

Abstract geometric lines in the top-left corner of the slide, consisting of several thin black lines forming overlapping, irregular polygons and triangles.

INTRODUCTION TO CI/CD

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Udacity Cloud DevOps Engineer Nanodegree Program
Project: Give Your Application Auto-Deploy Superpowers

BEFORE WE BEGIN

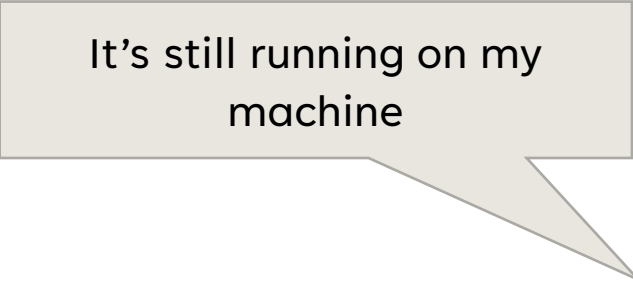
The clients' needs

Rapid releases with **high quality**.

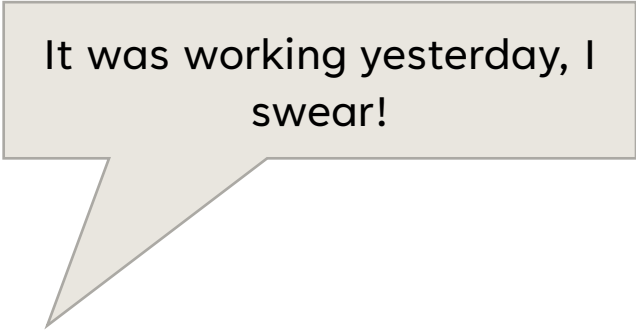
-> We have to **develop** & **deploy** product **as fast as possible**.

Problems during development

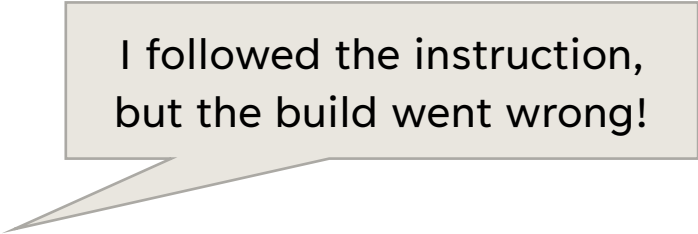
Have you ever heard something like:



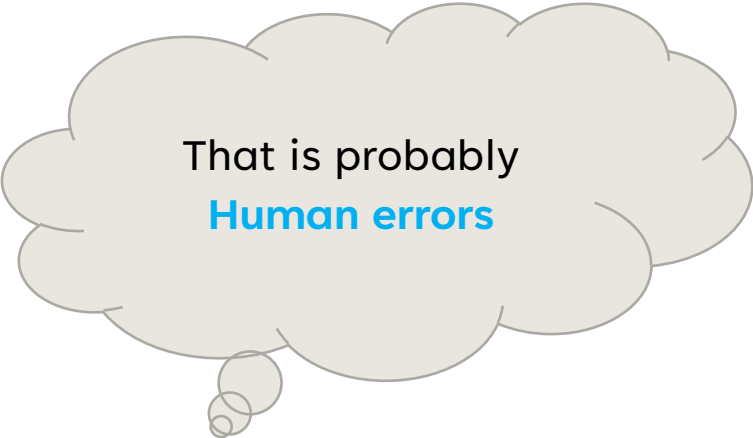
It's still running on my machine



It was working yesterday, I swear!

