

# Software Engineering Project

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# Thomas Luvö

- VP at Synective Labs AB
- 10 years experience from the telecommunication industry and software development
- 2 years of agile transformation in practice
- Approximately 5 years with software configuration management and version control systems strategies

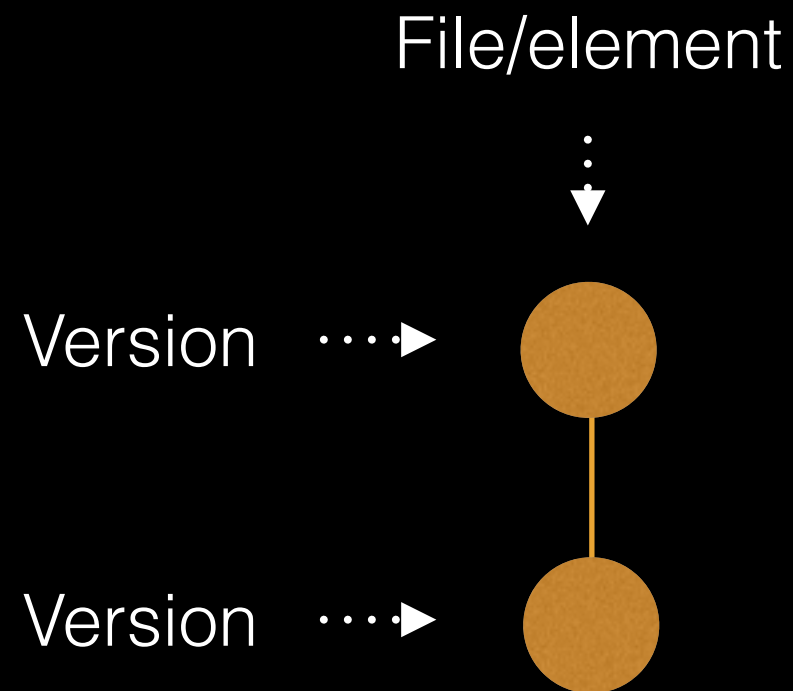
# What is version control?

- Version control is about managing changes in files or elements
- Logical way to organize and control versions and releases
- Version control system is an application/system to manage the version control
  - Git, SVN, ClearCase
  - Google Drive, Dropbox, Wiki

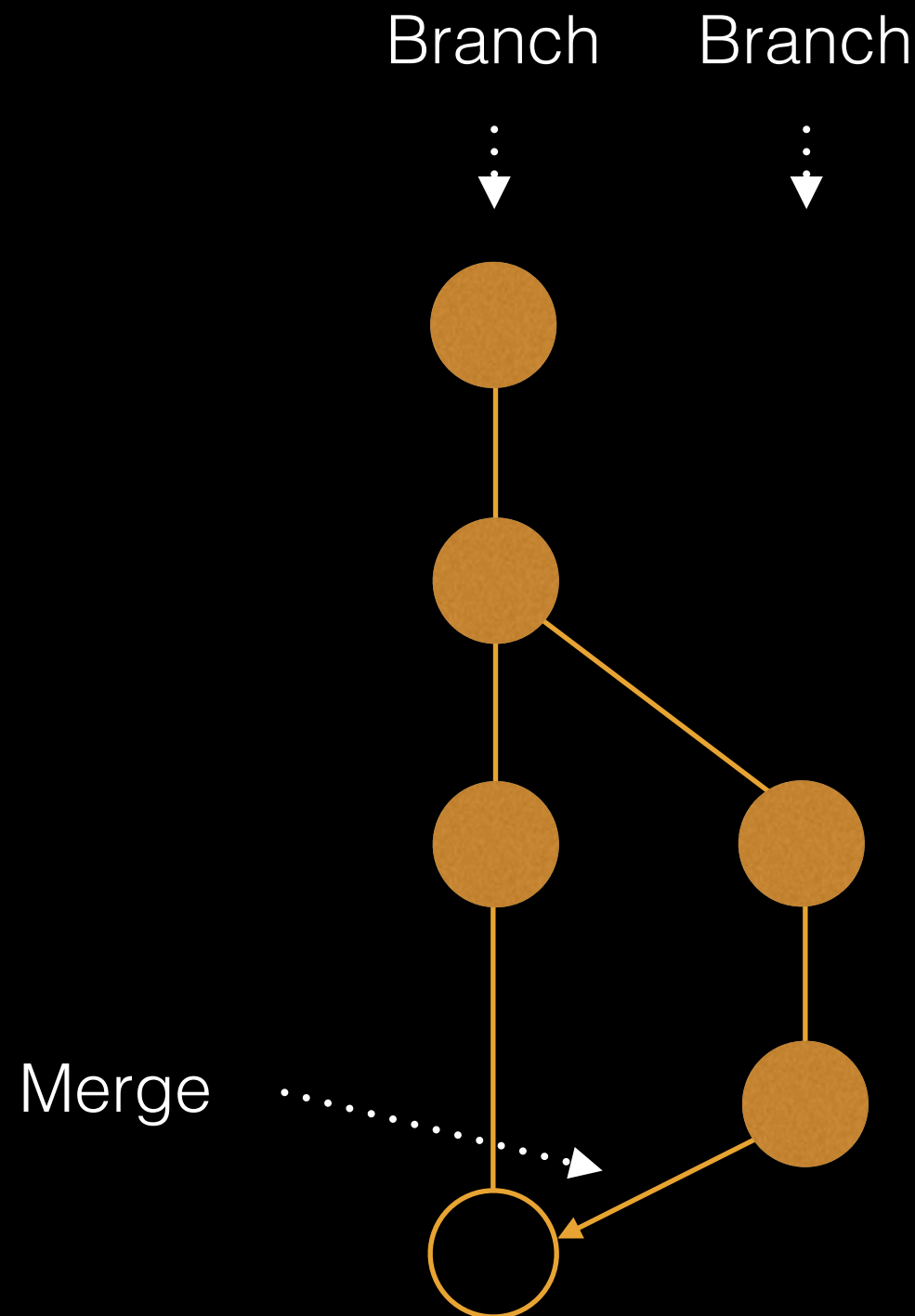
# Why use version control?

