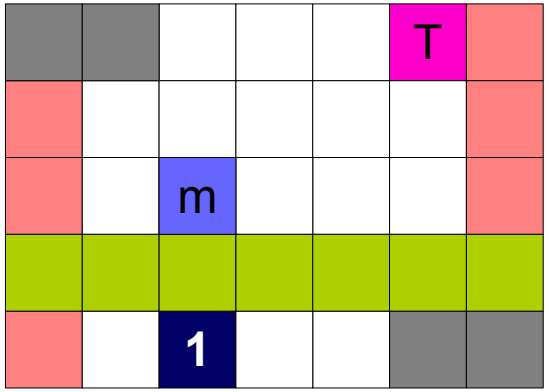
Project planning

01219245/01219246
Individual Software Process

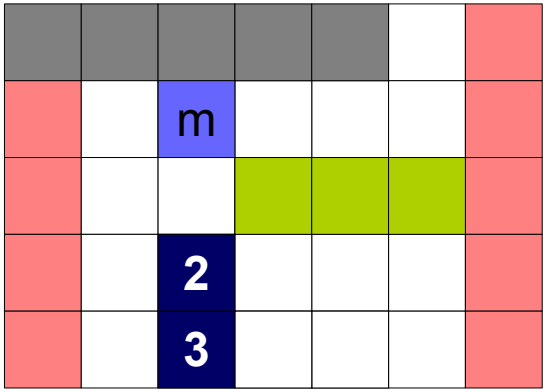
4 iterations

- 1st iteration: now – 29th March
  - Iteration review: 15th March
- 2nd iteration: 30th March – 19th April (3 weeks w/ Songkran)
  - Mid iteration review: 5nd April
  - Iteration review: 19th April
- 3rd iteration: 20th April – 26th April (1 week)
  - Mid iteration review: -
  - Iteration review: 26th April
- Final iteration: 26th April – 10th May
  - Mid iteration review: 3rd Mayl
  - Project review: 10th May (hopefully with a project fair)

