

From Hackathon to Production in a Year

—

Victor Kropp

@kropp

kropp.name

Hackathon

48 hours

100+

participants

40+
projects



HACKATHONS

JetBrains Hackathon 2017





**winners'
cup**

Do anything you want



**See a need —
fill a need**

dotMemory Unit



Toolbox App



YouTrack Mobile



Toolbox App



A control panel for
your tools and projects

Search

FAVORITES

-  **jetbrains-toolbox** 12 minutes ago
~/work/toolbox
-  **exposed** 
~/work/exposed
-  **jsontest**
~/work/jsontest
-  **qt5sprinter**
~/work/qt5sprinter
-  **ConsoleApplication**
~/tmp/ConsoleApplication/ConsoleApplication.sln
-  **Upsource** 3 months ago
~/work/upsource
-  **jsonld-metadata** 4 months ago
~/work/jsonld-metadata
-  **ganalytics** 9 months ago
~/work/qt-google-analytics
-  **gradle-teamcity-gitversion-plugin** 9 months ago
~/work/gradle-teamcity-gitversion-plugin
-  **chrome-open-tabs-in-bg** 10 months ago

Add to favorites

Hide project from Toolbox

 IntelliJ IDEA Community 2017.2.5 IntelliJ IDEA Ultimate 2017.3 EAP ✓

Team

Team

Core Developers

Windows

macOS

Linux

and

UI/UX designer

UI developer

IntelliJ developer

Ring UI



Users Groups Spaces Services



Log in...

Run...

Button one

Button two

Button three

Another action

20 Sep 2014 ▾

20 Sep 2014						
Mo	Tu	We	Th	Fr	Sa	Su
18	19	20	21	22	23	24
25	26	27	28	29	30	31
September						
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					
October						
				1	2	3
				4	5	
6	7	8	9	10	11	12

some text on top

before  Some text after

some text under loader

Unchecked by default



Checked by default



Disabled unchecked



<https://jetbrains.org/ring-ui/>



PhpStorm 2017.2.4 downloading... ≈ 15 seconds 24% X

Projects **Tools** ¹

1 NEW UPDATE

[Update all](#)**CLion**
2017.3 EAP**IntelliJ IDEA Ultimate**
2017.3 EAP**PyCharm Professional**
2017.2.3[Update](#)**WebStorm**
2017.2.5

▼ AVAILABLE TOOLS

**CLion**
[A smart cross-platform IDE for C and C++](#)[Install](#) ▼**DataGrip**
[Many databases, one tool](#)[Install](#) ▼**Gogland**
[Up and Coming Go IDE](#)[Install](#) ▼

20%

project

Design for compatibility

Backward compatibility

Forward compatibility

Security

Always keep security in mind

- **HTTPS** only
- Signed data source
- Checksums for downloads

Code review

Find bugs **early**

Share knowledge

Improve code **quality**

Consistent design

JOEL ON SOFTWARE

YOUR HOST



my own, highly irresponsible, sloppy test to rate the quality of a software team. The great part about it is that it takes about 3 minutes. With all the time you save, you can go to medical school.

The Joel Test

1. Do you use source control?
2. Can you make a build in one step?
3. Do you make daily builds?
4. Do you have a bug database?
5. Do you fix bugs before writing new code?
6. Do you have an up-to-date schedule?
7. Do you have a spec?
8. Do programmers have quiet working conditions?
9. Do you use the best tools money can buy?
10. Do you have testers?
11. Do new candidates write code during their interview?
12. Do you do hallway usability testing?

Automate everything

Continuous Integration server **compiles** the app
and runs **tests** after each commit

