

## A Little History of the St. Louis World's Fair

In 1904 an international exposition was held in St. Louis, Missouri, formally known as the Louisiana Purchase Exposition and informally as the St. Louis World's Fair. The purpose of the World's Fair was to celebrate the 1803 Louisiana Purchase. There were over 50 concession-type amusements found on "The Pike" that provided educational and scientific displays, exhibits and imaginary 'travel' to distant lands serving to provide an historical perspective, support local boosting (think 'booster club') and/or pure entertainment.

A lot of new, exciting, educational, and entertaining events can go on at a fair. If you were to search today many states will hold a yearly state fair. At the end of this conference there will be an event called Hot 'n Spicy Cook-off & Tasting; however, the original staffer assigned for this project has unexpectedly resigned and did not finish the project. There is registrant information that needs to be imported into an Excel file and then analyzed, a rough outline of a marketing presentation yet to be created, and a customer list that needs to be integrated into the event database so that new reports can be generated. With the event around the corner, you team has been asked to complete the tasks so that this last event will be a success. You are responsible for creating the proper files to be used for marketing and registration purposes.

The following are the deliverables that you will need to provide:

1. A Power Point Presentation that will be given during the Awards banquet to promote this event.
2. An Excel workbook analyzing both the funds that will be used for this event and the participation of teams in each category of the event.
3. An Access database for storing and retrieving the registration data for this event.

### Deliverable #1: Budget Analysis

One of the things that we must finalize is the budget. To do this, we will use an excel worksheet to create our analysis. We will be working with figures from people who have already preregistered for the cook-off. At this point we are not worried if our total funds are negative because there will be additional revenue to offset this from those who have yet to register and from those attendees that purchase tickets at the door. The following directions will help you create an effective tool to analyze the budget.

1. Open the file **BudgetAnalysis.xlsx** provided to you.
2. Import data from your Access database using the Registrants Query to a new sheet and name that sheet RegCount.
3. On the worksheet RegCount, use the filter drop-down to sort the table in Ascending Order by "GroupName".
4. In C182 Add the text "Note: Main Contact Designator" and in D182 enter "TRUE". Format these two cells with a Green background and bold text surrounded by a normal border.
5. Create a table from F182:H186 with the following layout using a normal boarder around all cells. Make sure all text is Bold and Centered and all cells have a yellow background.

	Groups	Registrants
<b>Hot</b>		
<b>Spicy</b>		
<b>Non-Traditional</b>		
<b>Total</b>		

6. We first need to find out how many groups we have in each category, so in G183 create a formula using COUNTIFS that first selects the category from the Category column and then selects the TRUE that designates the Main Contact in D182.
7. Next, we need to find the total number of registrants by category, so in H183 create a formula using COUNTIF that counts the category in the Category column.

*NOTE: Remember to use the right combination of relative and absolute cell addressing so any formulas can be copied/filled down and still work. In addition, no constants should be used in ANY formula in this workbook – cell references should be used instead.*

8. Use the SUM function to total each of the two columns.

On the **BudgetAna** worksheet there are several calculations to perform.

9. In B4:B6 paste a link that will display the count of registrants based on the count that you performed in the RegCount Worksheet.
10. In C4:C6 use cell references to calculate the revenue collected from each participant's registration fees.
11. In cells D4:D6 paste a link that will display the count of the number of groups per section based on the count that you performed in the RegCount Worksheet.
12. In Cells E4:E6 use cell references to calculate how much money is allocated to each category based on the number of groups that are registered for grocery shopping.
13. In Cells F4:F6 use cell references to show the total dollar amount that is being used for awards to winners based on categories.
14. In Cells G4:G6 calculate the current profit/loss according to how much money is coming in from registrations and how much is going out based on grocery funds and award funds.
15. Using a function, calculate the Rank of each category based on budget shortfall (1 = highest budget shortfall) in G4:G6.
16. For the next step, Merge and Center the title of this table and add the following percentages to the Budget Allocation Table beginning with B13. The category that needs the most funds allocated should receive 40% of the starter budget, the second category in most need should receive 35% and the third should receive 25%. Use a lookup function to find the corresponding percentage by which to multiply the starter budget to determine the dollar amount that each category is allocated and enter this formula in Cells I4:I6.
17. In column J you should calculate the final budget outlook based on the results of the profit/loss calculations and the category allocations. Make sure to use cell references to calculate this column.
18. Merge the top two rows of the **BudgetAna** worksheet to span your table, and merge and center the title and make it a size 24 font Arial Rounded MT Bold.
19. Format the table contents (excluding the table title and including one blank row beneath the Totals Row) with a pre-defined theme Table Style Medium 24. Use Word Wrap and then adjust your column widths appropriately to minimize space and yet have only two lines of text for each heading. Place a Top Border on the Total Row and format the assumptions table and lookup table with normal borders between the cells and a thick box border around each table.
20. Make sure that any monetary values have a dollar format and that all numbers have NO decimal places. If there are any dollar amounts that are NEGATIVE, they should be displayed in red and within parentheses.