- Code must be shared and “protected” continuously within the project
- Several developers must be able to work on the same code in parallel
- Software exist in several versions and each must be possible to be retrieved and updated

# File/element and Version Version tree



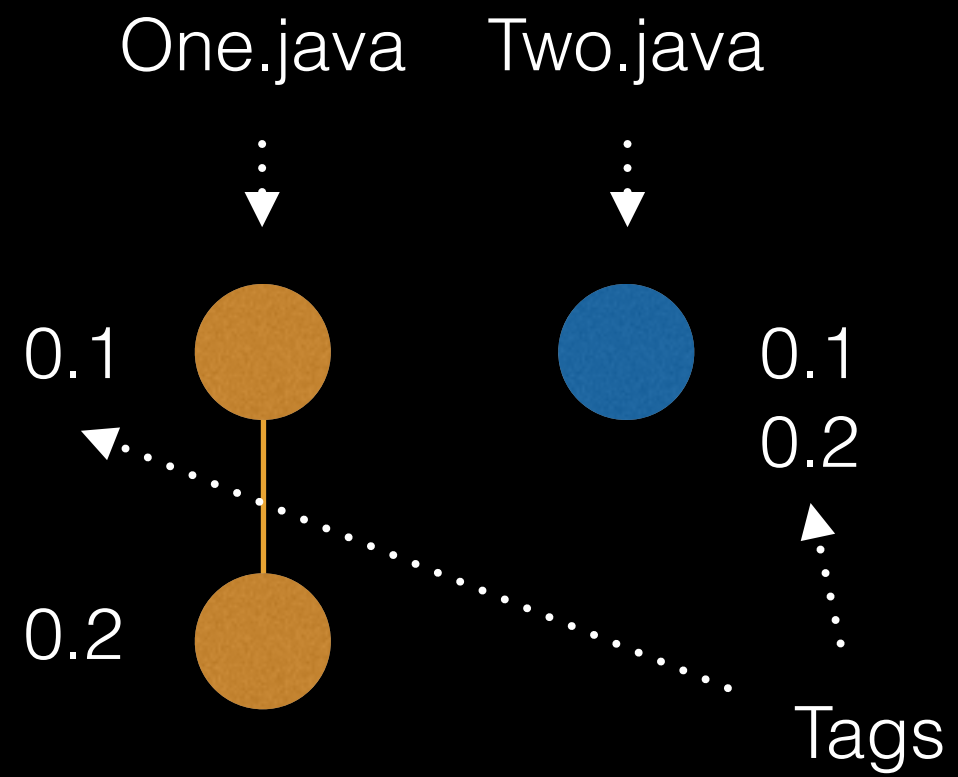
# Branch and Merge



# Why branching?

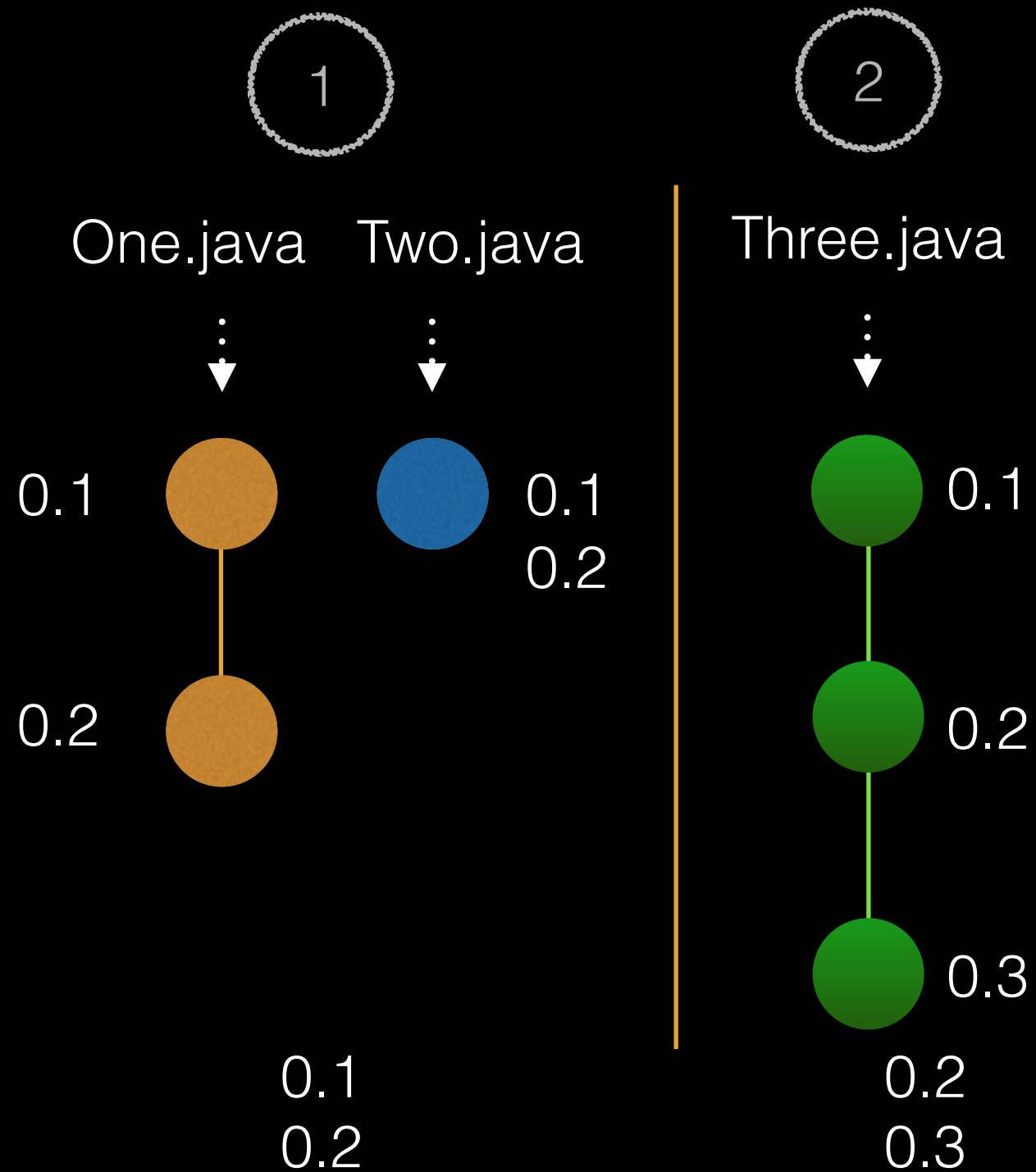
- Avoid interfering with stable software
- Create a stable environment for your development
- Allow for controlled release handling