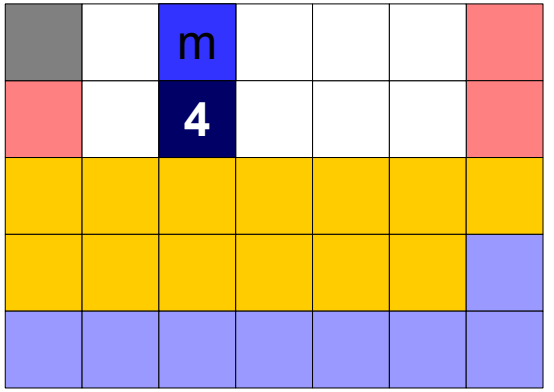
Calendar



March



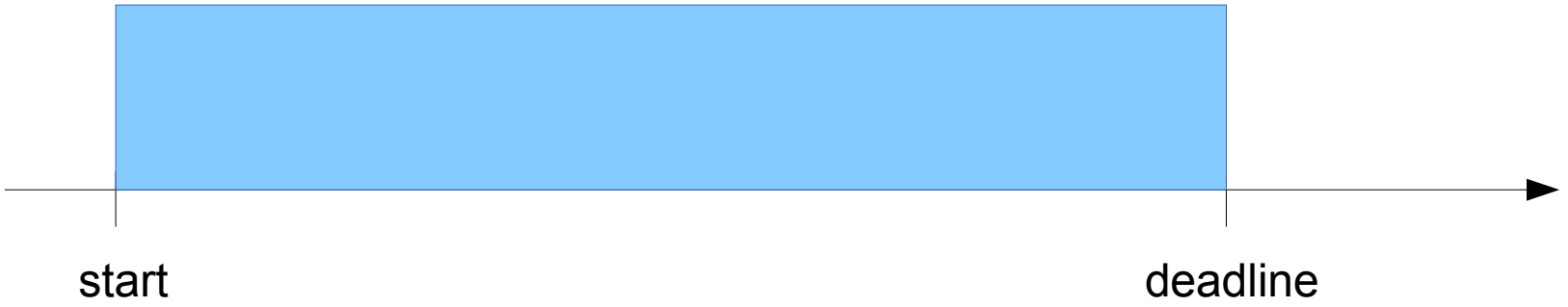
April



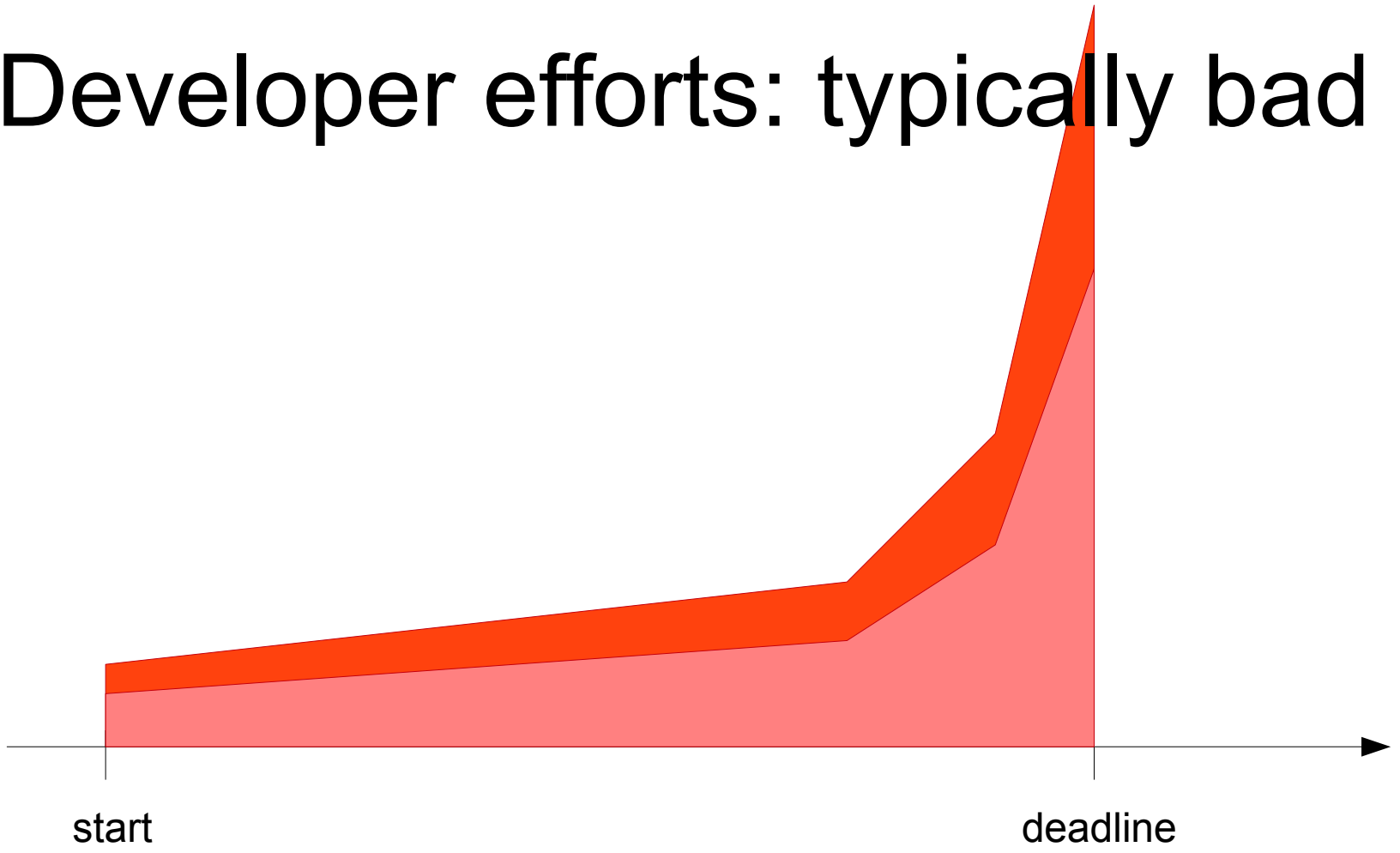
May

