

# Feature Based Development

## Pitfalls and Possibilities

# Agenda

GENERAL GOALS

WHERE DO WE NEED THIS?

WHERE DO YOU NEED THIS?

HOW MIGHT WE ACHIEVE IT?

LAZY AND COMFORTABLE

SCIENCE VS. ART

PITFALLS & POSSIBLE SOLUTIONS

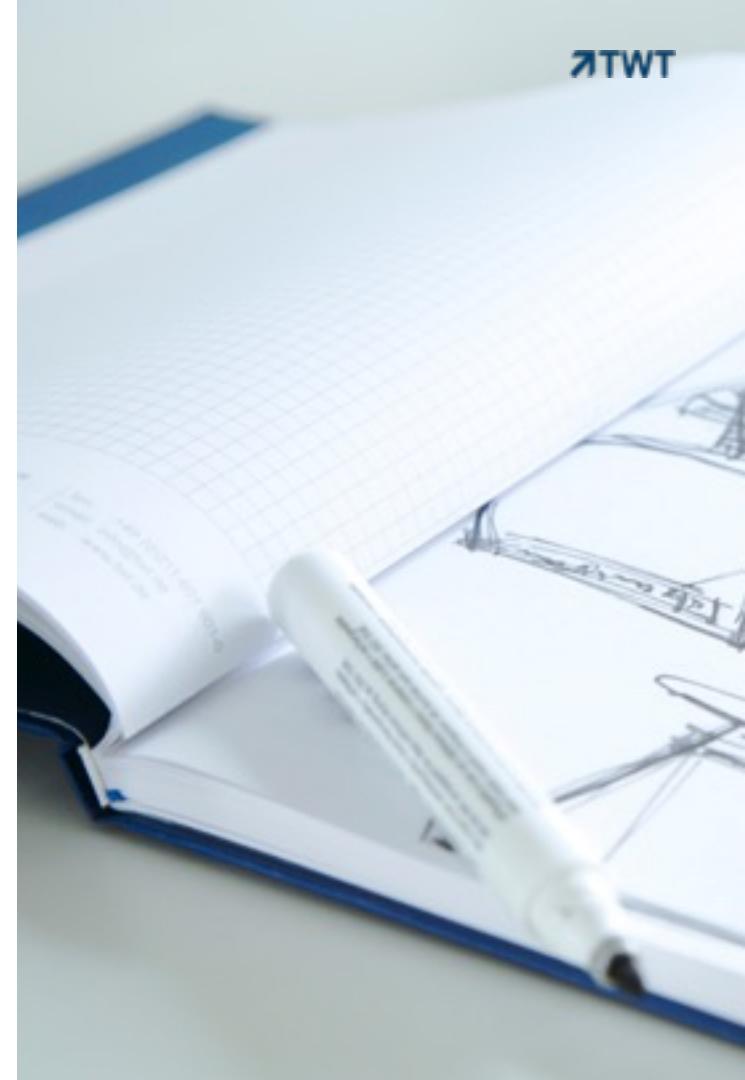
DISCUSSION



# General Goals

## General Goals

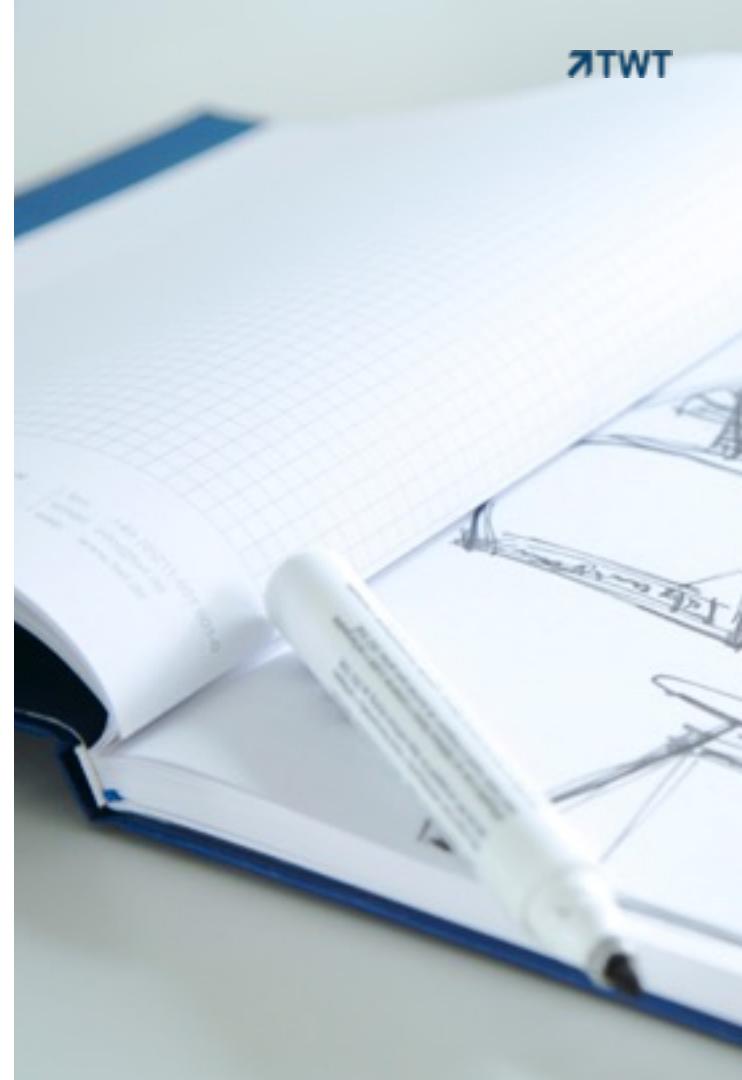
