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Developer for more than 20 years

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Goal

- Describe a set of patterns that will assist you to fail a project

Categories

- Organisational
- Management
- Architectural
- Development
- User Interface

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Strict division

- Analysis
- Architecture
- Development
- Configuration management
- Test

Line and projects

- Line management
- Divide employees between projects

Communication

- Prefer written
- A written text can be read at any time

Customer

- Avoid having the customer at the same premisses as the developers

Separate dev and ops

- Devs should not be allowed into the production systems
- Devs should develop deployment packages and scripts
- Devs should be responsible for bug fixing

Improvement

- Hire personnel with the proper skills
- Don't pay for any courses
- Never send people on conferences
- Don't sponsor any books
- Learn new things on personal time

Measuring

- How many bugs have one person fixed

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Resources

- Refer to people as resources
- Resources can be replaced

Meetings

- Schedule lots of meetings
- Demand that everyone attend
- Cancel them late
- Don't show up
- Show up unprepared

Daily stand up

- Standup meetings are just uncomfortable

Weekly dev meetings

- Weekly dev meetings
- Cancel them often

Written communication

- Always demand written MoM after every meeting

Planning

- Plan 12 months ahead with all details up-front
- Follow the plan strict

Collective planning

- Never!
- One person should estimate all tasks
- Planning poker is just a waste of time

Detailed control

- All details
- Never self organise

Demotivation

- Criticize in public
- Don't invest in tools
- No large screens
- Managers should have the fastest computers

Working offsite

- Make it extremely difficult to work from home
- No laptops
- No VPN
- No external ssh

Demand overtime

- 40 hours a week is for wimps
- Avoid a clear goal for the extra effort

Coding standards

- Should be defined by a management committee

100% test coverage

- Anything less is a failure

Forbid TDD

- Testing should be added last

Javadoc

- Demand 100% javadoc

Add quality at the end

- Quality should be assured last
- Testing early will test things that is not done yet
- Performance can be added at the end

Avoid deployment

- Risky and error prone
- Different environments by different people
- Reduce the number of times
- Maximum 2 times a year
- Never any small releases

Continuous deployment

- Deployment is risky
- Has to be done manual

Improvement

- No regular retrospectives
- Management should define all improvements

Accept broken builds

- System sometimes doesn't compile
- Do not stop the line to fix the build

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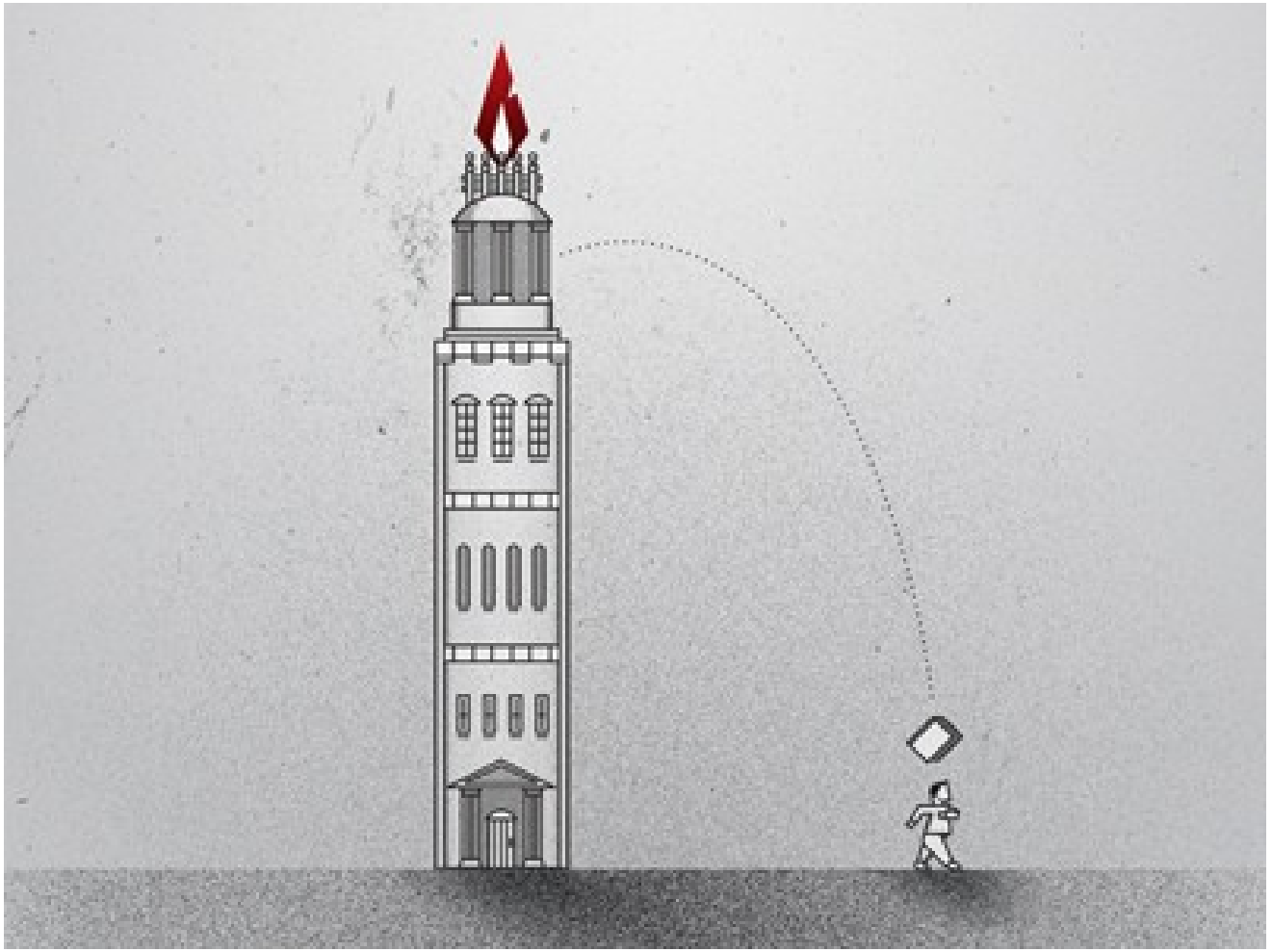
Company policies

