ECONOMY

Refrigerator with child-safety lock took home first prize at FirstBuild's Hackathon

By **LISA HORNUNG** | September 25, 2018 10:00 am

"My Fridge Safe" has a locking drawer in the refrigerator that only unlocks via a smartphone app. | Courtesy of FirstBuild

Whenever actors or musicians win a major award, there is typically one person they all make sure to thank — their moms. Prizes like first place in **FirstBuild**'s fourth annual "Hack the Home" Hackathon are no different.

When Josh Weil and his teammates Eric Ott and Alex Vance took home the top prize this past weekend, Weil gave credit to who other than his mom, Melinda Weil, who he said helped them shape their idea for “My Fridge Safe,” a refrigerator with a drawer that can lock to protect young children from getting into medications, foods or drinks that they shouldn’t touch. Adults can lock and unlock the drawer using a mobile app.

“I was telling her about the Hackathon, and we were bouncing back and forth ideas, and that was one of her ideas,” Weil said. “It wasn’t quite exactly that, but it was something similar. I brought that to my friends, and they ended up liking it.”

Ott,

Eric Ott and Alex Vance accepted the award for first place at the FirstBuild Hackathon. Center is Larry Portaro, director of FirstBuild. | Courtesy of FirstBuild

Vance and Weil have participated in three of the last four Hackathons, but this is the first time they’ve taken the top prize. They won $3,000 for first place, as well as a prize for best design, a $1,000 bonus.

Weil is a mechanical engineer, and Ott and Vance are computer engineers. Their combined talents (along with Weil’s mom’s brilliant idea) helped them get a full prototype in place in one weekend.

“The good experience is in taking any type of design from what we had, which was a concept, to a working prototype in 48 hours,” Weil said. “It was tough, but it was worth it. It was a lot of fun. … it felt really nice to have it working completely by the time we got done.”

Of the 29 unique projects that teams worked on, My Fridge Safe impressed the judges most because of it "actually was hardware, as well as an app, that was fully functional by the end of the event, and it kind of wowed our judges' panel," said Larry Portaro, director of FirstBuild, which is the innovation lab of **GE Appliances**.

The Hackathon was judged by FirstBuild staff and sponsors, as well as by Dr. Emmanuel Collins, dean of the J.B. Speed School of Engineering; Grace Simrall, chief of civic innovation and technology at Louisville Metro Government; and Jimmy DiResta, a master maker.

More prizes were up for grabs as teams were challenged to use sponsored products and materials in innovative ways in their designs.

"We're very pleased with the breadth of ideas and, quite frankly, the diversity of the folks that attended the event," Portaro said. "We had participants from across the U.S., all the way from Michigan to Florida, students that represented their schools in the event, as well as professionals locally, as well as from the region."

There were 29 teams that participated in the FirstBuild Hackathon. | Courtesy of FirstBuild

This year, the event also hosted a Maker's Village, in which the **Louisville Maker Faire** hosted booths and exhibitions for makers.

"There was such creativity that I think it was right for FirstBuild," Portaro said. "That really gave people a sense of what making is about. These are generally local makers: there

was a group from Frankfort who built a tank, like a functioning treaded vehicle. I mean, who doesn't love a tank?"

Students from Louisville Collegiate School built race tracks and cars to race on them, he said.

"What was great about that was you could see the students getting excited about the races themselves, but they weren't just talking about who won — they were talking about why different cars won. You see that they were talking about design approaches and maybe trade off with how something looked versus how it performed," Portaro added.

The second-place winner of the Hackathon was a team who built a washing machine sensor that can detect if a load of laundry is too big or off balance before the wash begins. In third place was a group of GE Edison engineers who built a dishwasher handle that allowed airflow to dry a dish towel or your hands while the machine is running.

Laura Hammond, senior marketing manager for FirstBuild, said she especially liked a project that created a warming drawer.

"I'm from upstate New York originally," Hammond said. "Every day you're out shoveling snow — every day. You could set your drawer to warm up your socks and your gloves, or your fresh clothes when you come back inside from shoveling. I felt that was really interesting and near to my heart."

In previous years, Ott, Vance and Weil have had moderate success. The first year, they created a smart umbrella stand that would dry your umbrella and keep track of the weather so it could alert you to carry one; it won best design. The second year, they created a smart blender that would keep track of the calories in your smoothie.

Weil said he's not

Participants of all ages came out to the Maker Village at the

Hackathon. | Courtesy photo

really sure of the next step in the process, but he was told to expect an email with paperwork and that FirstBuild wanted to see the app they developed and to set up the prototype for viewing.

Whether the prototype becomes a GE Appliances feature is yet to be seen. Portaro said the next steps involve testing.

“Now that we’ve been able to make our first function prototypes with the teams, we’re going to share those across our community and really try to get the voice of users and other community members to see what they value on it,” he said. “Then we’ll put it into our development process where we rapidly innovate and iterate on the idea in creating different appearances and working models and sharing those and hopefully getting to a minimally viable product, something that’s desired by the community.

“Then we’ll go into commerce on it. We might do a small manufacture and test. We might do a crowdfund,” he continued. “It really kind of depends on the community and what they’re passionate about.”

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Lisa Hornung a native of Louisville and has worked in local media for more than 15 years as a writer and editor. Before that she worked as a writer, editor and photographer for community newspapers in Kansas, Ohio and Kentucky. She has a bachelor’s degree in journalism from the University of Georgia, and after a 20-year career in journalism, she obtained a master’s degree in history from Eastern Kentucky University in 2016.