Release is published with a **single click**

JetBrains Toolbox JetBrains Desktop Applications Launcher		<Active branches>	no hidden
▶ <input type="checkbox"/> Installers (Stable) ▾		Pending (100+) ▾	Idle Run ... x
▶ <input type="checkbox"/> Build Smoke ▾			Idle Run ... x
▶ <input type="checkbox"/> Build All ▾		Pending (100+) ▾	Idle Run ... x
▶ <input type="checkbox"/> Test All ▾		Pending (100+) ▾	Idle Run ... x
▶ <input type="checkbox"/> Feeds Acceptance Tests ▾			Idle Run ... x
<input type="checkbox"/> Upload Release ▾	No builds to display	Pending (100+) ▾	Idle Run ... x
Build ▾		<Active branches>	no hidden
▶ <input type="checkbox"/> Build Number ▾			Idle Run ... x
▶ <input type="checkbox"/> Build UI ▾			Idle Run ... x
▶ <input type="checkbox"/> Build Chrome Extension ▾			Idle Run ... x
▶ <input type="checkbox"/> Build Mac OS X ▾			Idle Run ... x
▶ <input type="checkbox"/> Build Mac OS X Debug ▾		Pending (100+) ▾	Idle Run ... x
▶ <input type="checkbox"/> Build Windows ▾			Idle Run ... x
▶ <input type="checkbox"/> Build Windows Debug ▾		Pending (100+) ▾	Idle Run ... x
▶ <input type="checkbox"/> Build Linux AppImage ▾			Idle Run ... x
Docker ▾ Various Docker images used for building and testing Toolbox App		<Active branches>	5 successful no hidden
External Libraries ▾		<Active branches>	no hidden
▶ <input type="checkbox"/> OpenSSL (Linux) ▾			Idle Run ... x
▶ <input type="checkbox"/> OpenSSL (Mac OS) ▾			Idle Run ... x
Feed ▾		<Active branches>	no hidden
▶ <input type="checkbox"/> v1 Internal Feed ▾			Idle Run ... x
▶ <input type="checkbox"/> v1 Public Feed ▾			Idle Run ... x
▶ <input type="checkbox"/> v1 Publish Internal Feed ▾			Idle Run ... x
▶ <input type="checkbox"/> v1 Publish Public Feed ▾			Idle Run ... x

Cross-platform development

There are **lots** of platform specific things

Every feature must be tested on all supported operating systems

Eating your own dog food

Eating your own dog food,
also called **dogfooding,**
is a slang term used to reference a scenario in
which an organization uses its own product.
The idea is that if the organization truly
believes its own product to be superior, it
would use the product itself.

https://en.wikipedia.org/wiki/Eating_your_own_dog_food

Dogfooding

Learn your application

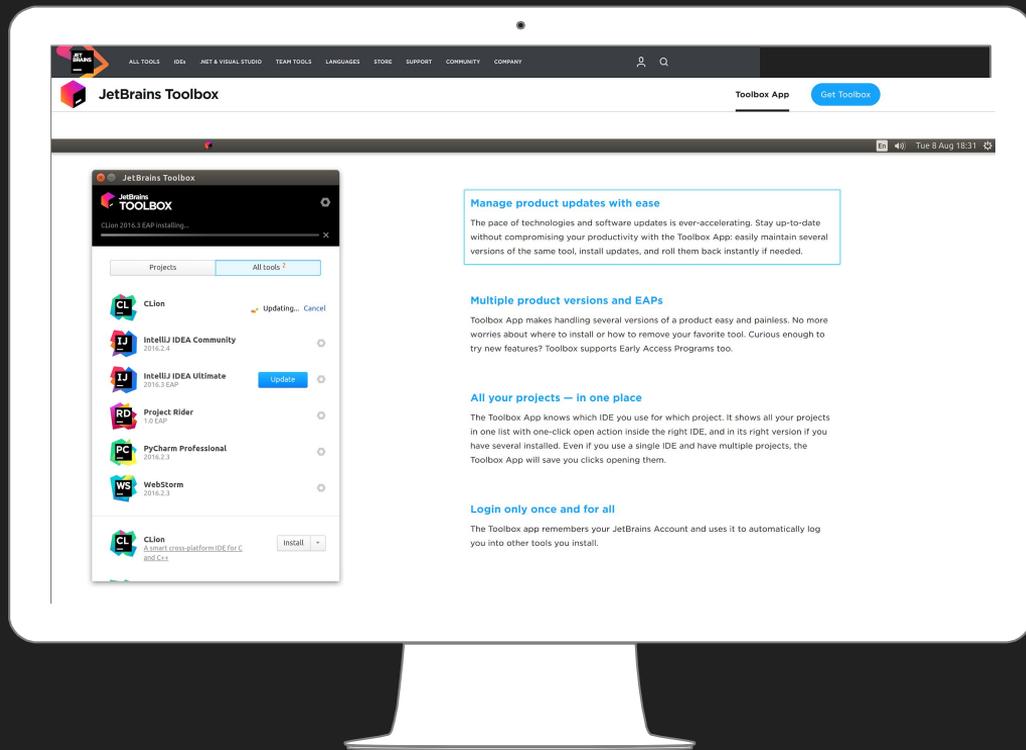
Get early feedback from colleagues

Toolbox App

Check it out at

jetbrains.com/toolbox/app

Follow @JBToolbox
for updates



Thank you!

Victor Kropp
@kropp

Questions?

Victor Kropp
@kropp