- Transparency
  - everyone on same page
- Quality
  - maintainable
  - bug-free
- Robustness
  - no breakage



# Where do we need this?

Where do we as an agency need this?

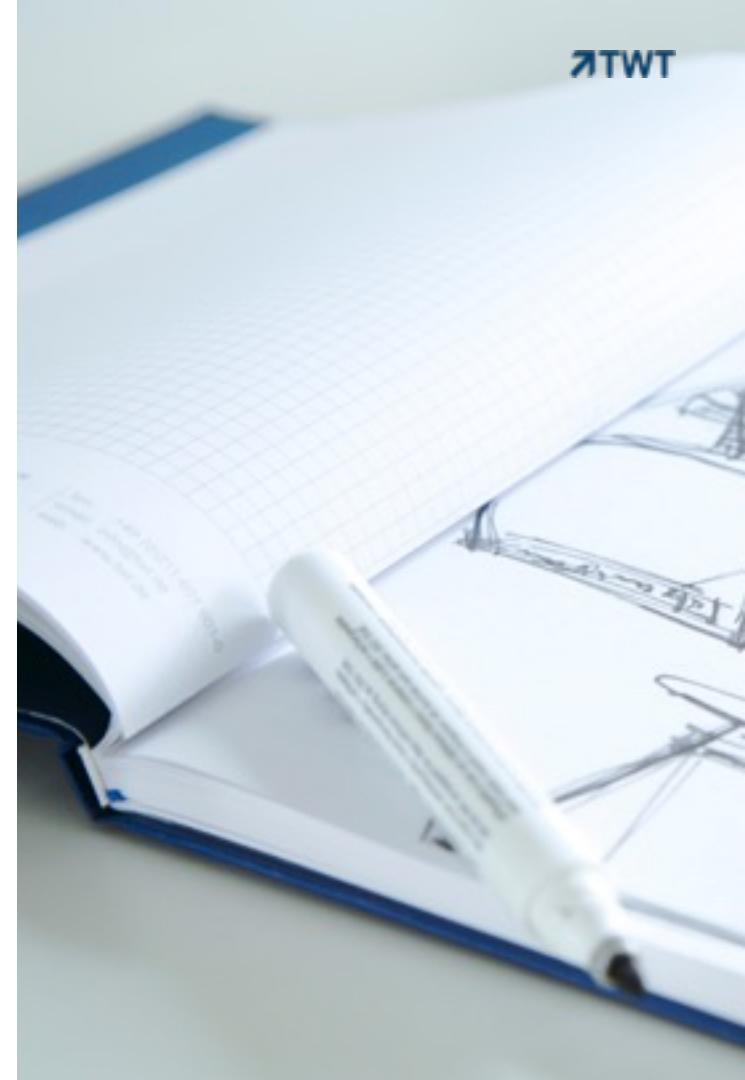
- Customer projects
  - CMS
  - e-Commerce
  - Web Application
  - Search
- Modules and Extensions
- Re-usable Components
  - Javascript, Java, PHP



