

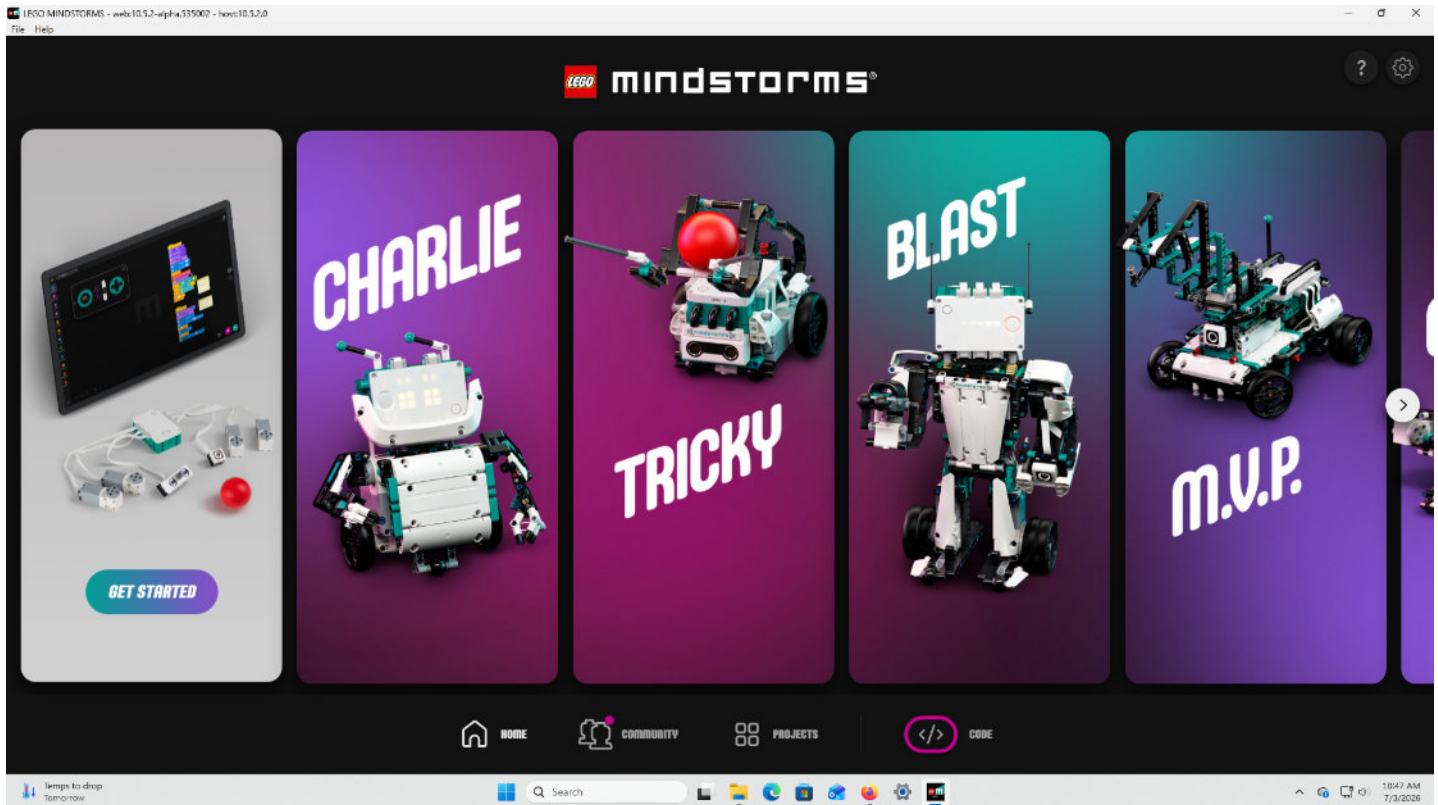
BEYOND THE SUNSET:

PRESERVING THE MINDSTORMS LEGACY

The LEGO® MINDSTORMS® Robot Inventor App will be discontinued on June 1, 2026, with no further updates or support. Resources on LEGO.com will guide you in transitioning your play experience to the LEGO® Education SPIKE™ Prime App. Note: A full 1:1 experience or firmware replacement cannot be guaranteed.

OK

Whether you're a child of the 80s, a future builder of tomorrow or anything in between, knowing your age will help us give you the best experience and help keep you safe online.