Planning

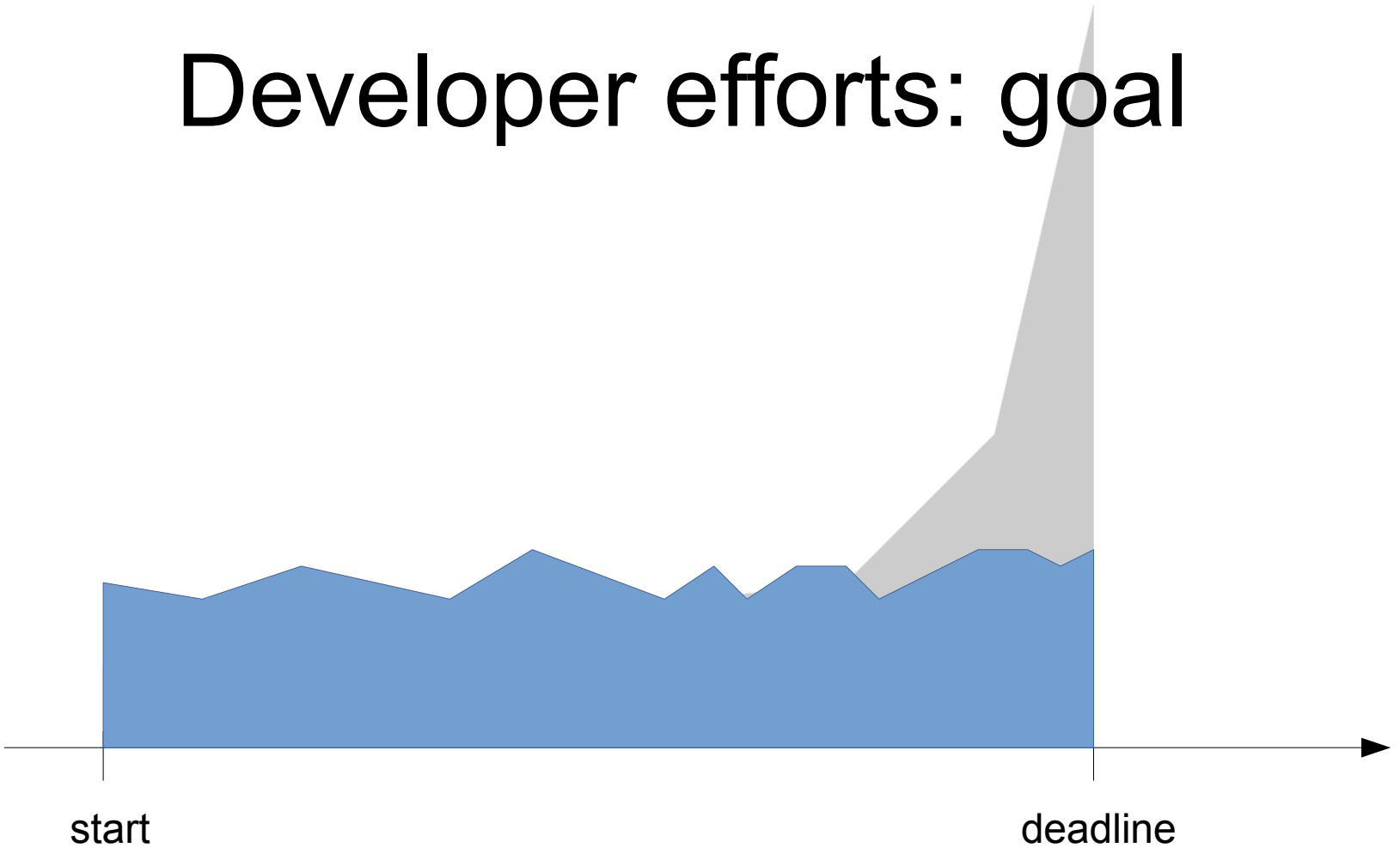
Developer efforts: ideal



Developer efforts: typically bad



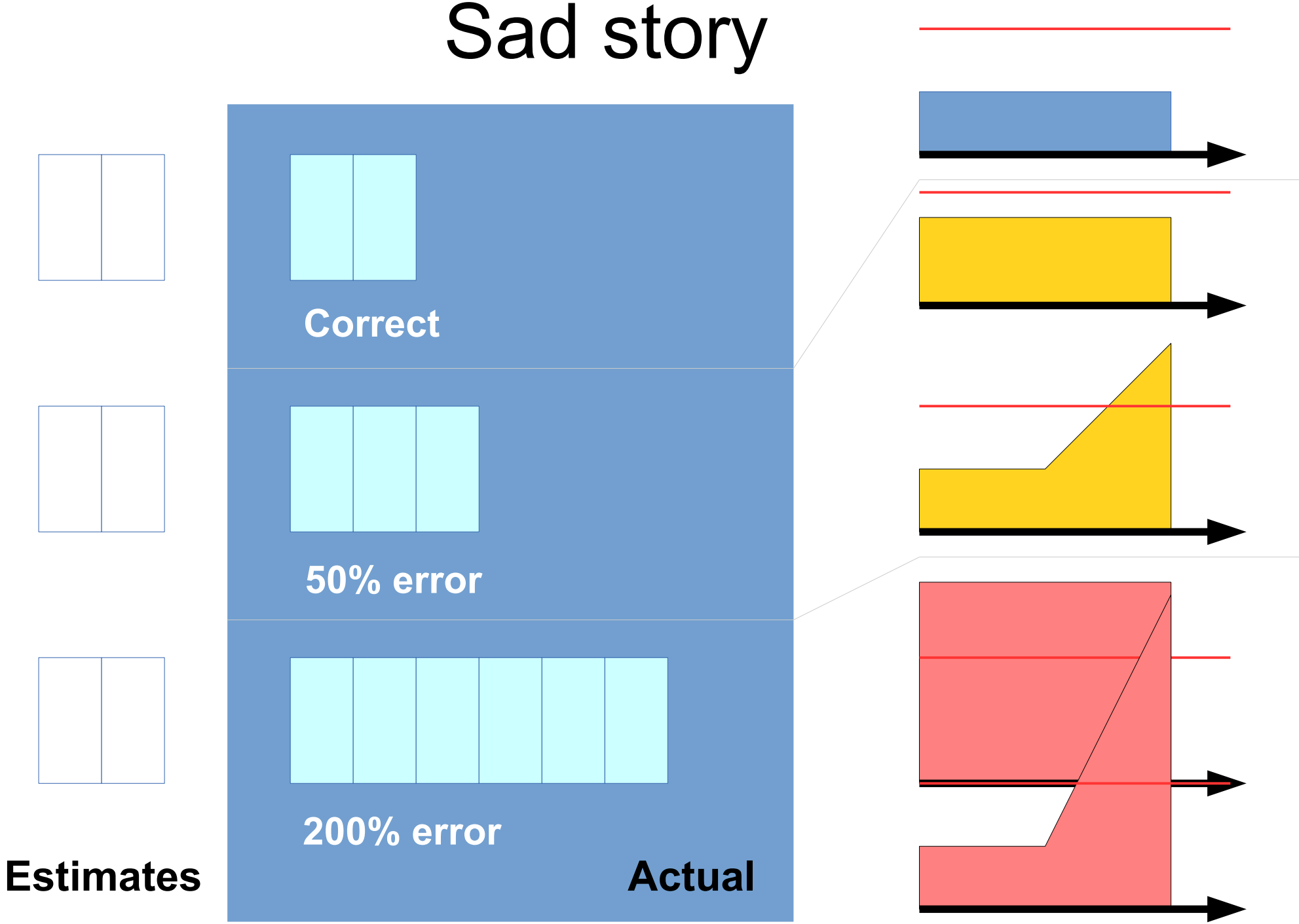