# Where do you need this?

Where do you need this?

- Your own projects
- Open Source Contributions



# How might we achieve this?

How might we achieve this?

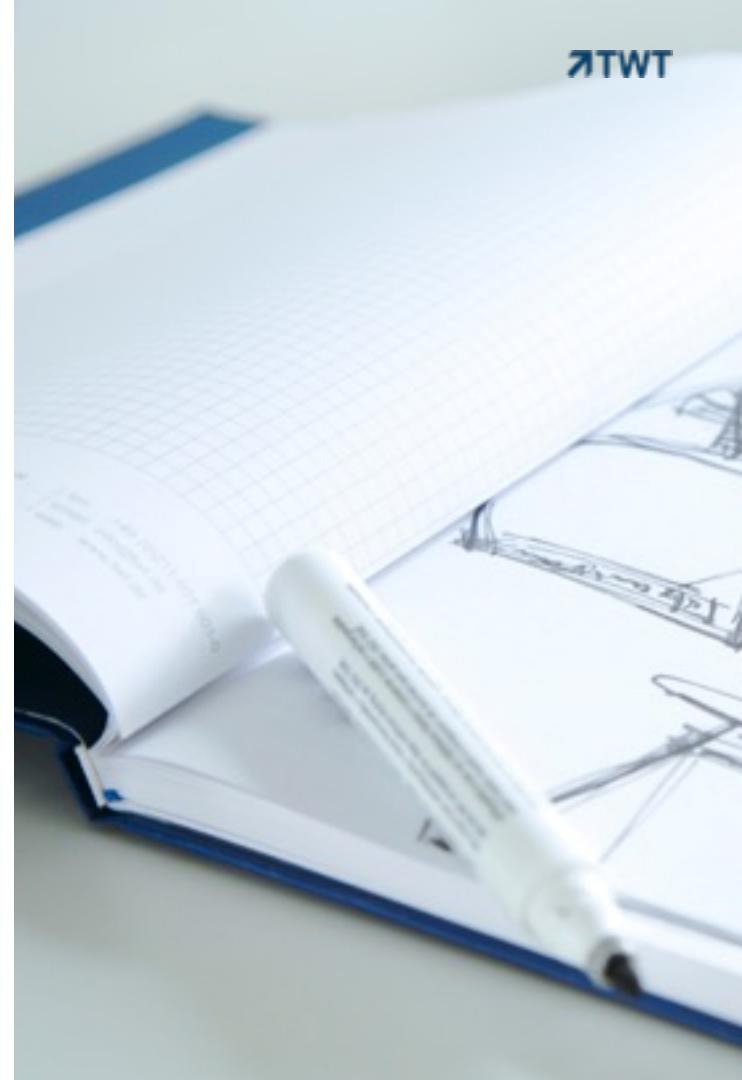
- Git Flow
- Naming Conventions
  - feature/
  - bugfix/
  - hotfix/
  - release/
  - support/
- Issue Id Integration
  - branch names
  - commit messages



How might we achieve this?