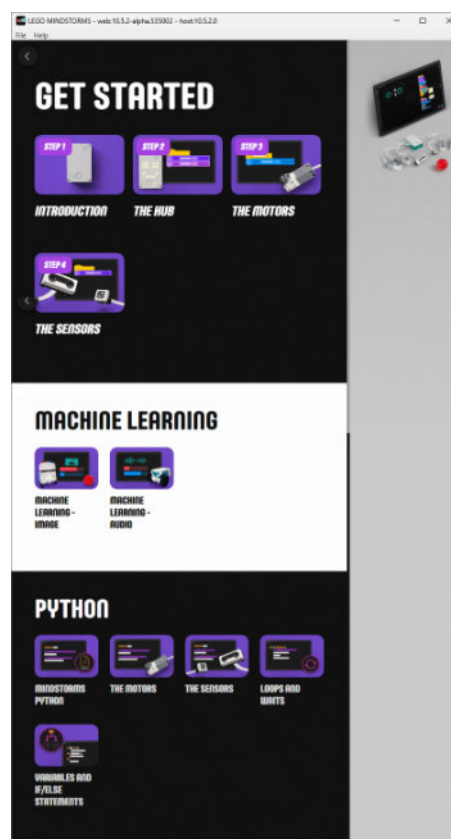
I'm a long-time fan of MINDSTORMS, all the way back to the original RC kits that came out over 25 years ago. As new kits came out, I have enjoyed exploring them and finding new ways to use the pBricks (which is what the programmable brains of LEGO robots are commonly called) and motors in new and inventive ways. It takes some doing to program a 25-year-old robotics system on a modern computer, but it can still be done, because without the programming a robotics kit is just a bunch of bricks and electronics.

The first LEGO Robotics set came out in 1998. Since then, the major platforms have been RCX, which was succeeded by NXT in 2006, NXT 2.0 in 2009 (same pBrick, new models), and EV3 in 2013. Eventually EV3 was replaced by MINDSTORMS Robot Inventor (or "RI") in 2020, only to be retired in 2023, signaling the end of MINDSTORMS just short of its 25th anniversary.

When you purchase a kit like the LEGO MINDSTORMS Robot Inventor (RI), you are not just buying parts; you are buying a complete experience—the programming environment, the building instructions, and the logic-driven "vocabulary" that makes these robots come alive.

It felt like a library being locked shut when the news hit that the RI app was being sunset. The official transition to the Spike app may seem logical on paper: same hardware platform though a different app, but in practice it is a lot more complex than that. Although RI and Spike share the same hardware, the firmware and coding

environments are fundamentally incompatible. Programs built in the RI environment do not simply "port" over; the rich library of building instructions and community models risked vanishing into the digital ether. There are also other functionalities that are lost, like Remote Control, Machine Learning, and the ability to control the RI hub with Scratch (using the Scratch Link extension) which allows it to work together



with other LEGO products that share the Powered Up wireless protocol, including such diverse products as Boost, CONTROL+, or LEGO Super Mario.

The RI app consists of a base program with instructions for the five hero models and downloadable content to explore these models created by members of the MINDSTORMS community. But when I moved to a new Windows computer and installed the RI app I found I couldn't even download the additional content because the app's internal links were broken. I was frustrated. A robotics kit isn't just hardware; the software and additional features of the program are an essential part of the equation. Taking that away devalues a product customers have already paid good money for.

The Power of "Making Noise"

My role in this wasn't technical—that credit belongs to others. My role was to be persistent. For three months, I repeatedly called LEGO Customer Service, determined to ensure the community's concerns were heard.

I shared my frustrations on EuroBricks and on the ROBOTMAK3RS Facebook groups, urging the community to make our case known. We needed answers: Would the app vanish? What happens to the custom blocks for each hero model? How do we preserve the work we've built?

The Technical Archaeologists

While I was busy making phone calls, the real

technical heavy lifting was being done by a member of the community. A EuroBricks user by the name of Sizlaq did the difficult work of uncovering the “why” and “how” behind the broken app ecosystem.

Sizlaq didn’t just point out the problems; he set up the repositories and tools necessary for us to take matters into our own hands. Through the ROBOTMAK3RS collective, we are now distributing these solutions so our community stays active.

Preserving the Ecosystem

The goal of these preservation efforts is simple: we want to ensure that our kits remain functional on our own terms, without relying on servers that are scheduled to go dark.

For those looking to restore or maintain their setups, Sizlaq’s work has been instrumental. He outlines how to handle the app and its data, two distinct pillars of the restoration process:

1. **The Installer:** This brings the application back to life.