Developer efforts: goal



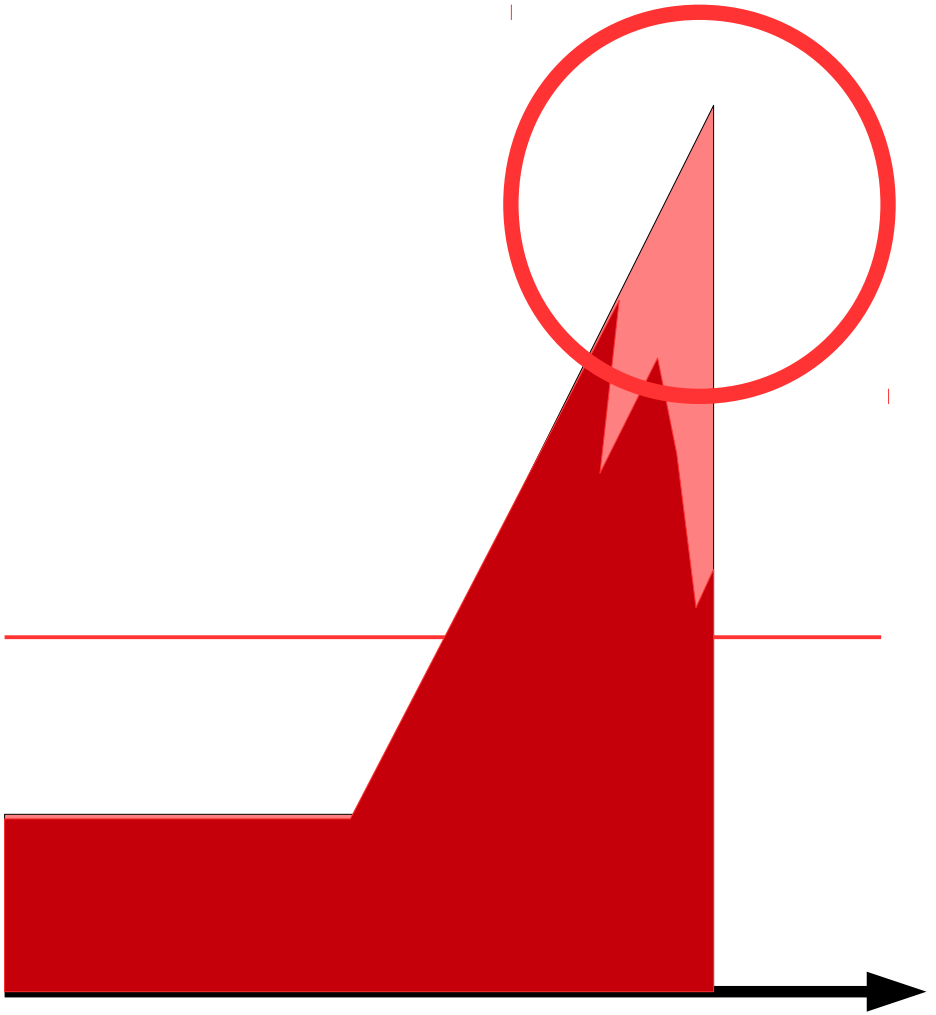
Why work so hard?

- Laziness? Not really.
- Usually, we underestimate the amount of work needed.