## ■ Git Flow+

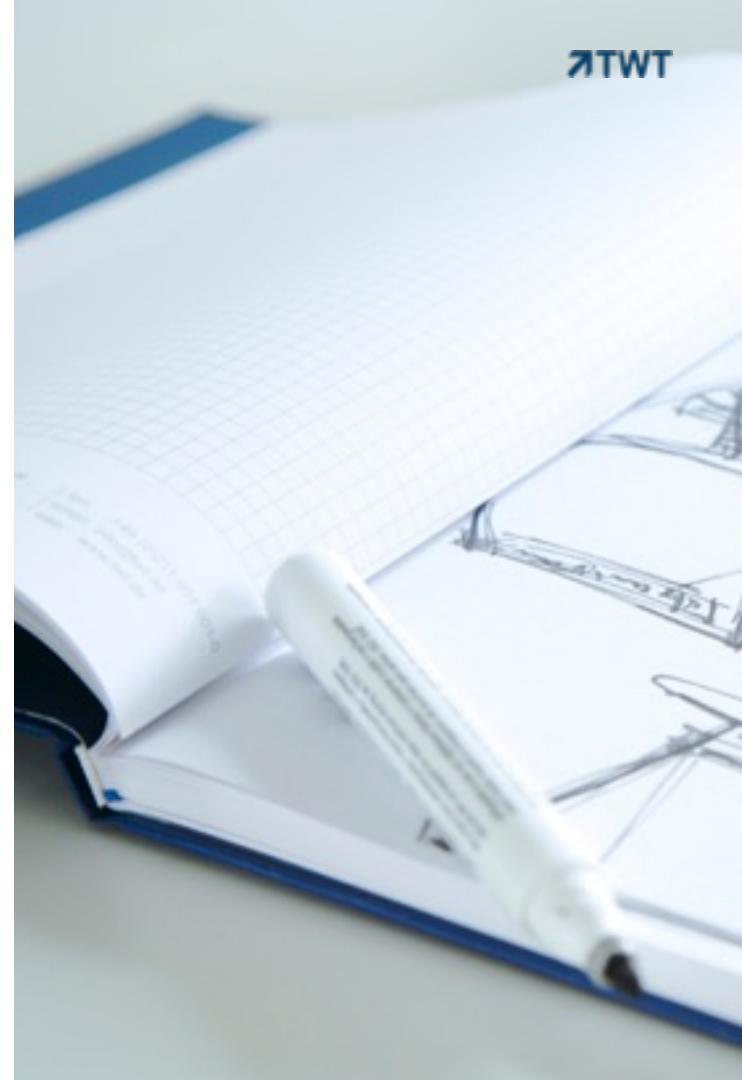
- push all branches
- useful for backup
- useful for holidays and sick leave
- „garbage collection“ necessary
- support/ branches for version support



