# Community Code Project

# aka Continuous Code Reviews

# Motivation of the project

- Give **feedback** on code quality to the Squeak community

- Identify clean code as **good examples for students**

# Research Problem

- Contemporary code reviews are done only once before a pull request is merged
  - No continuous feedback on code quality (especially of legacy code)
  - No support for questions of new developers concerning existing code
  - Forces the developers to leave their IDE for commenting on code -> Context Switch

- How to give **continuous feedback** on code quality?

# Walkthrough of the approach

The developer Alice reads a piece of code relevant to her current issue. She does not understand, why this is done like it is and **adds a comment** on this piece of code. Because Bob did the last change to this code, he gets **informed about the new comment** by a notification in the IDE. He opens the concerned method and answers the questions. Alice recommends Bob to refactor the code to directly reveal this intention. He does so and **pushes the done button** of the comment in order to hide the comment of the discussion. After Alice has finished her issue, Bob enjoys reading her code and therefore pushes the **”I like” button** of the new method in order to help new developer getting to know the coding styles of the project.

# Implementation

- In order to identify the **identity of a meta object**, we use a textual hash
  - Package: package name
  - Class: class name
  - Method: class name + selector
  - Method snippet: class name + selector + snippet text

- Comments are migrated when the meta object is moved to another class / package

- Reset of comments is performed explicitly by user only

# Open Questions

- Who should be notified?
  - All developers that performed a change to the code
  - The last developer who performed a change
- How to annotate the existing comments?
- How to scale the system?
  - Download all comments for all classes
  - Request comments for classes names contained in the image