Sad story

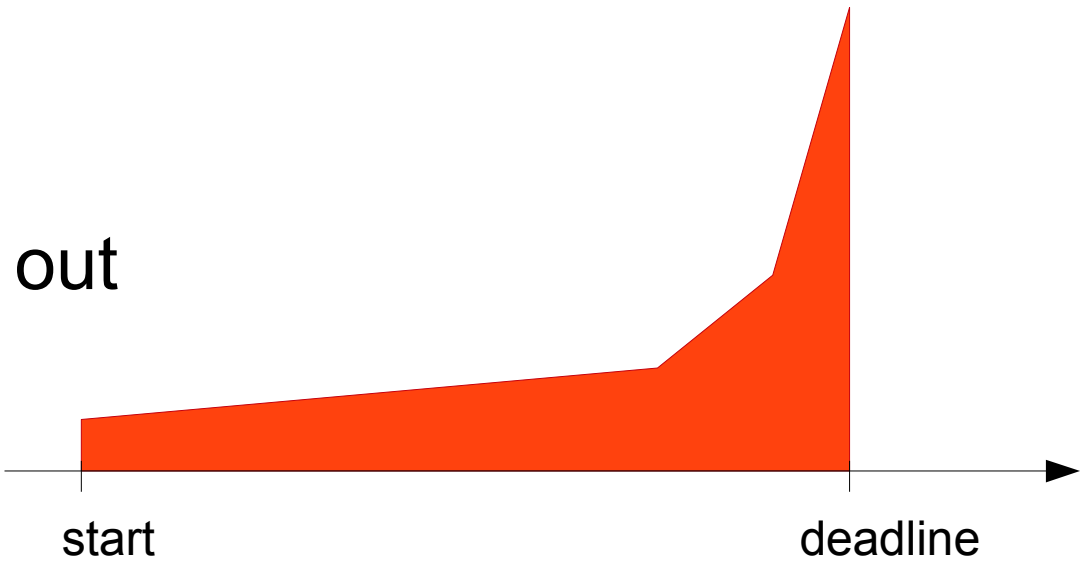


Can you do this?



Bad estimates

- We want to get all features done in a given time.
- However, we usually underestimate the effort needed.
- We end up with having all features but…
  - with bugs
  - with bad quality
  - and developers burn out



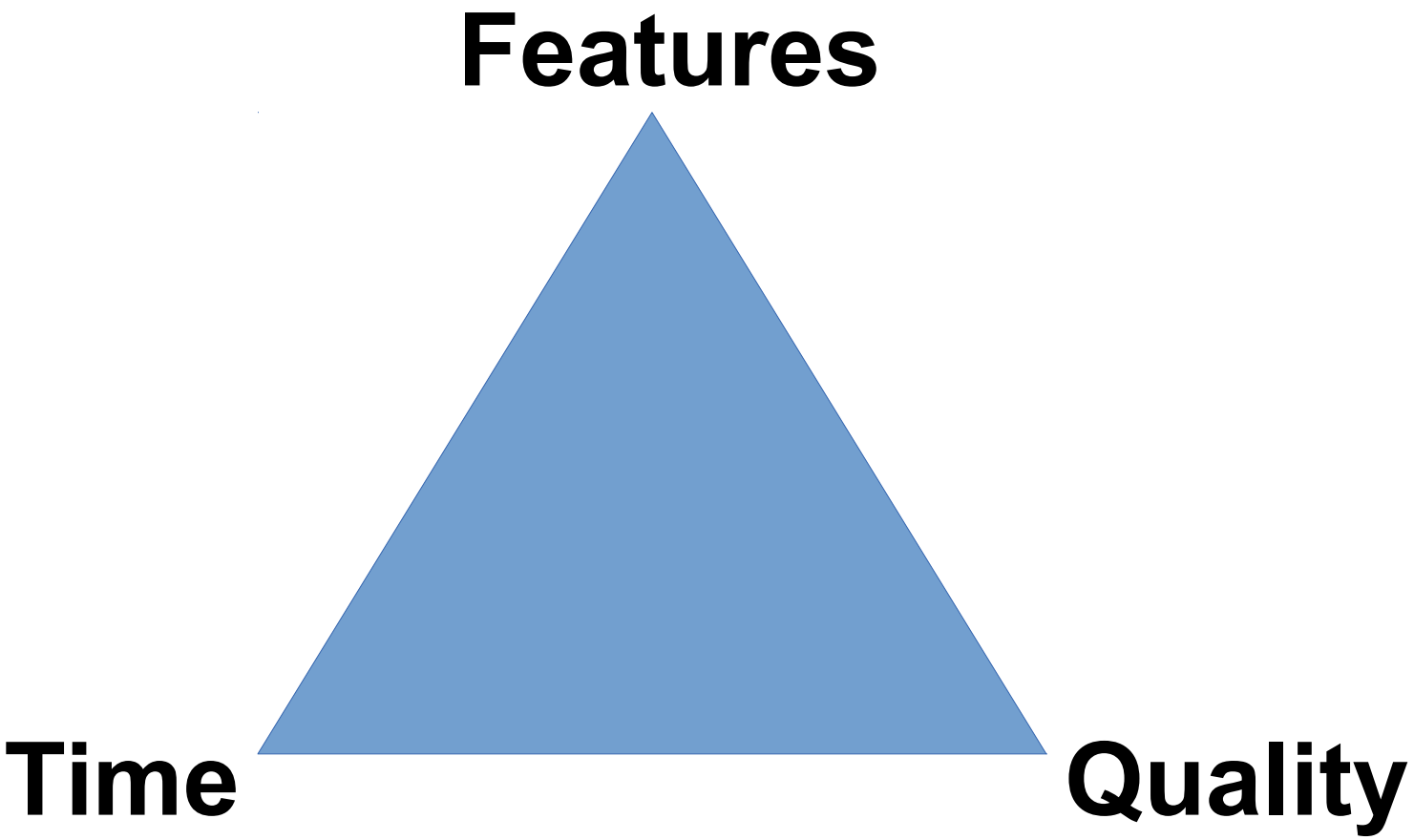
Good estimates

- If you have a good estimate, you can have a very realizable plan.
- But it is hard to have good estimates on the effort you need to get your software done.
- Very hard to obtain good estimates:
  - when you are doing something you have not done before,
  - when your customer's requirements are not clear,
  - when situations can change over time.