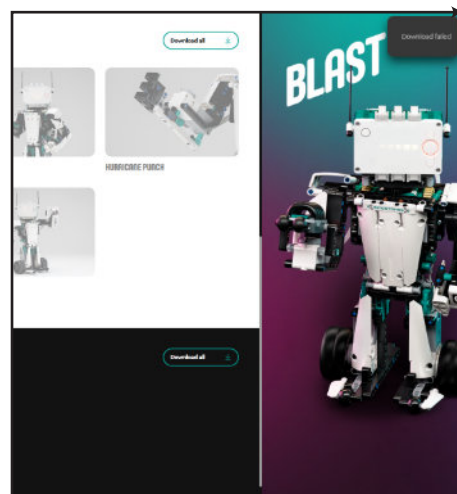
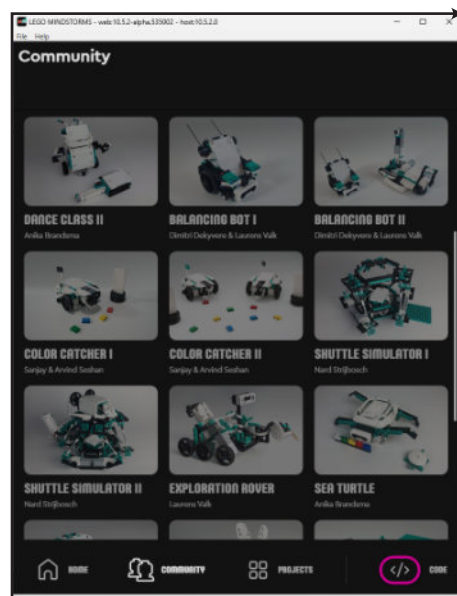
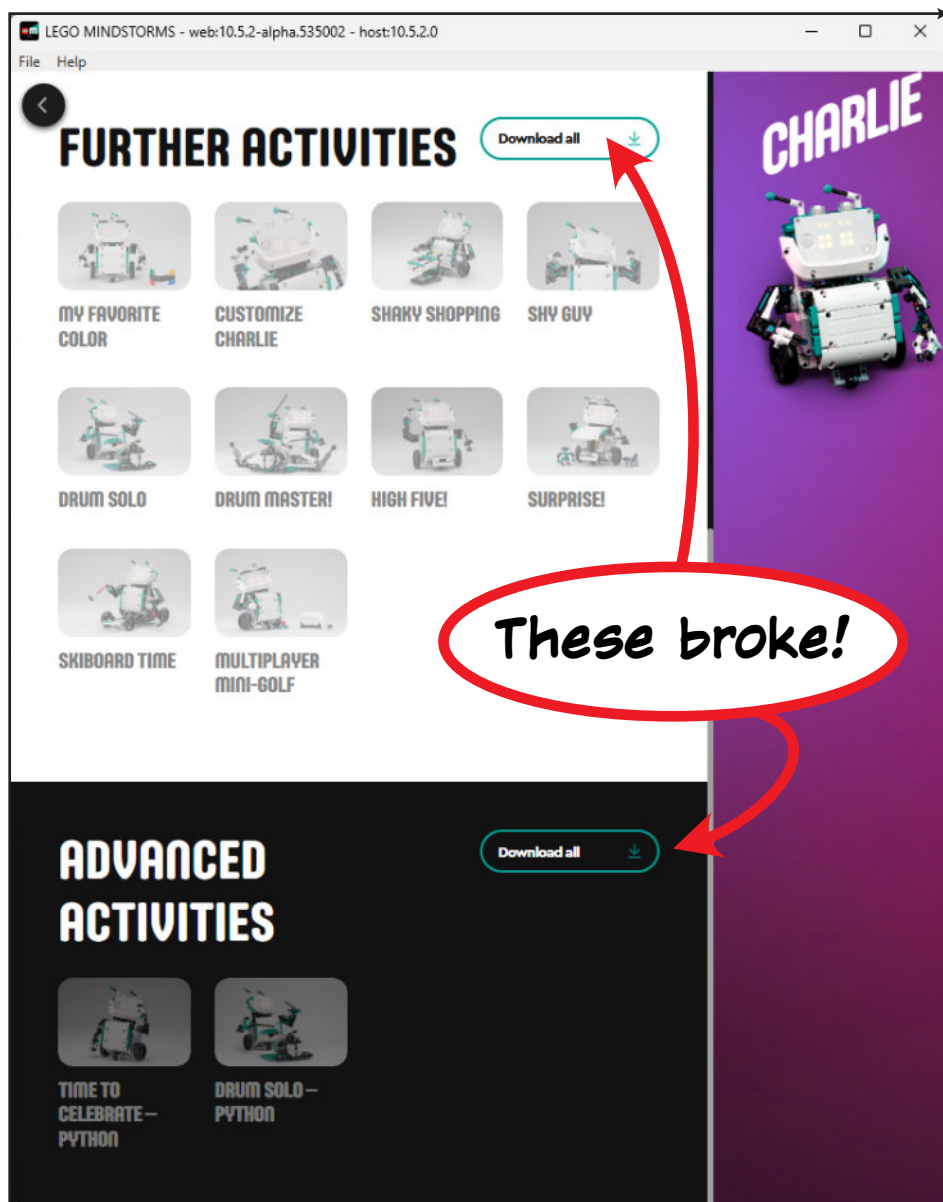
2. **The App-Data/Content:** This is the soul of the app—the saved tutorials, the community builds, and the specific programming blocks that make your models function.