# Tags





# Baseline

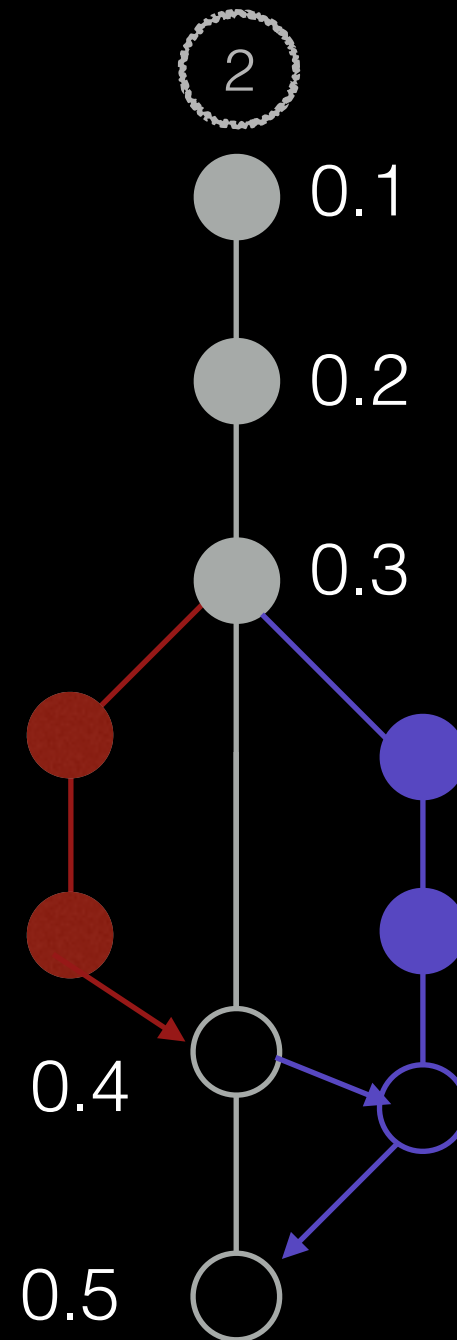
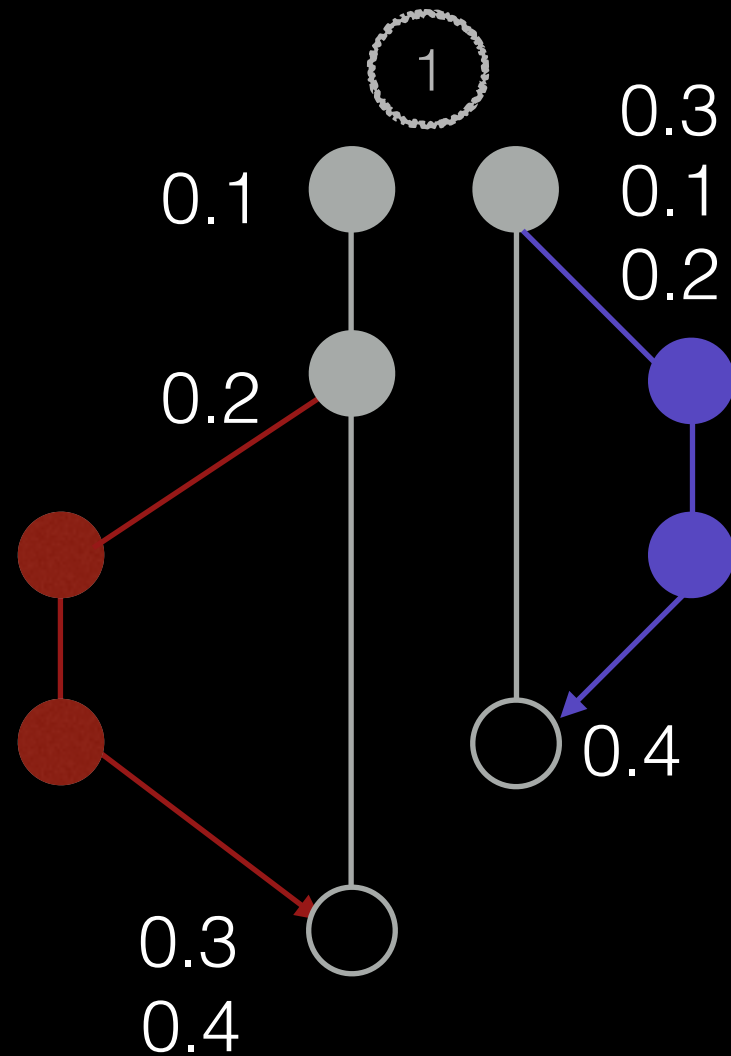
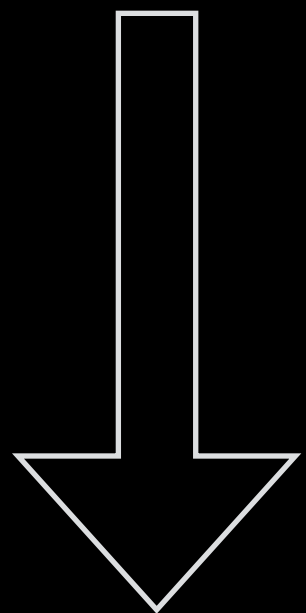


Baseline release 1:  
Baseline release 2:

# Multiple features in parallel

Baseline:

- Module 1: 0.2
- Module 2: 0.3

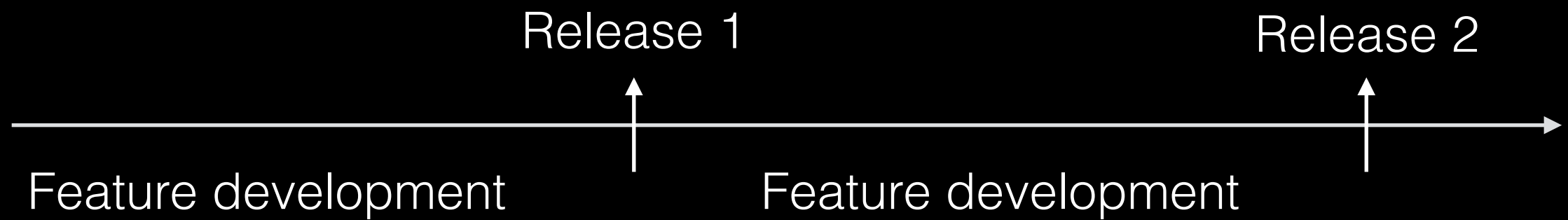


Baseline:

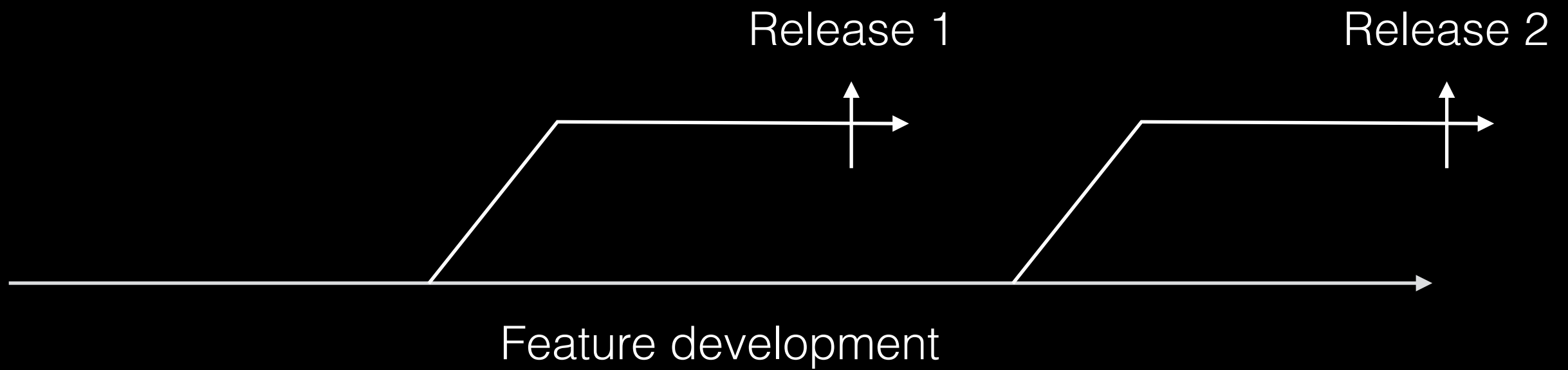
- Module 1: 0.4