Dilemma?

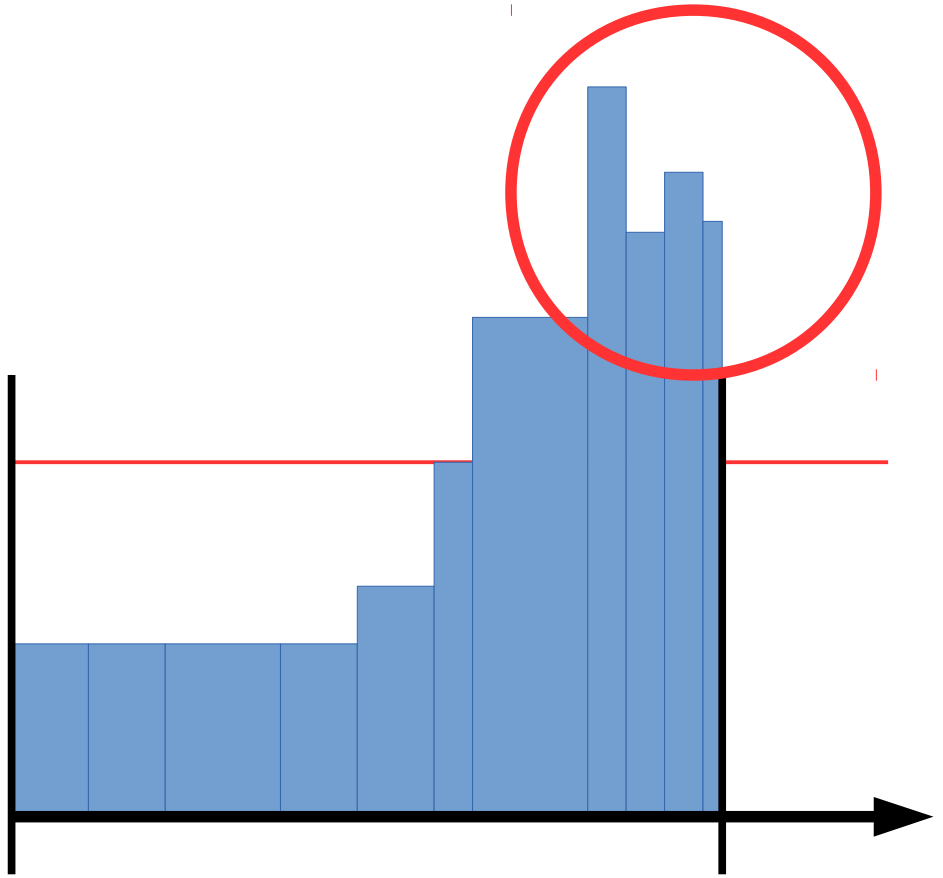
- 2 choices:
  - Find a way to obtain better estimates on the effort so that we can plan better.
  - Try to live without good estimates.
- Why can't we try both?