# Lazy & Comfortable

Lazy and comfortable

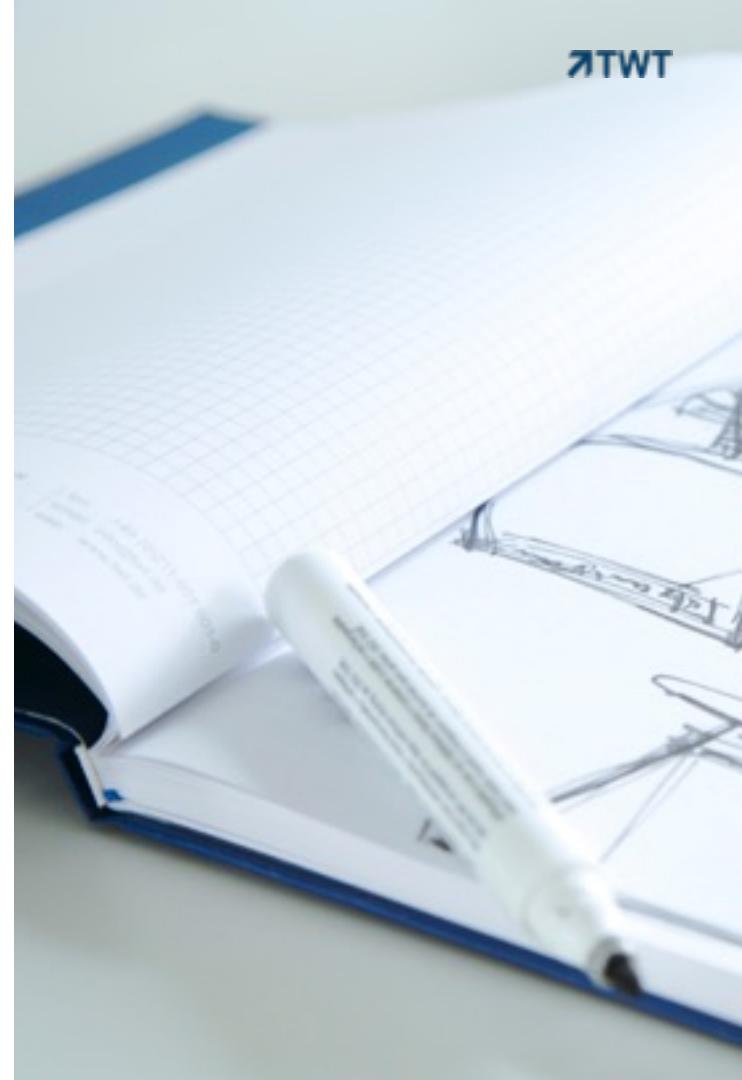
- JIRA Git Essentials
  - JIRA + Agile
  - Stash
  - Bamboo
- Expensive, but worth it
- Free for Open Source
- Cheap for small teams



Lazy and comfortable

## ■ Alternatives

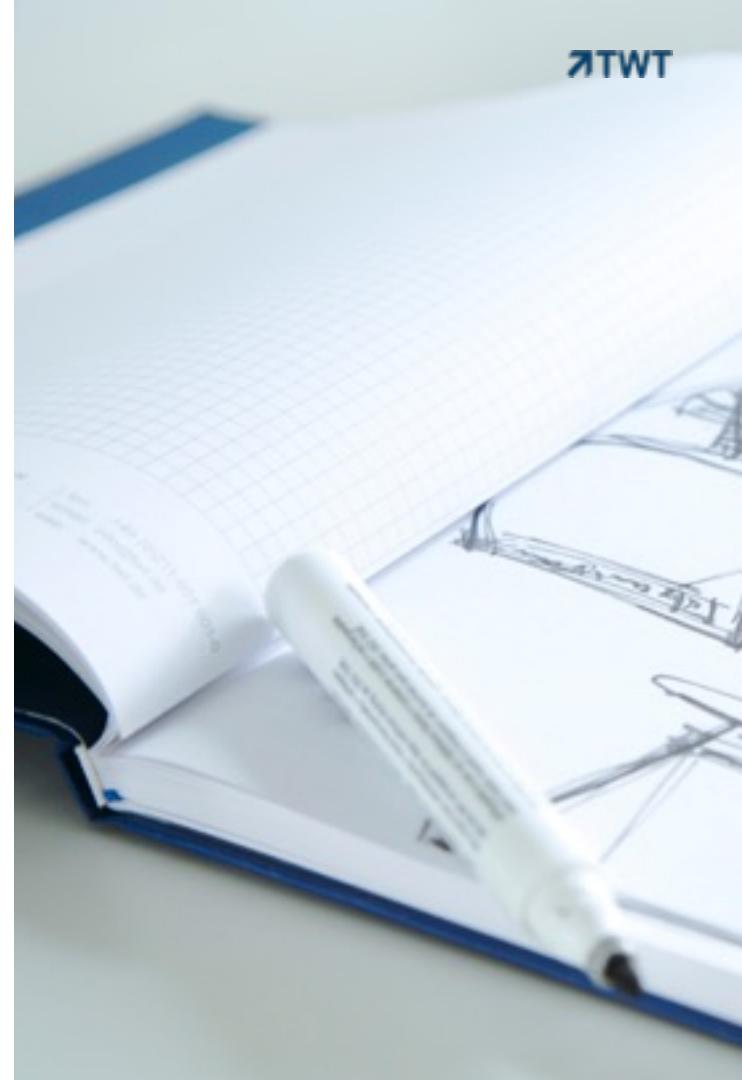
- Trello
- Mantis
- Redmine
- Gitlab
- Github
- Jenkins CI
- Travis CI