21. Based on the calculations on this worksheet create a 3D Pie Chart to be inserted into its own worksheet that displays the percentages of how many groups have registered for each category.
  - a. Give this chart the title “Registered Groups”.
  - b. Title the tab of the chart worksheet “Registration Chart”
  - c. Make sure that the data labels include both the category name and percentage and are displayed on the pie chart, centered on each slice, with a font size of 14.
  - d. Rotate the 3D aspect of the chart so that the smaller slices are centered at the front of the pie using a rotation of 170 degrees and a separation of 20%.
22. Create an embedded 2D Clustered Line Chart to show the budget of each of the three categories. Choose Chart Layout 1, delete the Legend, and lower the x-axis labels to the bottom of the chart.
  - a. Title the chart “Budget Outlook by Category”.
  - b. Change the Data Series Fill to Solid, invert the color for negative numbers, and, since red is better for negative numbers, change the 2<sup>nd</sup> color to Red.
  - c. Without changing the size of the chart, move the upper left-hand corner so it covers cell E10.
23. The last formatting step is to Hide the Gridlines of the **BudgetAna** worksheet.
24. Save the file as **MWC3TeamNumber\_BudgetAnalysis.xlsx**

## Deliverable #2: Banquet Presentation

During one of the luncheons we want to have a presentation announcing this culinary competition along with presenting some of the numbers of those who have already submitted a registration form. Your next task is to create the **presentation** to be shown during Friday’s lunch.

1. The Presentation will consist of seven slides. First, start PPT and then Open the file **Outline.rtf** that contains most of the information you will need.
2. View the Slide Master
3. Change the theme to an appropriate theme and insert the graphic **HotnSpicy.png**.
4. Recolor the graphic as “washout” set the size to 7.5 high and 10.0 wide – don’t forget to unlock the aspect ratio – with a position of 0,0, then make the picture as the background.
5. Format the text area of the slide to a height of 5 in. and a Vertical position of 1.7 in.
6. Format the line spacing of the first bullet level to 12pt before and after, Single spaced.
7. Close the Slide Master.
8. Insert a Footer with page # and date – not auto updated, and apply to all but the title slide.
9. Slide #1
  - a. Change the Layout to Title (this will remove your picture)
  - b. Add the picture to this slide with the same formatting as the Slide Master above.
  - c. Add your MWC3Team#.
10. Slide #2: Change the Animation of all of the bulleted points together to Fly In.
11. Slide #3: Add the following speaker notes:
 

“In the technological field there are only three out of the five senses that we use as humans to create, solve, improve, etc. The two senses that we NEVER use are that of Taste and Smell and that is what AITP is changing.”
12. Slide #3: Change the Animation of EACH bulleted point to Fly In.
13. Slide #4: Remove the bullets for this slide, bold each heading, set a Hanging indent at 1.5 in. and use a tab after each heading to produce the following layout:

<b>Where:</b>	2019 MWC3 St. Louis, Millennium Hotel
<b>Cost:</b>	\$10 per group for admission to compete, lots of tasting, and One vote from each group member towards your favorite dish.
<b>Prizes:</b>	Bragging rights and having your recipe featured in the MWC3 Newsletter along with prizes for 1st, 2nd, and 3rd places.
<b>When:</b>	March 23, 2019 10am – 1:00pm

14. Slide #5: Insert a new Title and Text slide here, add the title “Rules” and copy and paste the information from Rules.txt. Make sure to make it a numbered list and delete the extra lines, including the one at the end.
15. Slide #6: Insert a new Title and Text slide here. Delete both place holders for Title and for Text, then Copy and Paste, using presentation colors with a link, the pie chart that you created in the **MWC3TeamNumber\_ExcelFile.xlsx** file.
16. Slide #7: Insert a new Title ad Text slide here. Delete both place holders for Title and for Text, then Insert WordArt (using an appropriate WordArt style) “Create and Enjoy some Hot ‘n Spicy Sensations” then center the text vertically and horizontally on the slide.
17. Finally, change the transition setting for all slides (except the title slide) to “Ferris Wheel.” Save your presentation as **MWC3TeamNumber\_LunchPres.pptx**.

### **Deliverable #3: Registration Database**

This event will be announced as a community wide event open to the public. Ticket prices vary based on Type (see table below). Any tickets that are purchased in advance receive an additional \$2.00 discount. Therefore, the final task is to modify the database to include customer data and ticket sales. Remember to maintain the user-friendly features created for the registration information as you add the customer information so that volunteers can not only add/track the participants but also those who will be purchasing tickets to the event.

