

Introducing GreenPiThumb

GreenPiThumb is a gardening bot for houseplants.

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A gardening bot for houseplants

The tagline should be a phrase and not a sentence. When you read this out loud, the way you wrote it requires you to say the word GreenPiThumb twice in a row.

Introduction

Let's talk about the intro. As a software engineer/programmer, the tendency is to jump directly into the guts of a project. There's no need to talk about what you're going to do. The same is probably true in your comedy career. The job is to make people laugh. You already have their attention.

With a blog post, you have to convince the reader to keep reading. The rule of thumb is that the first sentence determines if the person will continue reading or find another article to read. You might have the first paragraph, but if you don't capture their attention immediately, they will leave. This applies, by the way, to all types of writing. Emails, resumes, letters to the editor, etc.

In this post, you jump right into the features. There really is no intro. The question is what should it contain. The target audience holds the answer. I think you are talking to people interested in Pis. Maybe give examples of how the reader could use it to solve one of their problems. Get the reader excited about following in your footsteps.

For example, at the end of your TaskRabbit post, the reader was perhaps interested in doing the same thing or at the least curious about TaskRabbit. I'd like to see the reader drawn in earlier in this post. By the end, I was into it, but it took me until the road bumps section to feel a connection. Yeah, I know technical details are dry, but I think you can work on the intro and get the reader excited.

Powered by Raspberry Pi

In this section, I'd like to see you explain the Raspberry Pi more. Take "For most of the enthusiastic..." from the third paragraph and put it in the opening paragraph of this section. I like the examples you gave because it helps the reader to understand how they can use it.

Then, segue to yourself and your experience in a separate paragraph.

I'm a software guy, so I never explored the Pi beyond running applications on it. -> As a software guy, I only explored the Pi by using it as a server and running applications on it.

Odd word pairings

- tiny ~~little~~ servers
- frontend development – I believe frontend should be two words and the same with backend.
- two or three month project – two- or three-month project
- effective programming techniques and ~~healthy~~ **important** software engineering practices
- projects are from enthusiasts -> projects created by
- ~~completely~~ open-source
- plug ~~right in to~~ into the Pi
- ~~real~~ heavy lifting
- It translates everything into JSON to make it easier for web applications to consume.
-> It translates everything into JSON, which makes it easier for web applications to understand.
- a a static mirror
- ~~A lot~~ Much of that time was due to roadblocks ~~we ran into that would grind~~ that stopped our progress ~~to a halt~~ for weeks at a time. Below, ~~I've included~~ are the major issues we ~~ran into~~-encountered.
- using ~~both~~ a sewing needle
- didn't ~~seem~~ seem that
- It was hard to decide whether GreenPiThumb was watering too much or too little ~~when~~ because we ourselves had no idea how much water ~~was correct~~ to use.
- would go up/down -> went up/down In general, try to remove the helping verb 'would.' This is relevant to the entire document.
- **the resulting** data
- ~~either~~ if the soil

Repetitive words/wordiness

My apartment could use **a plant**, but I'm lazy and didn't want to take the time to water **a plant** myself. Think about replacing the second plant with 'it.'

The tables below show the equipment we used to build GreenPiThumb. We're sharing the exact parts we used so that it's easy for you to follow our model, but many of these are commodity components that you can swap out for something functionally identical ~~if you~~ ~~so choose~~.

We ~~had to buy~~ **bought** them because we had ~~zero~~ **no** electronics equipment, so we include them ~~here~~ for completeness

~~much~~ easier – appears at least twice

We started ~~out~~

it ~~has~~ served us well

~~So we tried a new sensor.~~ We ~~were~~ originally **used** Dickson Chow's Plant Friends soil probe, ~~so~~ but we swapped it out for the SparkFun soil sensor.

It's a lesson I learned [long ago](#) from Joel Spolsky, software essayist extraordinaire, and it's a ~~lesson~~ **something** that I expect to learn again and again on ~~many~~ software projects to come.

Transition words

I find that simple sentences hinder the flow of reading. Adding a transition word softens the delivery style and makes it less choppy.

Read the following aloud and see which you like better.

My apartment could use a plant, but I'm lazy and didn't want to take the time to water a plant myself. I decided it would be much easier to spend several hundred hours building a gardening robot to do it for me.

My apartment could use a plant, but I'm lazy and didn't want to take the time to water a it myself. So, I decided it would be much easier to spend several hundred hours building a gardening robot to do it for me.

Adding the word 'so' mimics the pattern of speech. Each time you have a simple sentence, e.g., noun, verb, one clause, determine if a transition word would improve the flow.

~~We haven't seen any of~~ The other Pi gardening projects don't talk about how they spread ~~out~~ the water over the soil, **which** ~~this~~ is a shame because we still haven't ~~really~~ figured it out.

Product name

I want to see GreenPiThumb more often. For example, when you proposed "the project" to Jeet use GreenPiThumb instead of "the project."

Unclear

We decided to build our own because a) it's fun to make our own stuff and b) we wanted to treat the bot's software as a first-class citizen.

Get rid of the a) and b) and explain what you mean by first-class citizen. I don't understand what that means in this context.

We decided to build our own because it's fun to make our own stuff, and we wanted to treat the bot's software as a first-class citizen by

Comma placement

Put a comma before connectors such as 'but' or 'and' only if the second clause has a subject.

The majority of Pi hardware projects are from enthusiasts who are great with electronics, but don't have professional software experience.

The comma before 'but' is not needed in this case because the second clause refers back to enthusiasts as the subject so you cannot separate them.

Put a comma after 'so' at the beginning of a sentence.

Periods

Be consist with adding periods to bullet items.

Exclamation point

In keeping with the humor theme, add an ! to call out your mistakes. When you say "Probably not supposed to happen" append an !

Be direct

We wanted to be the opposite -> We were the opposite
tried testing -> tested
could have -> would have

En and em dashes

Instead of using a hyphen in sentences to set text apart use - or —. Here are the three of them - - —. Decide which to use and stick with it.

Also, instead of () use a dash.

(both READMEs and code comments) -> - both READMEs and code comments

'The'

I'm noticing a pattern of using the word 'the' when there is a better alternative.

the main motivation -> my main motivation

the hardware barely works -> our hardware

In this case, "all over my wall in the process", I think it should be 'the' wall or 'a.'

The soil refused to cooperate ~~with us~~. - 'The' must be included before soil.

Switching tenses

In the first half of the post, you used the past tense. We decided. But, starting in the hardware architecture section, you change to the present tense. We use. Choose one and stick with it. You return to the past in the middle of the Deployment section.

Acronyms

Please explain them with the acronym in ().

metal-oxide-semiconductor field-effect transistor (MOSFET)

Verb agreement

The web dashboard (below) uses this API to retrieve GreenPiThumb's state and **presents** the information through the browser in a human-friendly way. This should be 'presents.'

Things I particularly liked

The line about keeping the plant for 80 years. Your humor works!

The graphics and links.

The bumps along the way section! The tone of this section is great. It involves the reader. I was actually thinking of how I could help you solve the watering problem. This is exactly what you want - to hook the reader so that they want to help you. Well done! The videos are outstanding.

My favorite line: "It turned out that we didn't have basic gardening skills." I laughed out loud at this one!!! That entire paragraph is great.