Trade-offs



Traditional trade-off

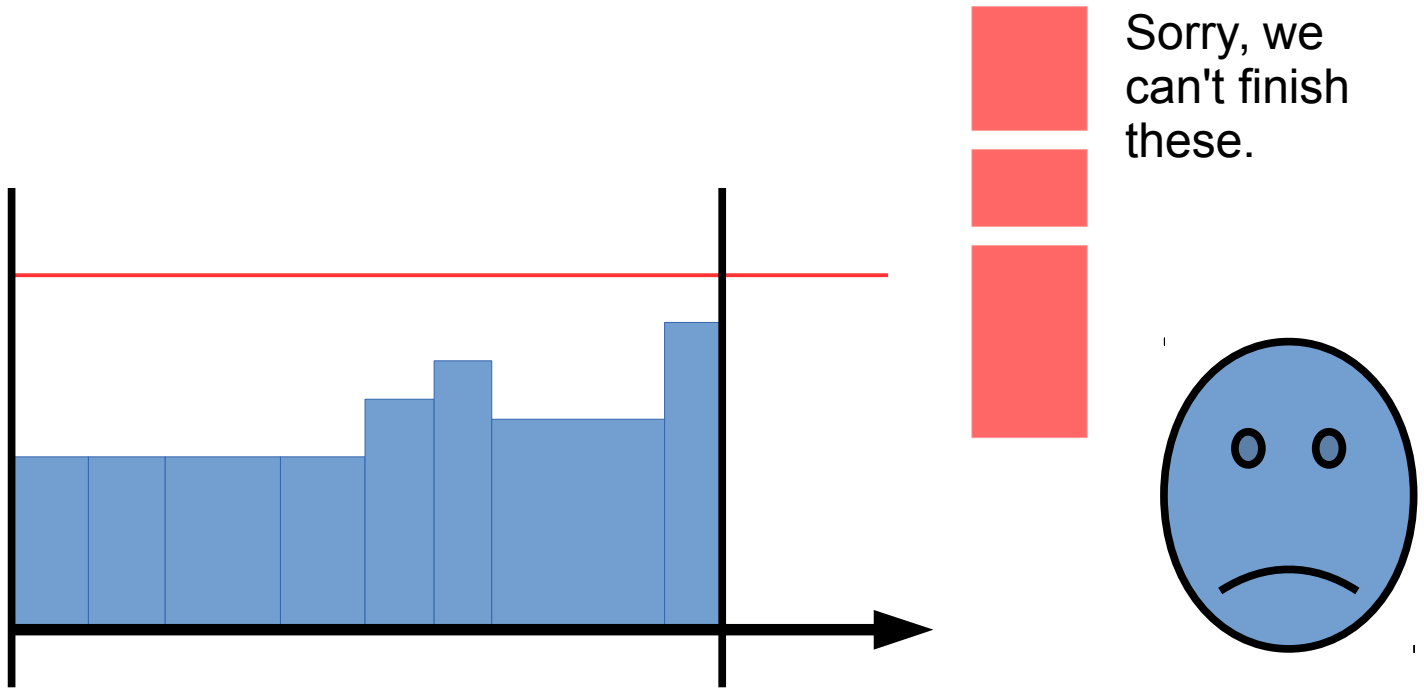
- Fixed time and features



Are we sure
that these features
are “done”?