# Science vs. Art

## Science versus Art

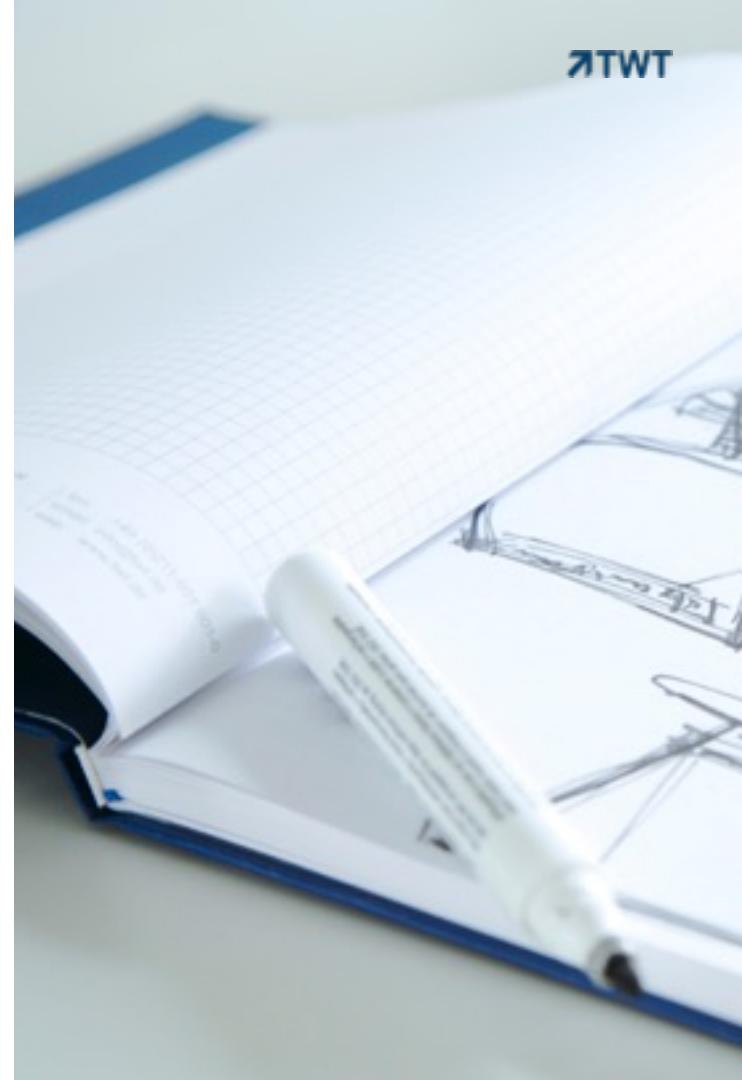
- Technical solutions and conventions only go so far...
- Features need to be well defined
  - What makes a good story for a feature?
  - How are features and issues interlinked?
  - What are the dependencies?



