GET READY!

Here's information to help you get ready to participate in this year's SMU Hackaweek starting with the Microsoft Discovery day. The information is split below for teachers and contestants. Please read this thoroughly as it may help inform your project ideas and team formation ahead of time if you are a contestant.

Contestants – high-school/university/non-student
The contestant categories and prizes for the contest are shown on the event website. The Microsoft Student and Microsoft High School categories are independent of the main SMU categories – it's possible for some eligible contestants to place in a winning position in more than one category. To compete you will need to form and declare (though not necessarily before the event starts) a team of 1 to 4 people working to create a software (and possibly also hardware) project of your choosing.

The Hackaweek starts with a launch day on May 8th which is a briefing day for contestants. This is an opportunity to gain some skills and set the theme for the competition. This year you'll get resources, training and hands-on gadget prototyping courtesy of Microsoft during its Internet of Things Discovery sessions. This may help spark some project ideas and there's also the opportunity later in the day for contestants to announce (or 'pitch') their ideas to the room to recruit other team members.

During the Internet of Things sessions you'll be using SMU computers in one of their labs, using a web browser and Visual Studio connected to something like this:

It's a Netduino Plus 2 microcontroller, programmable with C# and the .NET Micro Framework over a USB connection from Visual Studio running on various versions of Windows. It comes in a kit with a keypad, 2x16 character LCD screen, slider potentiometer and buzzer. It includes an Ethernet network connection to connect to the cloud and several kinds of digital and analog I/O ports. There's also a breadboard for connecting electronic components, and several other I/O components available (in limited quantities) that you'll hear about on the day.

During the day, Microsoft is also paying for the basic breakfast snacks and full buffet lunch that SMU supplies. At the end of the day, contestants return to their homes/work/schools to work on their projects and return on Sat May 16th for presentation, judging and awards, running throughout the day until just before dinner time. After the launch day, contestants use their own computers for project development and presentation. Microsoft will make available a variety of cloud-based resources to all contestants for use during the contest and beyond, depending on a contestant's eligibility for the Microsoft offers and/or any access codes made available. SMU may also introduce mentors who may guide you in creating a solution.

For those teams interested in incorporating the hardware kits into their project (which will help in competing in the Microsoft-sponsored prizes categories for eligible contestants), you can borrow one of the launch day kits for the week (subject to availability).

SMU appoints a panel of judges to score teams in the main SMU prize categories, typically with a first round of presentation judging and then a finalists round of presentations and judging (with a projector and screen available). The Microsoft-sponsored categories will be judged separately in parallel by Microsoft-appointed representative(s).

To compete in the main SMU prize categories, it may help you to know the broad criteria against which your project will be judged, which include:

- Usefulness/functionality
- Originality/imagination/creativity
- Robustness (does it work)
- Technical complexity (is the problem challenging)

If you are eligible to compete in the independent Microsoft-sponsored categories, it may help you to know the broad criteria against which you will be judged, which includes how well you did one or more of these things in your project solution:

- Use of Netduino C#/.NET MF microcontroller and components
- Use of Visual Studio Community Edition (or higher) 2013 to build a client-based application that connects to the Internet (which may include use of tools like Apache Cordova or Xamarin for cross-platform mobile development)
- Use of Microsoft Azure to host part of your solution (including ASP.NET, JSON, PHP or other supported frameworks)
  To be eligible for the Microsoft Student category and/or Microsoft High School category, the team must be formed by > 50% of the applicable membership (i.e. student in Nova Scotia high-school, college or university or student in Nova Scotia high-school, respectively)

If you want to get started before the event, then you can access these tools/resources:

- Microsoft Visual Studio Community 2013 (FREE) - https://www.visualstudio.com/en-us/products/visual-studio-community-vs.aspx

- Microsoft Azure Cloud Compute, Storage, Databases, Services, Data Analytics (FREE/Trial access methods provided at the event) - http://www.azure.com/
- Netduino Plus 2 microcontroller information - http://www.netduino.com/netduinoplus2/specs.htm

Teachers

As a teacher, you may be coming to support students from your school or to attend the event which this year includes specific side sessions for teachers. If you wish you can also compete in the contest in the non-student category, as well as help your students as a mentor. It is recommended that you bring a wifi-capable laptop or tablet if you wish to attend the side sessions.

See the information for contestants for an explanation of the event overall. This year Microsoft is providing an Internet of Things (IoT) discovery day on the launch day of the event. It will expose participants to gadget prototyping, app building and cloud services. Also, during the day, teachers will have separate Microsoft-led sessions in another room which will include briefings on technology to help you and your students in the classroom as well as resources available to help you teach technology. The sessions may include information on OneNote, Office 365 & Web Apps, OneDrive, Sway, Mix, Microsoft Education Network, teacher certifications, Visual Studio, Azure, education discounts and resources available to you in the cloud and locally.