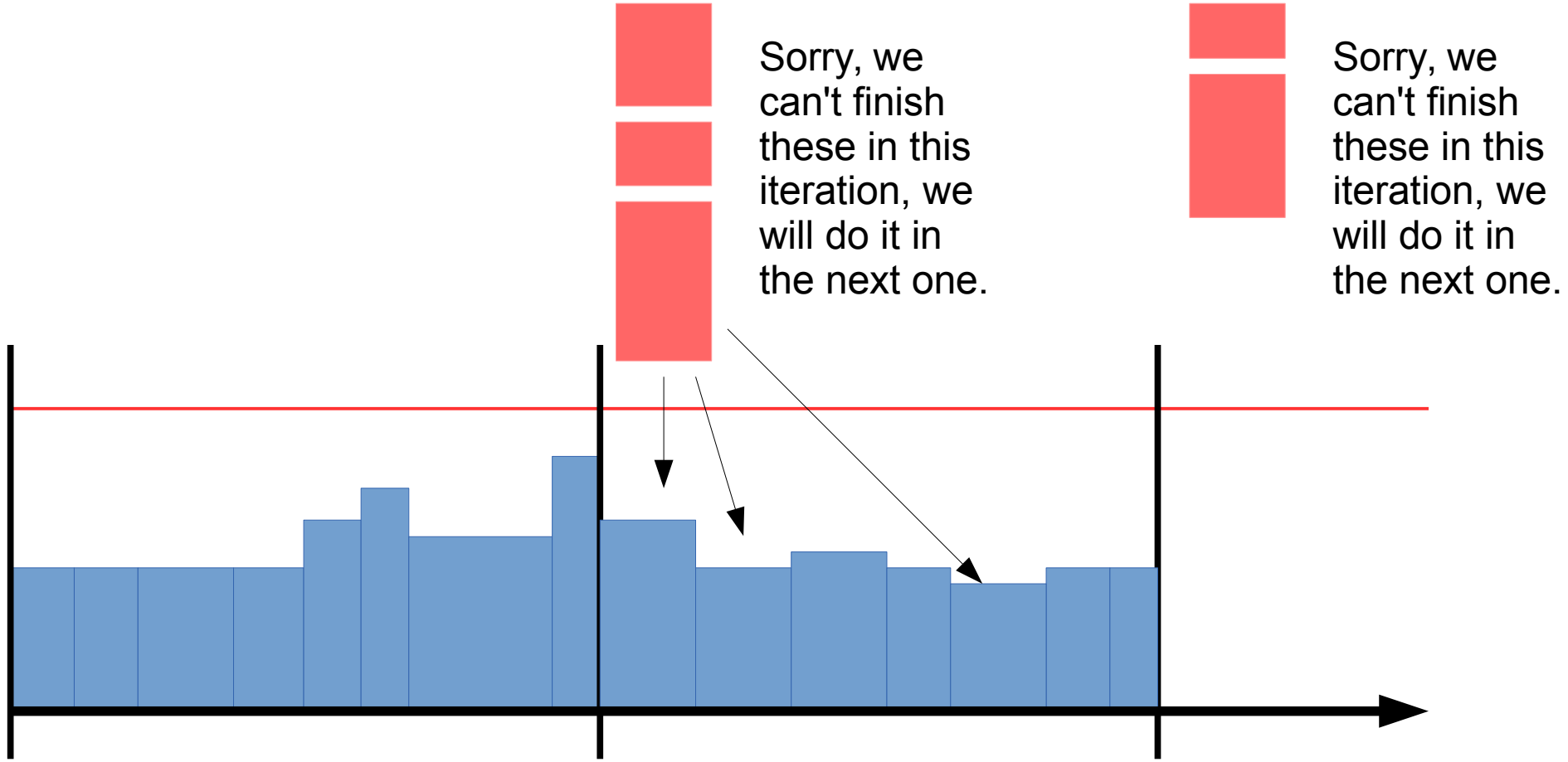
Live-and-learn trade-off

- Fixed time and quality



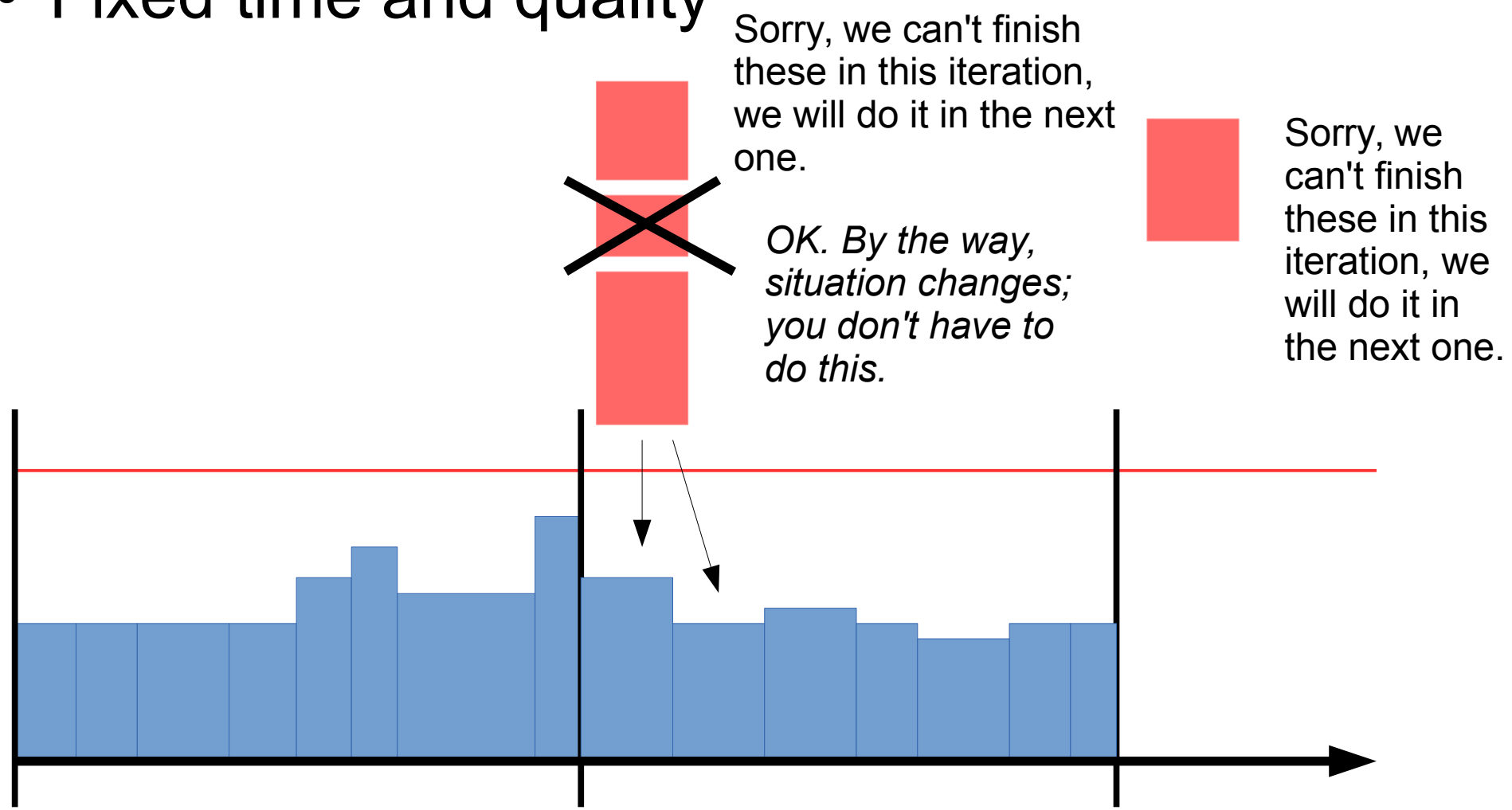
Live-and-learn trade-off with short iterations

- Fixed time and quality



Live-and-learn trade-off with short iterations + re-planning

- Fixed time and quality



Activities in planning

- Task breakdown
  - Smaller tasks are typically easier to estimate and to get done.
- Prioritization
  - We can't get everything done in one iteration. We should try to focus on more important ones first.
- Estimation
  - So that we have some idea on what features we can complete in this iteration.

Planning for your 1st Iteration

- No “formal” estimation at this point
  - since we really have no data.
- Set plausible goals for your 1st iteration
  - these are the features that we will complete first.
  - (see more on the next slides)
- Refine your task breakdown to correspond to the goals