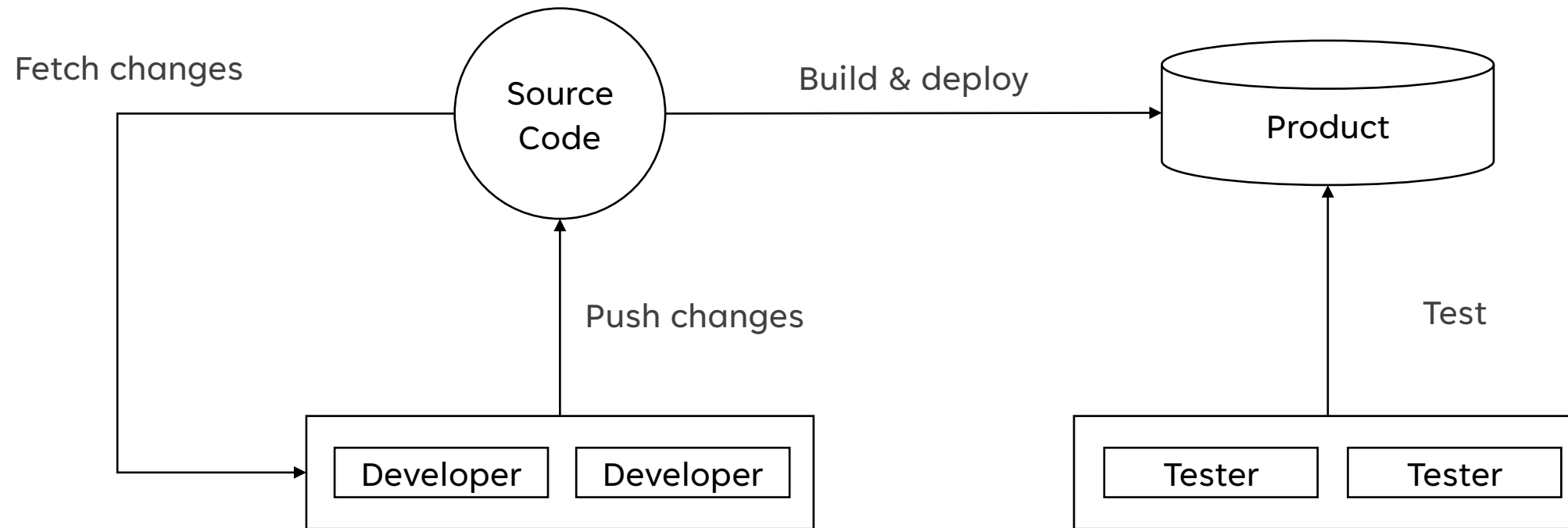


I followed the instruction, but the build went wrong!



That is probably
Human errors

Where we make mistakes



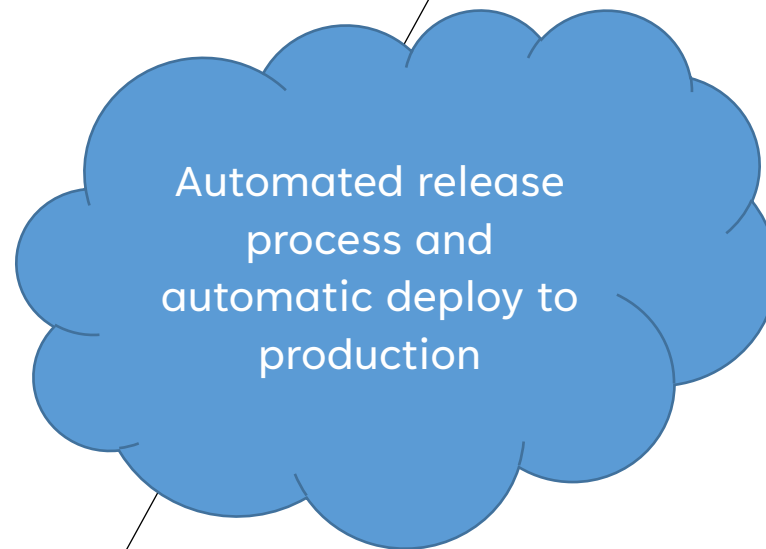
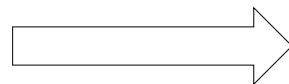
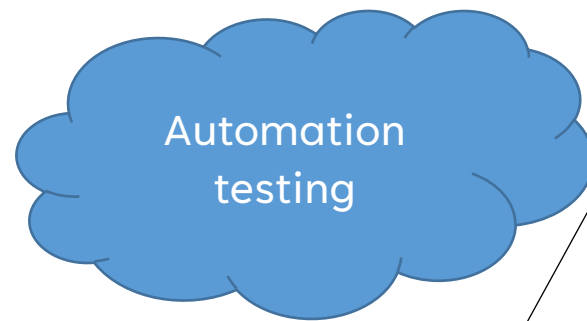
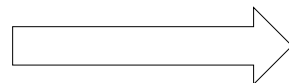
All steps are done manually & test is performed too late.

WHAT IS CI/CD

CI: Continuous integration

Purpose: Application do not break after new merging

CD: Continuous delivery and continuous deployment



COST & GAIN

Gain

- Detect bug early (less bug)
- Reduce testing cost
- Reduce human errors
- Release more often & less risky

Cost

- Write automated test
- Setup CI/CD system
- Commit/push changes frequently
- A strong CI
- Testing is the culture