- Module 2: 0.5

Branching model

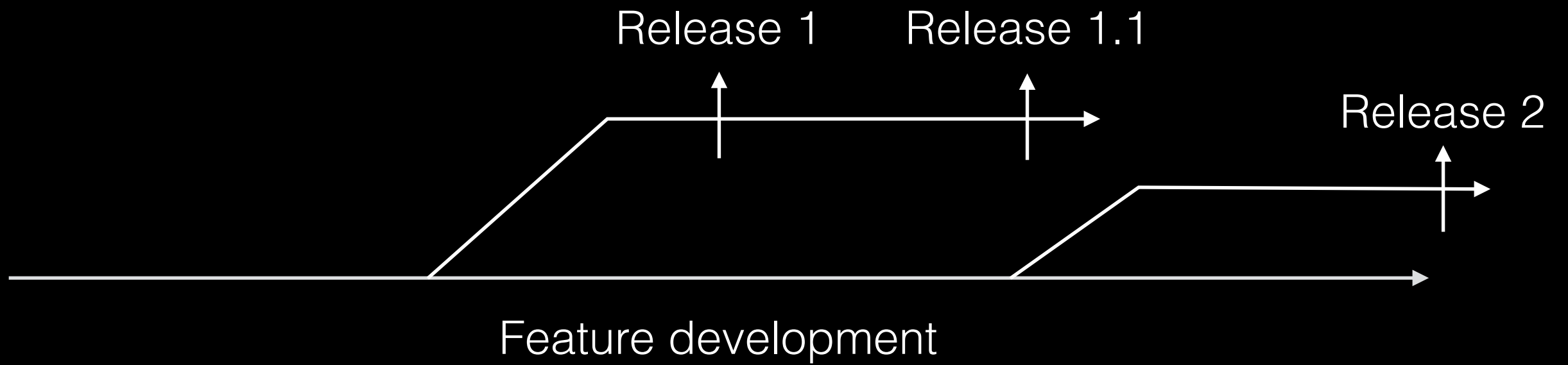
# Ideal world



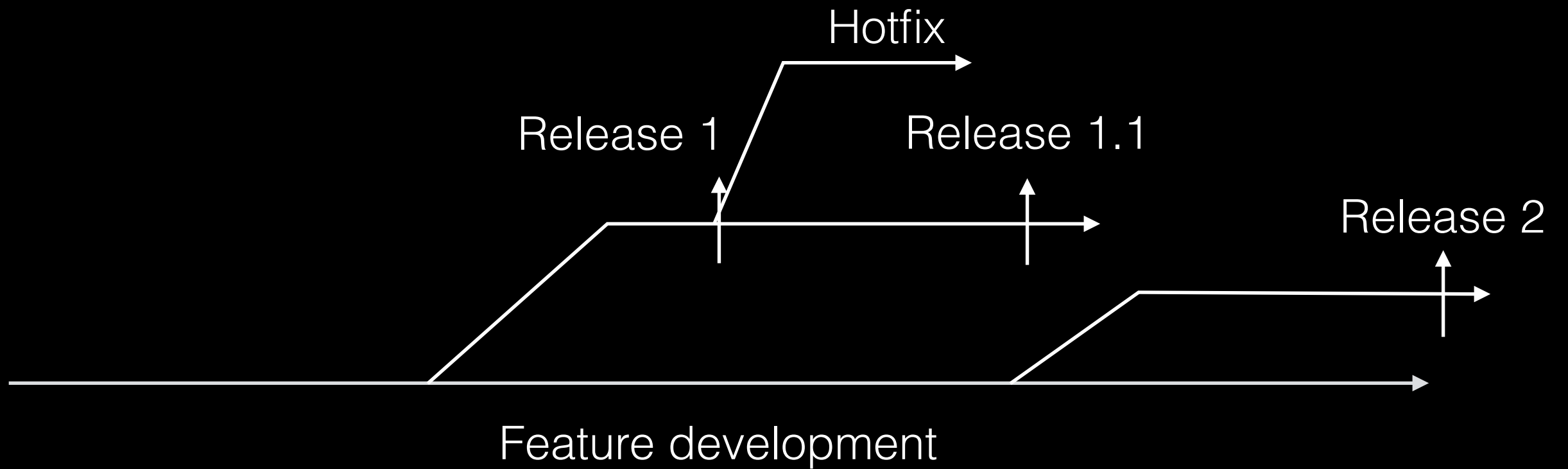