If you are navigating this transition, you can find the technical roadmaps developed by the community to help preserve your setup by searching for “Restoring the LEGO MINDSTORMS App and Content” on the ROBOTMAK3RS Blog (<https://blog.robotmak3rs.com/>). There you will find a series of articles outlining how to accomplish this on Windows, Android and macOS.

LEGO’s response

It took persistence and restraint to get my case across. The people at LEGO Customer Service are excellent professionals. They really want to help their customers the best way they can, but what I was asking was well beyond their knowledge and it took many tries before I got to talk to that one representative who knew how to get my

questions and complaint to the next level. The result was another long and informative conversation with what I can only say seemed the right person for the job: someone with a passion for MINDSTORMS, enough internal knowledge to understand what is possible and what is not, and the willingness to go the extra mile to ensure the community is as happy as can be realistically achieved. LEGO MINDSTORMS Robot Inventor had been retired by LEGO some years ago but they kept the software “alive” well beyond what they were legally required to do. However, LEGO acknowledged our concerns. While they confirmed that keeping the MINDSTORMS RI app available past the sunseting date is not feasible, they did postpone that date to October 2026 so users can save a last copy of the complete app and download additional content before it all disappears from the app stores. LEGO reached out to me and told me their programmers will be fixing the Windows app before the October cutoff date, however as of this writing there is no visible



As of this writing, the Windows version remains unfixed; the MacOS and Android versions are once again functional.

progress. Functionality of the Android and MacOS apps has already been restored. In addition, LEGO is committed to ensuring the community is supported. They are finalizing a series of PDFs to act as a bridge, which will include instructions for all models, screenshots of the block-based programs, and, critically, guidance on the correspondence of these word blocks between the MINDSTORMS Robot Inventor and Spike apps.

Final Thoughts: We Are the Stewards

The LEGO Spike app will be maintained until June 30, 2031, so if you don't mind losing some of the functionality of the RI app and recreating your programs you still have a few years of support you can count on.

If you prefer a different approach, the MINDSTORMS community is amazing. It comprises hardcore fans who keep working on solutions well beyond the lifespan of the MINDSTORMS products. Thanks to the work of one dedicated fan, you can now save and restore a full working copy of the RI app on different hardware platforms. If you prefer a different approach, have a look at PyBricks (<https://pybricks.com/>). It supports all the hardware that uses the Powered Up wireless protocol (so from LEGO Super Mario to MINDSTORMS RI) and even includes its predecessor MINDSTORMS EV3.

Even open-source solutions, like the fantastic PyBricks, operate on their own development cycles. Nothing in the digital landscape is truly guaranteed to last forever. This is why the act of archiving our tools is so important: it transforms us from passive consumers waiting for a sunset notification into active stewards of our own creative environments.

We have learned that we cannot rely solely on "always-online" ecosystems for our hardware. By archiving the app and its data, we are ensuring that we remain the owners of our technology, rather than mere temporary tenants of a service provider.

Preserving these tools isn't just about nostalgia; it's about ensuring that the next generation of builders can pick up a set from 2026 and experience the same joy, logic, and creativity that we have enjoyed. I encourage you to check the ROBOTMAK3RS blog for the full technical tutorials, so you can lock in your own access. Keep building, keep sharing, and keep making noise.

