

CWSF 2013 - Lethbridge, Alberta



Katie Brent

MARTHA: Medication Automated Reminder Technological Health Assistant

Challenge: Information

Category: Intermediate

Region: Bay Area

City: Oakville, ON

School: Notre Dame S.S.

Abstract: The purpose of this project is to develop a computer controlled hardware device to hold and dispense medications in accordance with a user's prescribed schedule. I wrote the software in C# and used a digital input/output board to interface with my device. The unit offers audio guidance and visual indicators and is able to monitor a user's compliance, important for those with cognitive disabilities.

Biography

I am 14 years old and in the ninth grade. This is my first time at CWSF, and I am beyond excited to have this amazing opportunity. I love academics, athletics, and the arts- I believe that it is important to have a balance of each. My favourite subjects are math and science- I love discovering and learning new things! In terms of sports, I play curling and badminton. As for the arts, I paint in acrylics, play the tenor saxophone, sketch and sew. During the summer, I love spending time at our family cottage north of Sault Ste. Marie where I boat, swim, fish, and hike. In the future, I would like to attend university for either computer or medical sciences. In fact, it was this year's science fair project that sparked my interest in these areas. I was inspired once I realized that many people struggle to remember to take their prescribed medications at the proper times. In the future, I plan to expand on both the electronic and software components of my project. My advice to students thinking about doing a project in the future is to try something new? you may just find a new passion!

Awards

Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100