# Real world



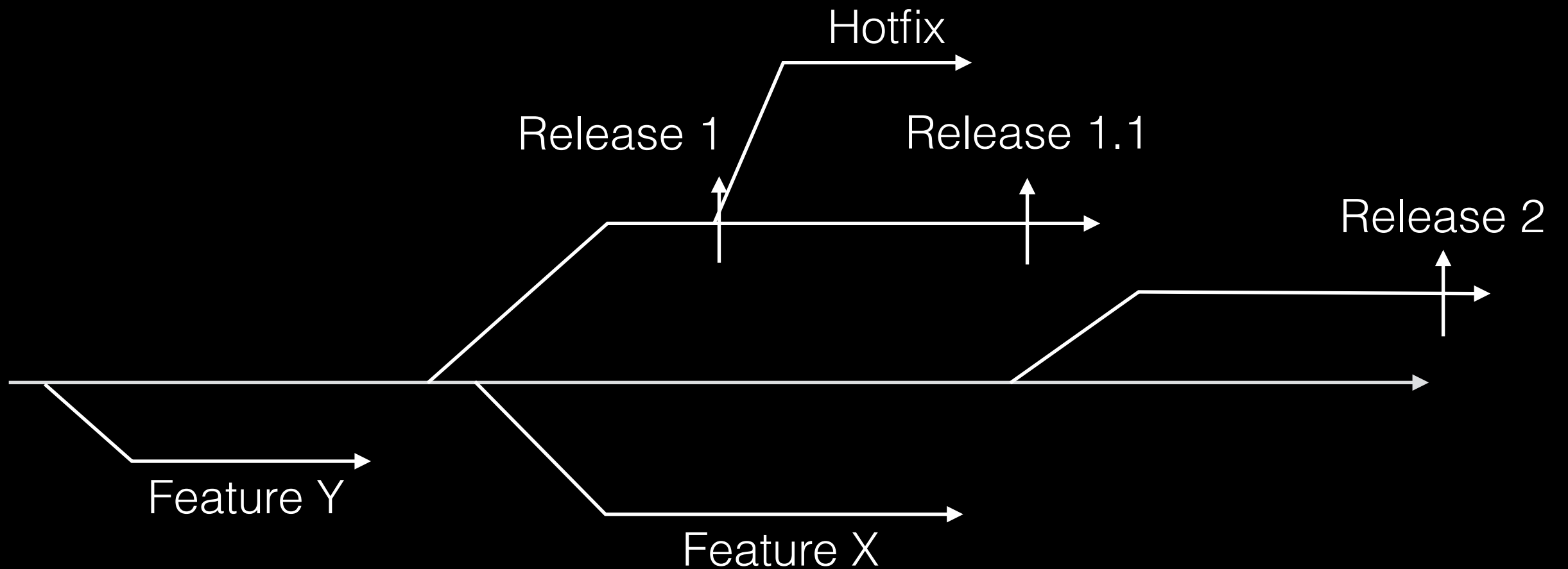
# Real world



# Real world

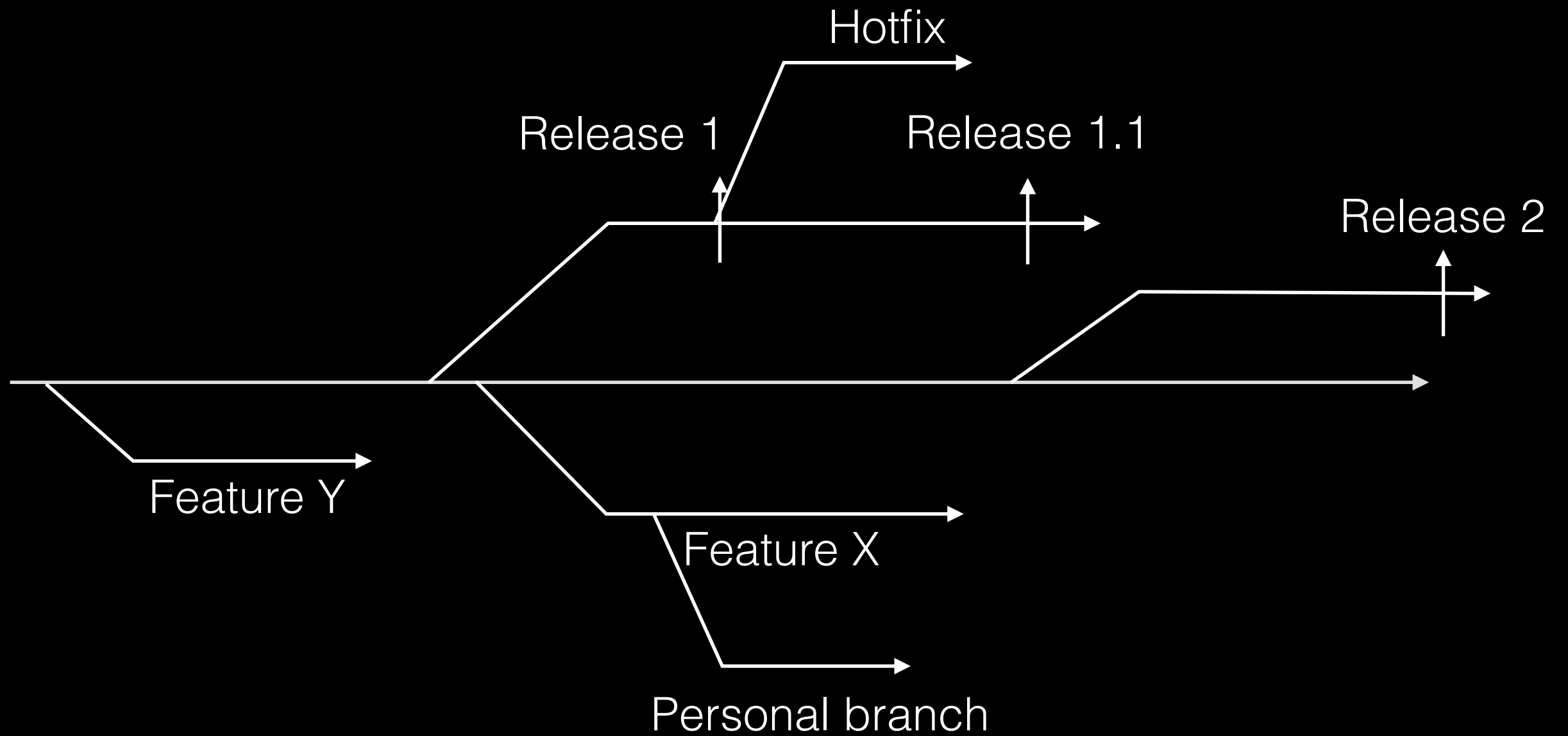


# Real world