# Pitfalls & Possible Solutions

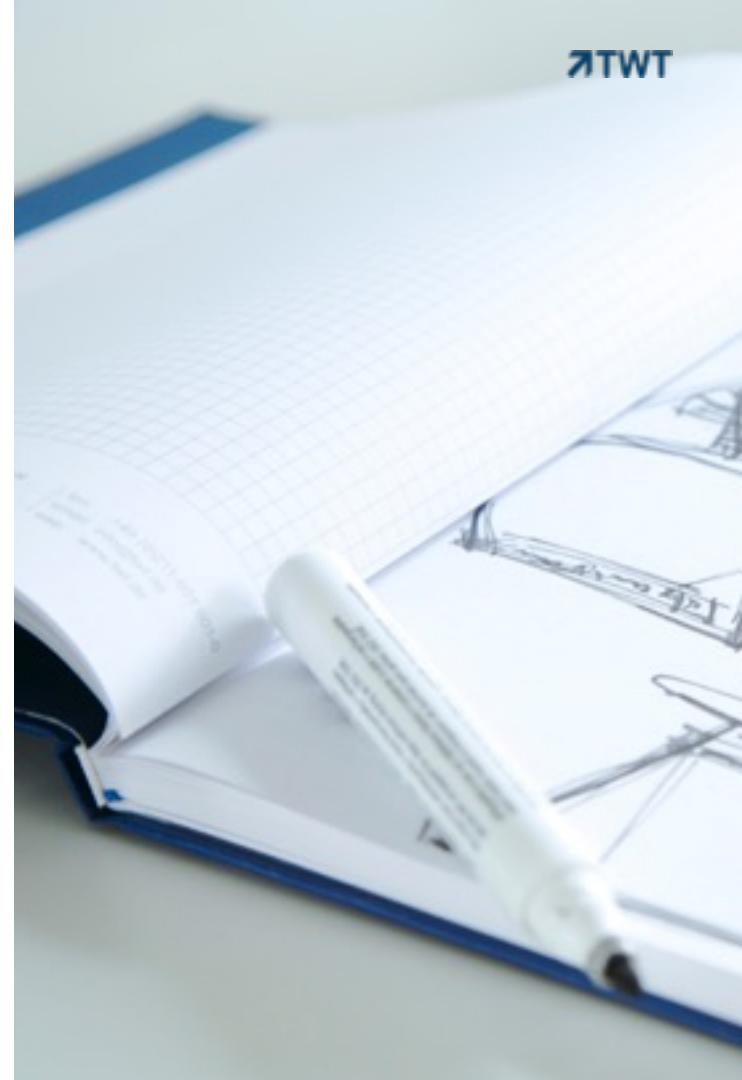
## Pitfalls & Possible Solutions

- Feature branches grow too old
  - dev and feature diverge too far
  - Story is too big
  - Focus is not clear
  - Too many dependencies



