Red Green Refactor

Starts at: 13:10

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Red Green Refactor

- TDD Mantra

- Development in short, repeatable cycles

- Constantly forming hypotheses and checking them

- Gives confidence to refactor and experiment

- Improves the code quality

RED

- Think for a while what piece of code move your project towards completion

- Write a short test:

  - tested object might not exist

  - method might not be implemented

  - AppCode helps to quickly implement/create missing classes or methods

- Execute tests, check if the test is failing (IMPORTANT)

GREEN

- Write a production code in your project:

  - the previous test must pass

  - do not focus on the quality of the code

  - you can even hardcode to achieve the passing test

- Execute test, check the result of the test (IMPORTANT)

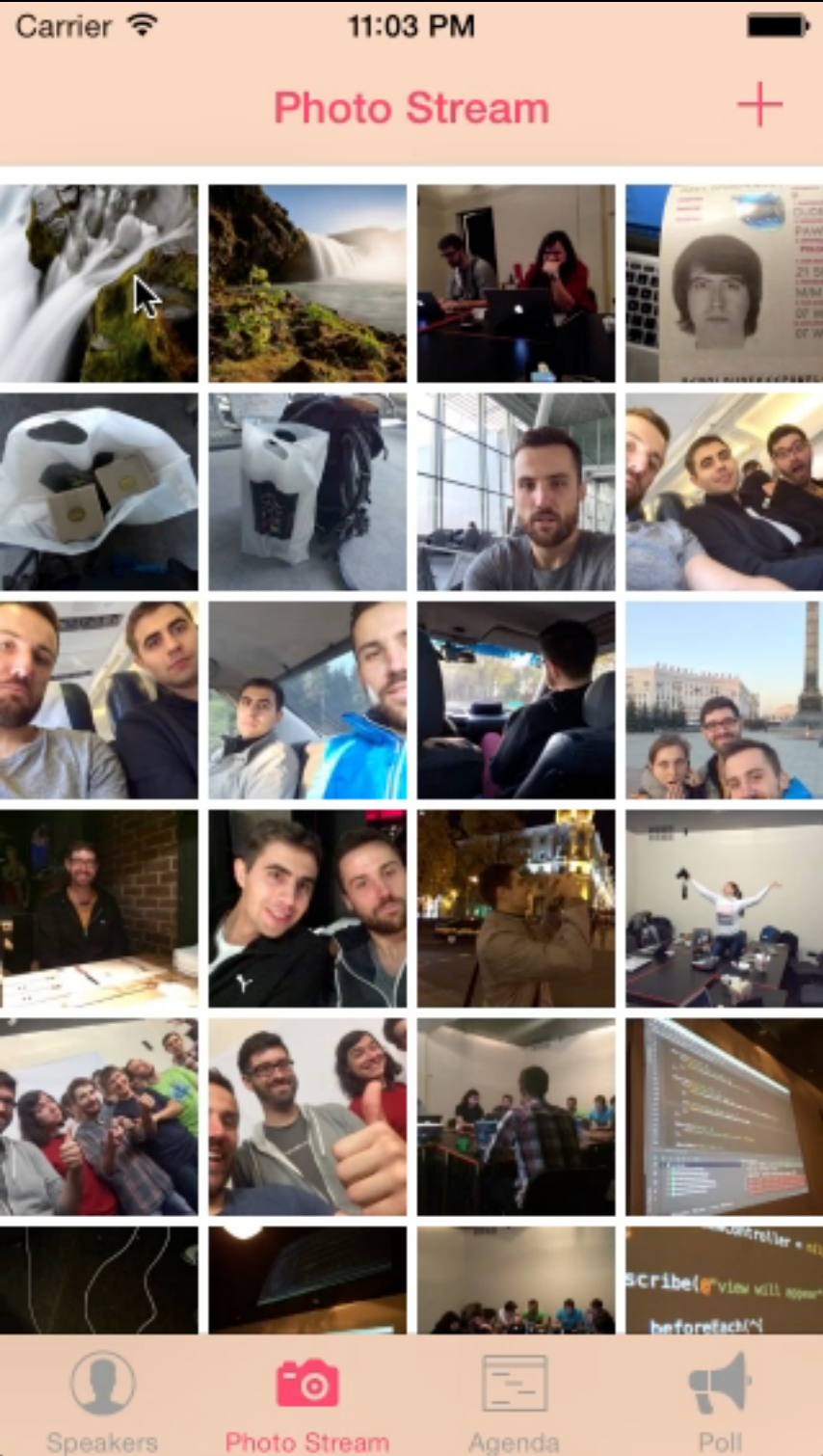- Now you have a proof that the test is testing the right thing

REFACTOR

- Take a deep breath, all of your tests are passing:)

- Go back to the code you've just written, see what can be improved

- Don't be afraid to change the code, tests will quickly catch mistakes

- Focus on the code duplication (DRY) and 'smelly' parts

- No idea how to improve, leave it for a while, then go back

- REPEAT!

What you get?

- Baby steps - a lot of small cycles

- Most of the time spend on refactoring

- When something goes wrong, it's easy to identify what was the cause

- You have to think about design of the code

- Once feature is done, you can move to next task

Feature To Implement

Task 1: Warm Up

- Observe the Red Green Refactor in the wild

- Add `UICollectionView` to `StreamItemPreviewViewController`

- Basic Setup of `UICollectionView`

Task 2: Your turn

- Checkout branch: `origin/red-green-refactor`

- Using Red Green Refactor implement the following

  - collection view should have paging enabled

  - collection view should have layout which is horizontally scrollable

- Spec: `StreamItemPreviewViewControllerSpec`

- Solution: `origin/red-green-refactor-1`

Task 3: Finish!

- Provide array of all `StreamItems` to `StreamItemPreviewViewController` (take a look)

- Checkout: `origin/red-green-refactor-2`

- Verify `UICollectionViewDataSource` setup

- Verify `UICollectionViewCell` setup

- Solution: `origin/red-green-refactor-3`

Common mistakes

- Too much time spend red/green cycle

- Attempt to achieve fully functional feature in single cycle

- Refactor stage is ignored

Thanks!