1. Find the database file, rename it **MWC3TeamNumber\_HotnSpicy.accdb**, and then open the database.
2. Import the file **Customers.xlsx** to create and populate the table needed for the customer ticket sales. As is often the case, this imported data is not normalized. The following steps will help you split this table into two normalized tables.
  - a. Create a Query in Design View and Add the TicketSales Table
  - b. Add the following fields: Customer ID, Last Name, First Name, Payment, and Pre-Paid.
  - c. Click the Totals button on the menu and Run the Query – you should only see the non-duplicating list of customers.
  - d. Switch to Design View and change the Query to a Make Table Query. The new table name is Customers. Run the Query and then close the query without saving.
  - e. Open the TicketSales table in Design View and delete the following fields (Note: these are all of the fields you just moved to the Customers table except the ID field): Last Name, First Name, Payment, and Pre-Paid. Close the table.
  - f. Open the Customers table in Design View and

3. As we will want to use this database next year and to allow for possible ticket price increases, we need to create a table to hold the ticket types and prices. Create a New table named Tickets using the following fields and criteria:

- a. Code – Number – Long Integer – Primary Key
- b. TicketClassification – Text – 25 characters
- c. Price - Currency
- d. Enter the data below into the table:

Code	TicketClassification	Price
1	Child (Under 3)	0.00
2	Senior, College, or Child	7.00
3	Adult	15.00

4. Open the Customers table in Datasheet View and change the “x” values in the Pre-Paid column to TRUE (Hint: Use Search/Replace).
5. Open the Customers table in Design View and make the following changes:
  - a. Change the type of the Ticket Code field to Number – Long Integer (This is the field on which you will link this table with the new Tickets table so they must be the same type).
  - b. Change the field type of the PrePaid field to Yes/No. When saving the table, click “Yes” to the warning – no data will be lost due to step 5 above.
  - c. Change the Customer ID field size to 2 characters and make it a Primary Key – say “Yes” to the warning as we already checked and all of the Customer IDs are only two characters. (This is the field on which you will link the table TicketSales).
6. Add a Relationship between the Customers table and the TicketSales table enforcing referential integrity on the one-to-many relationship between the CustomerID in each table (also check Cascading Update so when new tickets are sold, the CustomerID in TicketSales is automatically populated). Do the same for the TicketSales table and the Tickets table using the Code field in the Tickets table and the Ticket Type field in the Customers table, also enforcing referential integrity on the one-to-many relationship.
7. Create a form that can be used to enter new Customers and new Ticket Sales Customers with a subform called TicketSales using all fields from the Customers table and all of the fields except the Primary Key fields from Tickets and TicketSales tables, Group by Customers and choose Tabular Layout.
8. Open the Customers Form in Design View
  - a. click on the Payment field, and make the following changes to its Properties:
    - i. Validation Rule: =”Credit Card” or “Cash” ii. Validation Text: Enter Credit Card or Cash
  - b. Click on the Customer ID field, under Properties:Other, add the following to the ControlTip Text: Use First Initial Last Initial as the Customer ID
  - c. Widen the form to 7”
  - d. Vertically Narrow any fields that are larger than their corresponding field label.
  - e. Widen the TicketSales subform window to the 6.5” mark on the ruler.
9. On the TicketSales subform, perform the following:
  - a. Delete the field and its related label for the following: ID, CustomerID, and TicketClassification.

- b. Using a soft return after Number, make the Number of Tickets Label two lines and narrow the label and field accordingly. Move the other field labels so their bottom edge lines up with this one and move the other two fields closer.
  - c. Change the Ticket Classification field to a ComboBox and then make the following changes to its Properties:
    - i. Under Data, change the RowSource to Tickets
    - ii. Under Format, Column Count: 2
    - iii. Under Format, Column Width: 0",2.5"
    - iv. Under Format, Width 2.5"
10. Create a query called TicketSales Query that will be the basis for a new full report called TicketSales Report prepared for the conference committee showing all tickets purchased by each customer broken down by ticket type. Subtotal the number of tickets and the amount for each customer and total these subtotals for a grand total of number of tickets sold and the amount of those sales.
- a. Add all of the fields from the Customers table, Tickets table, and TicketSales table except the Primary Key fields and the Foreign Key fields.
  - b. Add a calculated field called AmtDue that multiplies the number of tickets purchased by the cost. Add a second field called TotalDue using an IIF function to calculate the total amount due based on subtracting the \$2 per ticket discount if the Pre-Paid value is True.
11. Create the TicketSales Report based on the TicketSales Query, use all fields EXCEPT the two calculated fields you created above, grouping by Customer, Landscape layout. Choose Summary Options and click Sum on Price.
- a. Open the report in Design View and move/rsize the fields and headings so that they are not overlapping, leaving room at the right for an added field (this will require making the first name and last name fields/labels narrower).
  - b. Remove the text box in the Last Name Footer that begins ="Summary for "... – this takes up a lot of room and isn't very helpful on the final report.
  - c. Add the TotalDue field under Detail next to Price field and cut/paste the field label above in the Report Header with the other field labels.
  - d. Copy the Sum field control under the Last Name Footer and paste it to the right, lining it up with the TotalDue field control above it. Under Properties, change the formula in this field to use the TotalDue field instead Number of Tickets.
  - e. Copy the control in Step c above and paste the copy in the Report Footer, also lined up with the original control.

Close your database! You have now completed all the requirements necessary for the continuation and success of this new competition.

Please make sure that you submit **ALL** of the following files otherwise the committee will NOT evaluate your work.

Deliverables:

1. MWC3TeamNumber\_BudgetAnalysis.xlsx
2. MWC3TeamNumber\_LunchPres.pptx
3. MWC3TeamNumber\_HotnSpicy.accdb

Make sure to come to the awards banquet on Saturday to find out if your work was approved!