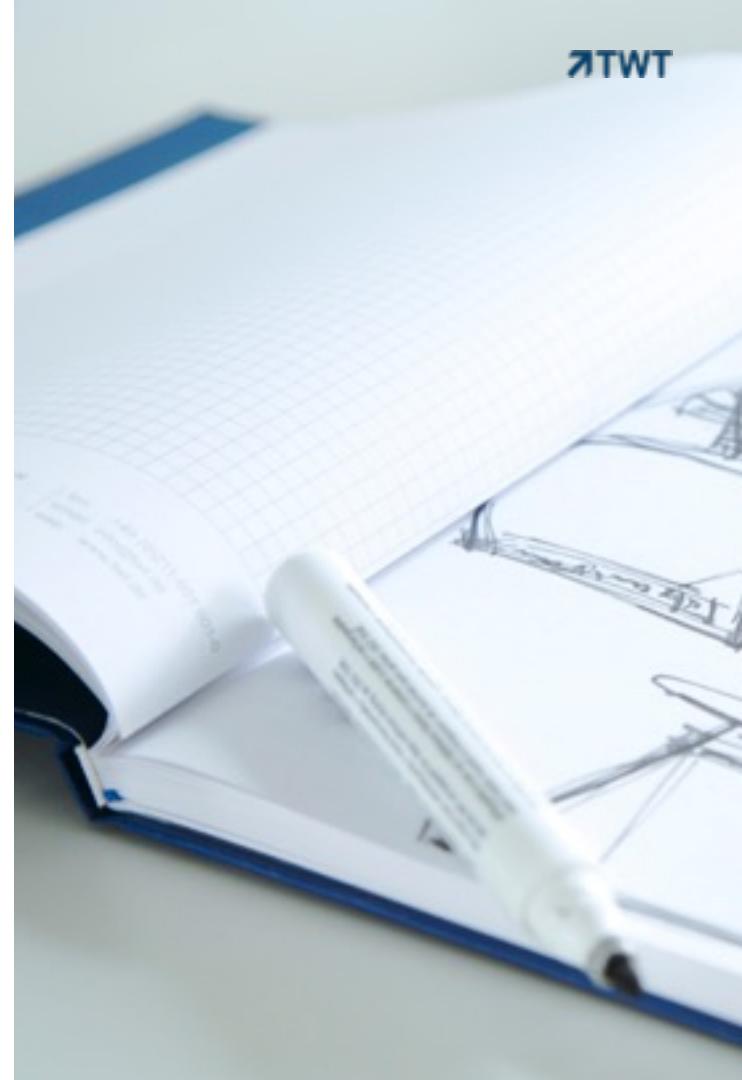
## Pitfalls & Possible Solutions

- Merge regularly
  - get current dev branch
  - merge dev into feature before integration
  - use virtual merges to see breakage



## Pitfalls & Possible Solutions

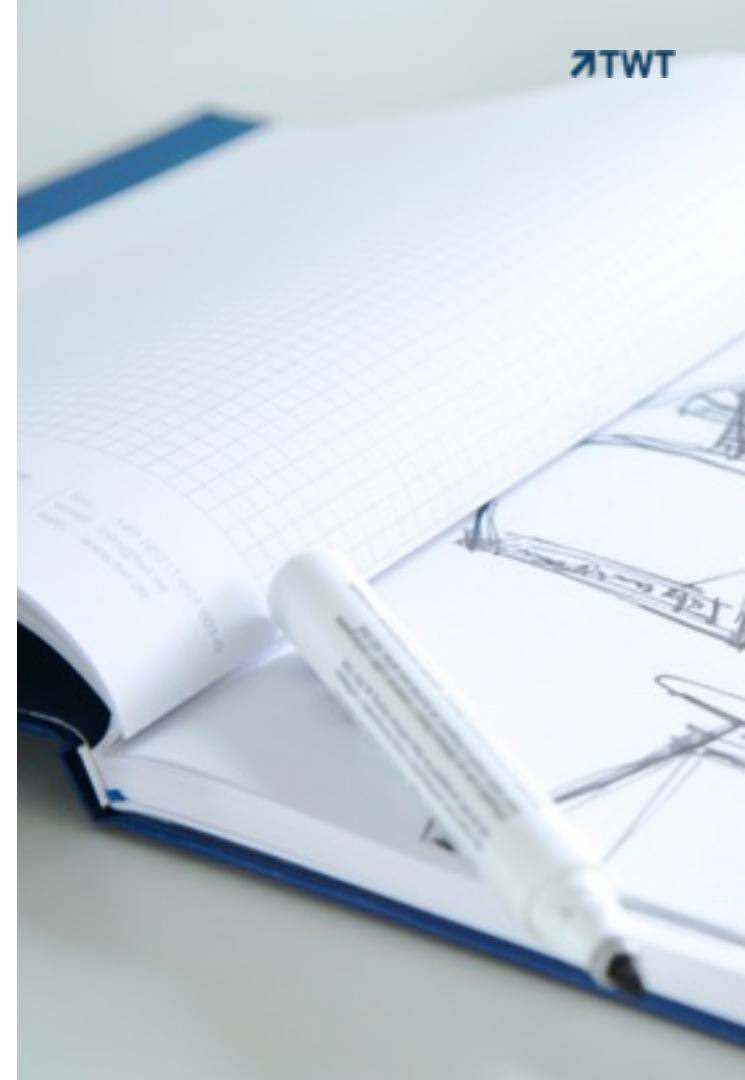
- Show various feature sets
- make last-minute changes to feature sets
- removes features from release branches



# Pitfalls & Possible Solutions

## ■ Feature toggles

- solve with configuration
- adds complexity
- configuration overload



# Discussion & Thanks

Kai Kroker

@nohypeactivist

twt.de