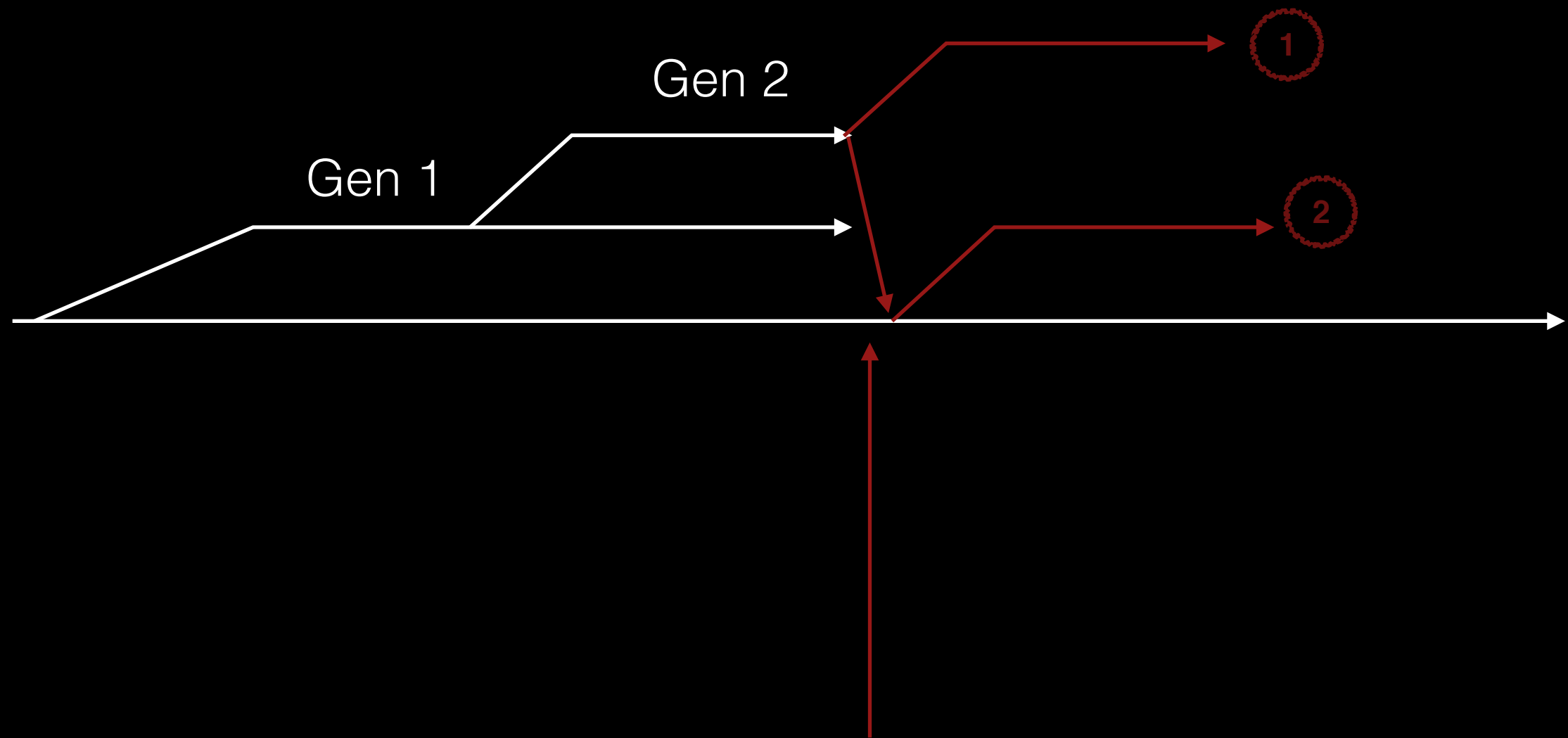




# Real world



# Branching decision



New platform with new interfaces and new requirements

# Integration scenario

