

Scoreboard Statistical Interface

James Barley

Messiah College
One College Avenue
Grantham, PA 17027

Project Goals...

- Interface the scoreboard in Brubaker auditorium with a PC in order to simultaneously keep statistics and run a scoreboard for wrestling, volleyball, and basketball
- Automate and Streamline the process of recording statistics and operating the scoreboard
- Create a product that is easy to use, reliable, and efficient

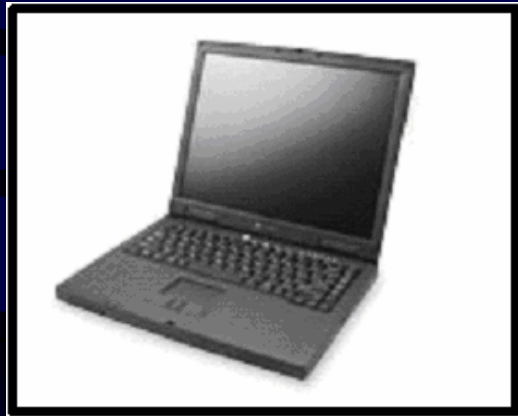
Project Benefits...

- Minimize amount of work needed to keep statistics and update scoreboard
- Limit number of workers involved in data process
- Input data more easily and quickly during sporting events

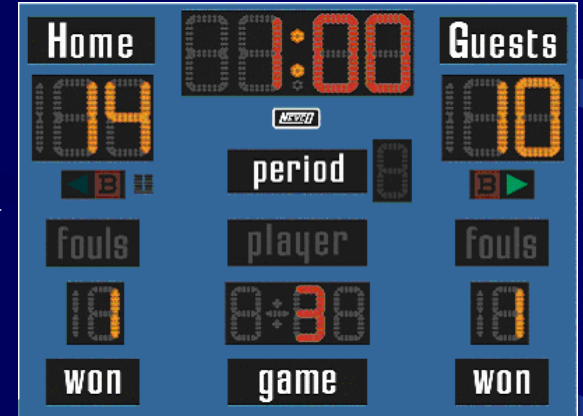
Objectives...

- To obtain a working statistical database for the Messiah College Women's Volleyball team that includes all of the current statistics.
- Have the database be controlled by an easy-to-use user interface on a Messiah College laptop.
- Allow statistics to be sorted by player, team, game, match, season, and specific statistic(s).
- Statistics must be able to be outputted to a text file that follows the NCAA statistics submission guidelines.

System Diagram



Logic and
Microcontroller



Computer Program Specifications

- Records all required statistics for basketball, volleyball, and wrestling
- Outputs results to both a database and a text file in the format required by the NCAA
- Updates the scoreboard at the proper time by sending a digital signal to the desired scoreboard.

Program Design Considerations

- Visual Basic 6 chosen as a relatively simple method for creating a visual interface
- Ease and speed of use factored heavily in the design of the user interface
- Choosing a layout similar to that of the paper and pencil method increases familiarity for the user

Volleyball User Interface...

Messiah Falcons Volleyball Statistics

File Edit View Help

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##	Player Name	Attack Type				PCT	Set	Service		Serve Reception				RE	Digs	Block			BHE
		○	◌	⊗	●			SA	SE	3	2	1	N			BS	BA	BE	
1	James Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	Amy Hall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	Tim Hillner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	Andy Vogel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	Jane Doe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	John Smith	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	Fred Flinstone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	Jack Jones	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	Tim Romanoski	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	Joe Shmoe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	Betty Crocker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Game Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Check to subtract statistics

Time Out: 15:00 Stop Time: Restart Clear Time

Home Point Guests Point

Volleyball Scoreboard

Home	0.0	Guests
12		9
0	1	0
won	game	won

Database Design Considerations

- Must be easily manageable for all sports
- Controlled mainly by the Graphical User Interface (GUI)
- MySQL

Project Constraints

- Only one user, therefore there is no need for a high security database.
- Must be able to load existing databases from previous seasons.
- Work on Microsoft Windows 2000/XP computers.

Project Strategy

- Find and learn about all necessary software needed
- Conceptual design of database
- Physical design of database
- Database integrated with Visual Basic 6.0 and run from user interface
- Allow data to be sorted and outputted to a database and text format
- Allow data to be inputted from a separate text file
- Create user manual throughout the entire process

Extra Information

- Resources and roles:
 - None
- Logistics:
 - No meetings with teammates are needed
- Budget:
 - Cost is free of charge

I Would Like to Thank...

- Professor Brian Nejme
- Dr. Donald Pratt
- Dr. Harold Underwood
- Coach Judi Tobias