

- Provide an estimated daily calorie needs by applying the Harris Benedict formula to the calculated BMR. The Harris Benedict formula multiplies the BMR by a factor based on the user’s reported activity level as shown below:

Activity Level	Daily Calorie Needs
Sedentary (little or no exercise)	BMR * 1.2
Lightly active (light exercise/sports 1-3 days/week)	BMR * 1.375
Moderately active (moderate exercise/sports 3-5 days/week)	BMR * 1.55
Very active (hard exercise/sports 6-7 days a week)	BMR * 1.725
Extra active (very hard exercise/sports & physical job or 2x training)	BMR * 1.9

- Your website must provide a method for the user to input their activity level so the daily calorie needs can be calculated.
- The website user should be able to enter their weight in pounds, their height in feet and inches, and their age in years.
- All inputs from the user should be validated both for correctness and reasonableness and the user notified if there is a problem. For example, if the user enters “10” or “abc” for their height in feet your web site should notify the user and not perform the calculations.

Presentation Requirements:

- The teams should prepare a brief presentation describing their website.
- The presentation should introduce the team and should describe how their website is structured, what tools and packages were used, and how it was tested.
- The presentation should include information such as how design decisions were made, what problems were encountered and how they were overcome
- The presentation computer will have a recent version of PowerPoint and a PDF viewer for presentation materials.

School Points Awarded for Gold, Silver, and Bronze: 5,000, 3,000, 1,000 points, respectively

Scoring Rubric: Student teams will be evaluated by a panel of 2 or more judges, who will score each presenting team using the following criteria and point values. The top 3 teams will be awarded Gold, Silver, and Bronze points as listed above.

- Correctness. A set of valid inputs will be applied to website and the answers compared to known correct results. Maximum 100 points
- Error handling. A set of invalid inputs will be applied to the website to verify the user is notified and incorrect results are not generated. Maximum 100 points.
- Website visual appearance. Visual appeal of layout, colors, graphics. Maximum 100 points.
- Code. Consistency of coding style, effective use of variables and constants, effective coding practices such as separation of content, style, and processing. Maximum 100 points.
- Presentation. Clarity of presentation, efficient use of presentation time. Maximum 50 points.

TOTAL POSSIBLE = 550 points

Judging format will depend on the number of teams. If there less than 10 teams all teams will be judged by the same panel of judges sequentially and the top 3 positions awarded. If there are more than 10

teams the teams will be divided into groups and each group will be judged by a different panel of judges. The top teams from each group will be selected and judged in a final round to select the top 3 teams.

Event Hardware/Software Required: Computer with webserver installed on it ready for deployment of competitor's website code. This computer will also be compatible with the projector to view their website. (Provided by TechFest)

Materials/Supplies Required: Competitor's website code and presentation in a single zip file.

Pre-Work Required: Students must do all design work and coding ahead of time.