

IT Thinking Hats

You will often need to think about IT problems from a variety of perspectives. Each perspective is like "hat" that you can wear to help you focus on a particular aspect of a problem. Different "hats" are helpful at different stages of development. Let's look at a few of the different "hats" that can help you achieve your goals with IT.

Outcome-Focussed

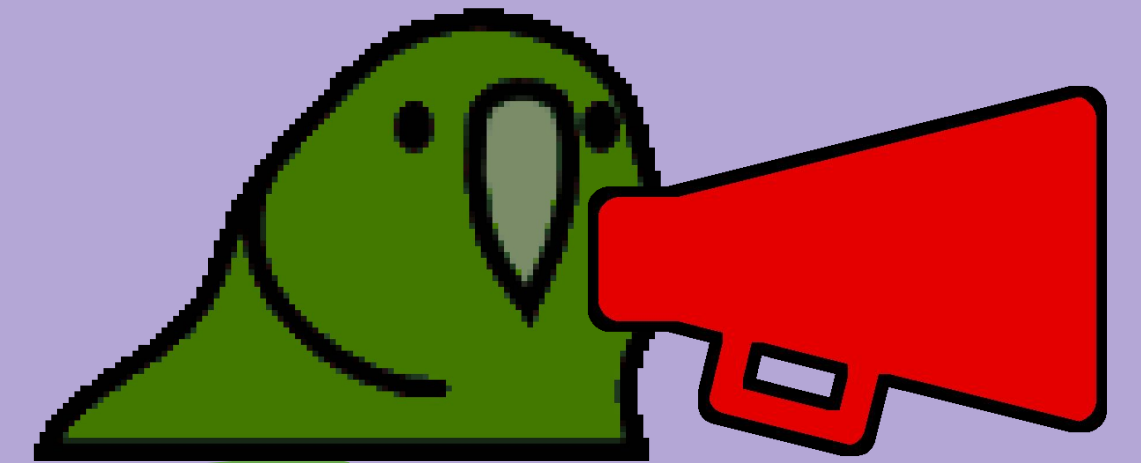
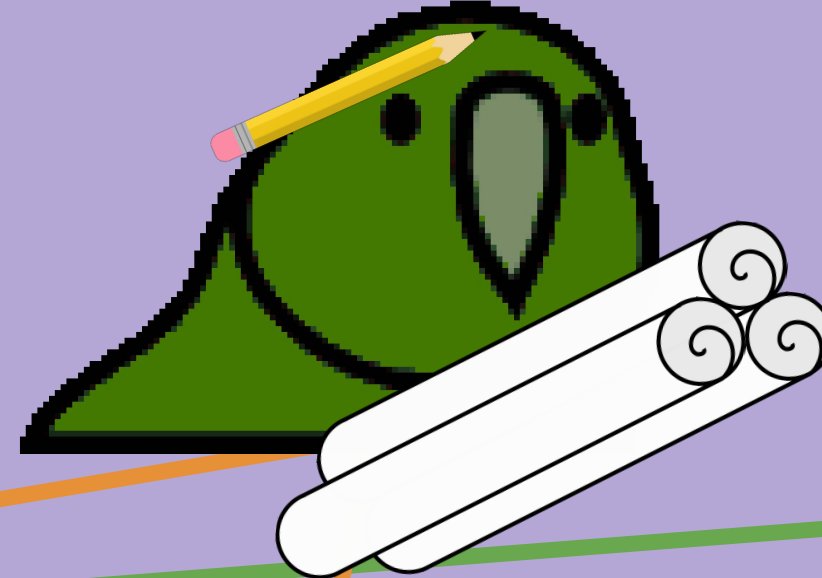
Will the planned solution meet users' needs? Could we solve this problem with a simpler solution?

Architect

What software and hardware will be needed to build this system? How should the pieces of software involved interact with each other?

Communicator

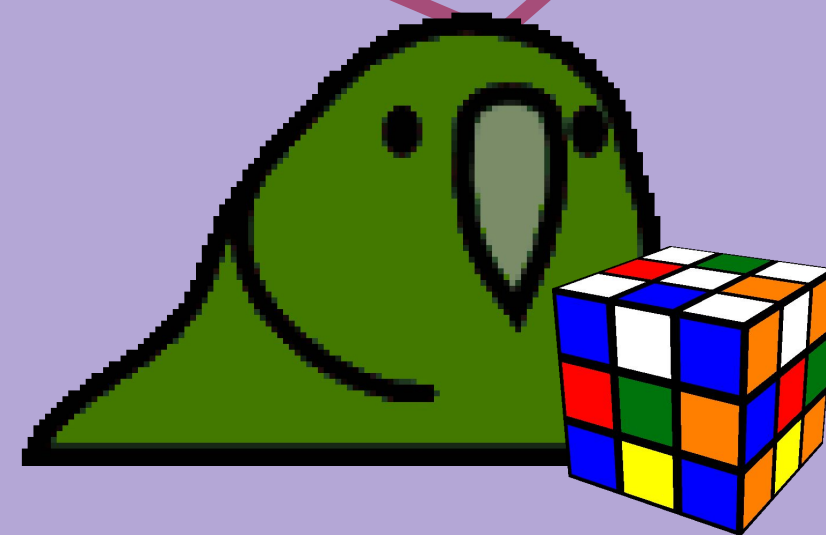
How can I explain my planned solution to users? How can I make this source code readable and documented so that other developers can maintain it?



Problem & Requirements

Design & Source Code

Testing & Debugging



Scientist

Which of these alternative algorithms is the fastest? What changes could I make to my machine learning system to make it more accurate?

Puzzle Solver

What abstraction can I use so that I do not need to repeat this section of code? What algorithm would solve this problem efficiently?

Detective

Why does my software act differently to how I think it should be acting? What is the cause of this bug?

Reviewer

What inputs would cause this software to produce incorrect outputs? Are there any potential security vulnerabilities?