

Technical Communication in Practice

Ryan Tillotson

Software Engineer, Google for Education

TODAY

- My background
- My workflow + communication in the field
- Q & A + Discussion

These thoughts are my own, and not necessarily representative of Google's.

BACKGROUND

Before Google

2013-2014

Application Developer

Nahan Printing - St. Cloud, MN

2014-2015

Application Developer

Zirous - Des Moines, IA

BACKGROUND

At Google

2015-2017

Software Engineer

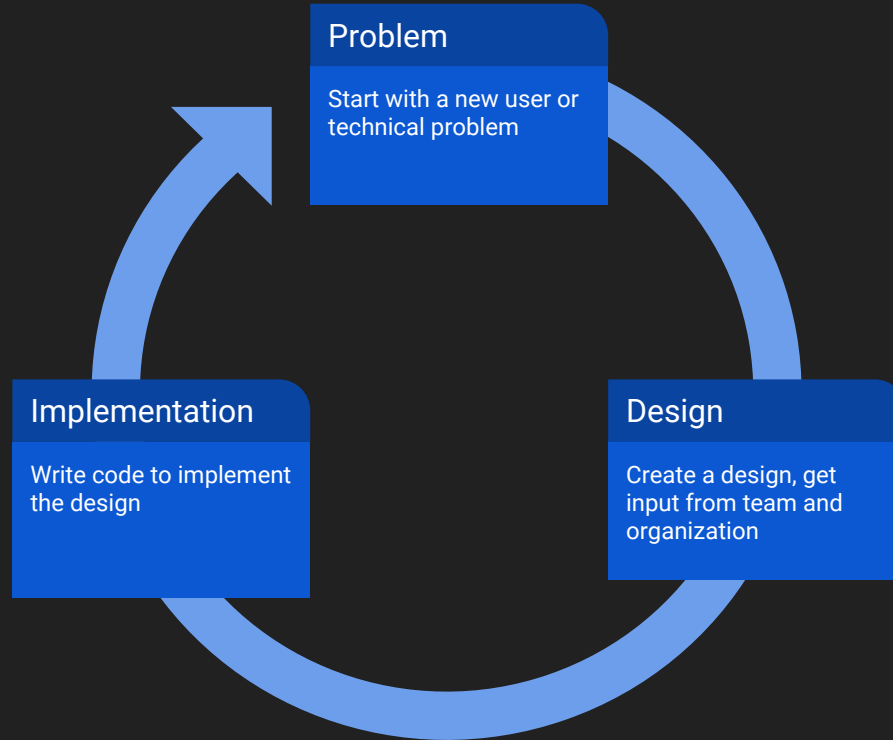
Legal Works - NYC

2017-Present

Software Engineer

Google for Education - NYC

DEVELOPMENT WORKFLOW



IMPLEMENTATION

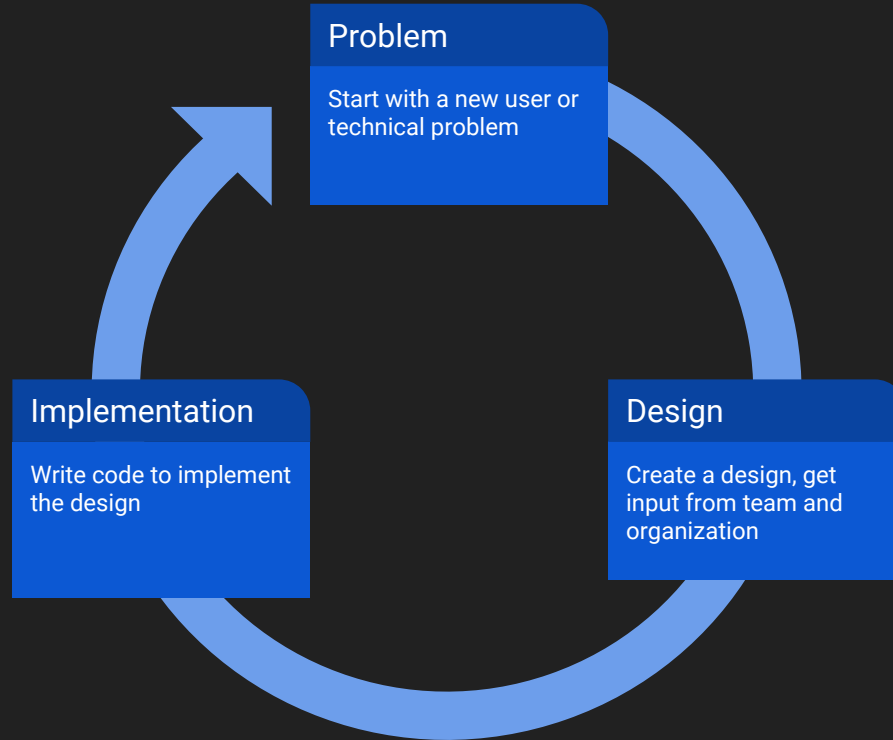
Code

- Consider your future self (or others) reading the code
- Tests are key to communicate what code is supposed to do
- Write code that describes **what**; comments should often be left to describe **why**

Code Review

- Be cautious of suggestions that are just different approaches, but may not be strictly better
