print a report.
5. Modify and format report properties (font, style font size, color, and caption).
6. Use report sections.
7. Perform grouping and sorting to a report.
8. Create reports using all types of controls including Active X and calculated totals.
9. Use advanced report design to create a running summary, insert a date/time control, and use label wizard.
Competency: Form Development
Tasks
1. Design, create, and modify basic forms in database.
2. Create a form with the form wizard.
3. Create a form based on a query.
4. Modify Format Properties.
5. Enter and delete records using a datasheet or form.
6. Use the control Toolbox to add controls, move a control, and resize a control.
7. View and print records in a form.
8. Use design view to disable the snap to grid feature, display the field list, move, move part of a paired control, align and space controls, add a label or image, and to edit an unbound control.
9. Create and modify a subform.

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