Nice Pairing

Or, How To Maximise Pair Programming Value

Or, How To Make Things Easier On The People Who Work With You

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Pair Programming

What is it?

Assumptions

1. You, your company and your team understand the value of pair programming and support it.
2. You have a strategy in place to implement it.

Effective Pairing

- Two heads are better
- Reduces the silo effect and dilutes the diva effect
- Reduces bugs and code rewrites
- Fastest way to induct new team members
- Shares the best knowledge of the team with everyone
- Distributes code/infrastructure ownership across the team
- It is fun!

Charlotte: Future Software Developer

Wasteful Pairing

- What happens when pairing goes bad?
  - **Option 1:** Impotent frustration. Distraction. Waste of time. Waste of money. Propagates poor habits.
  - **Option 2:** Work with what you have. Examine your own behaviour.
    - How are you helping?
    - How are you not helping?
    - What can you do to change?

What's An Archetype?

- An archetype is a simplified model.
- Useful to mirror our behaviour when we can't see it ourselves.
- Pairing archetypes:
  1. Highlights – work to these strengths.
  2. Lowlights – minimise the impact.
  3. Check Yourself – techniques to emphasize the highlights and minimise the lowlights.

Finger-Operated Coder

Highlights

- Keyboard shortcuts legend
- Ideas generator
- Fast typist

Lowlights

- Keyboard hog
- Fidgeter
- Trouble explaining ideas
- Has to type out mistakes

Check Yourself (Driver)

- Take your hands off the keyboard.
- Spend more time navigating.
- Use your words/pen/paper instead of typing.

Check Yourself (Navigator)

- Keep pushing your pair to explain/talk/interact with more than just their hands.
- Get your turn in the driver's seat (e.g. pomodoro).

The Thinker

Highlights

- Always worth listening to
- Sees issues before they arise

Lowlights

- Thinking or sleeping?
- May look like not paying attention
- May not share all the good stuff

Check Yourself (Driver)

- Take a moment to tell your navigator you are in thinking mode.
- Find a technique that helps you to explain what is going on in your head (pen & paper/models).

Check Yourself (Navigator)

- Don't try and fill the dead air, give your pair time and space to think.
- Ask questions to get the conversation flowing.
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The Cheerleader

Highlights

- Easy to work with
- Supportive when experimenting
- Confidence building

Lowlights

- Not critical
- Too focused on immediate problem
- Spends too much time navigating

Check Yourself (Driver)

- Use ping pong or pomodoro to ensure even driving time.
- Remind yourself to focus more on the code, less on the person you are coding with.

Check Yourself (Navigator)

- Ask for critical opinions.

The Brainiac

Highlights

- A great learning resource
- Able to anticipate issues before they arise
- Writes a lot of good code

Lowlights

- Keyboard hog
- If not inclined to share knowledge can be frustrating
- Can get carried away trying new things

Check Yourself (Driver)

- Always, always remember the smarter your team gets as a whole the better value you are to your company.
- Listen!

Check Yourself (Navigator)

- Ask questions, learn everything you can.
- Limit your pairing time to avoid becoming a spectator.

The N00b

Highlights

- Explaining code to a n00b can uncover bugs & refactoring opportunities
- N00b questions can highlight gaps in partner's knowledge
- Generates excitement about new stuff

Lowlights

- Requires patience from your pair
- Can slow down development in the short term

Check Yourself (Driver)

- Balance questions with listening.
- Try not to get too lost.
- Take responsibility for your own learning.

Check Yourself (Navigator)

- Accept the fact that development will be a little slower.
- Limit pairing with The N00b if you find teaching draining.

The Surfer

Highlights

- Good for mental break
- Passes the time when running tests
- Good resource for new tech

Lowlights

- The Internet is a Playground but you're at work!
- Kills the flow

Check Yourself (Driver)
- Don't share unless invited to.
- Isolate your cool stuff to company spam channel.

Check Yourself (Navigator)
- Keep directing attention back to the problem at hand.

The Talker

Highlights

- Excellent at describing problems and solutions
- Great brainstormer
- Good at extracting requirements

Lowlights

- Can dominate the pair
- Ideas hog
- Distracting to quieter partner

Check Yourself (Driver)

- Use the keyboard as well as your mouth.
- Remind yourself to listen, listen, listen.

Check Yourself (Navigator)

- Get your pair to put ideas on paper.
- Ask for what you need – "gimme a minute to think"

The Rock

Highlights

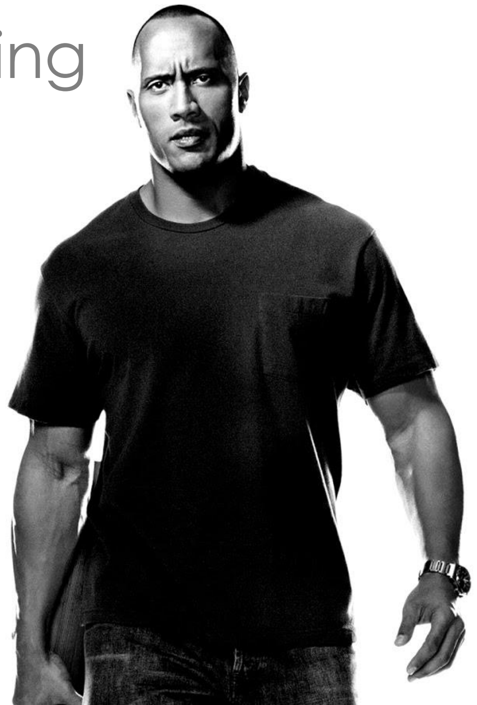
- Writes reliable code to best practices
- Minimises tech debt
- Excellent learning resource

Lowlights

- Creates scaffolding for throw-away code
- May lose sight of pragmatic programming
- Inflexible

Check Yourself (Driver)
- YAGNI.
- Remind yourself, again, of the downsides of premature
optimisation.

Check Yourself (Navigator)
- Keep checking in "what is our purpose",
"do we need that".



- Devs:
  - Can you see yourself in these archetypes?
  - Can you see your team in these archetypes?
  - What, if any, archetypes could you add?
  - How can you catch yourself in the act?
- Dev managers:
  - Run a tech session for your dev teams on Nice Pairing.
  - What characteristics does your team display:
    - Are these characteristics adding value, or diminishing it?
    - Brainstorm with your team on how to emphasize the good and reduce the bad.

Links

Nice Pairing blog
http://engineering.lonelyplanet.com/2013/08/09/Nice-Pair---Pair-Programming-Archetypes.html

Pair Programming explained
http://www.extremeprogramming.org/rules/pair.html
http://guide.agilealliance.org/guide/pairing.html

Pair Programming advocates
http://www.scribd.com/doc/25304465/null
http://www.versionone.com/Agile101/Pair_Programming.asp
http://www.airpair.com/pair-programming

The Pomodoro Technique
http://pomodorotechnique.com/

Ping Pong Programming
http://c2.com/cgi/wiki?PairProgrammingPingPongPattern