- Frame feedback as a question or consideration rather than a command

DEVELOPMENT WORKFLOW



SYSTEM DESIGN

Engineers

Product Managers

Project Managers

Engineering Managers

Executive Leadership

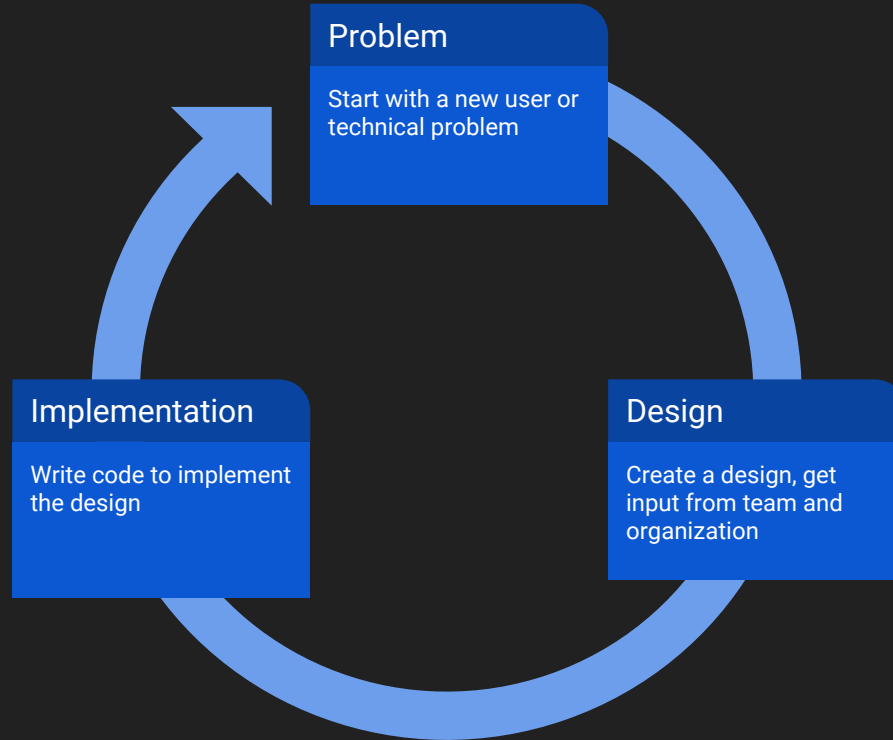
Product Counsel

Security Engineers

Users



DEVELOPMENT WORKFLOW



WHEN A USER TAKES A PHOTO,
THE APP SHOULD CHECK WHETHER
THEY'RE IN A NATIONAL PARK...


SURE, EASY GIS LOOKUP.
GIMME A FEW HOURS.

... AND CHECK WHETHER
THE PHOTO IS OF A BIRD.

I'LL NEED A RESEARCH
TEAM AND FIVE YEARS.



IN CS, IT CAN BE HARD TO EXPLAIN
THE DIFFERENCE BETWEEN THE EASY
AND THE VIRTUALLY IMPOSSIBLE.



“Ever since the Cognitive Revolution, Sapiens have thus been living in a dual reality. On the one hand, the objective reality of rivers, trees and lions; and on the other hand, the imagined reality of gods, nations and corporations. ”

- Yuval Noah Harari, Sapiens: A Brief History of Humankind