- Enforce the usage of common framework
- One tool shall solve all problems
- Force the usage of the same development environment

Ivory tower

- Only employ ivory tower architects



Simple design

- Is for simple systems
- Complex systems demand a complex design

Design committee

- All important design decisions
- No regular meetings

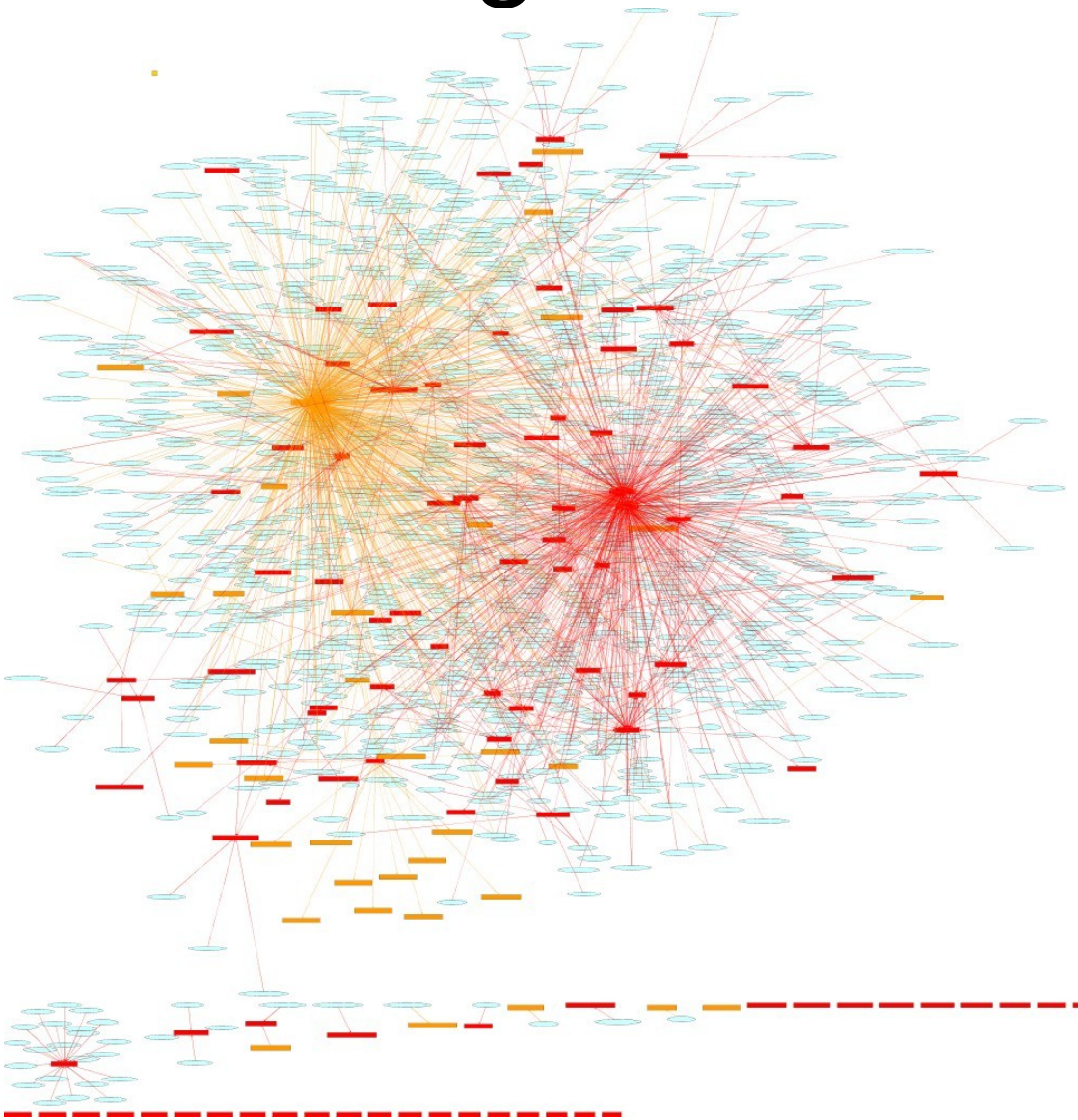
System communication

- Must be system agnostic
- Prefer xml over http

Singletons

- Supports global variables and state

Singletons



http://blog.code-cop.org/2012/01/why-singletons-are-evil.html

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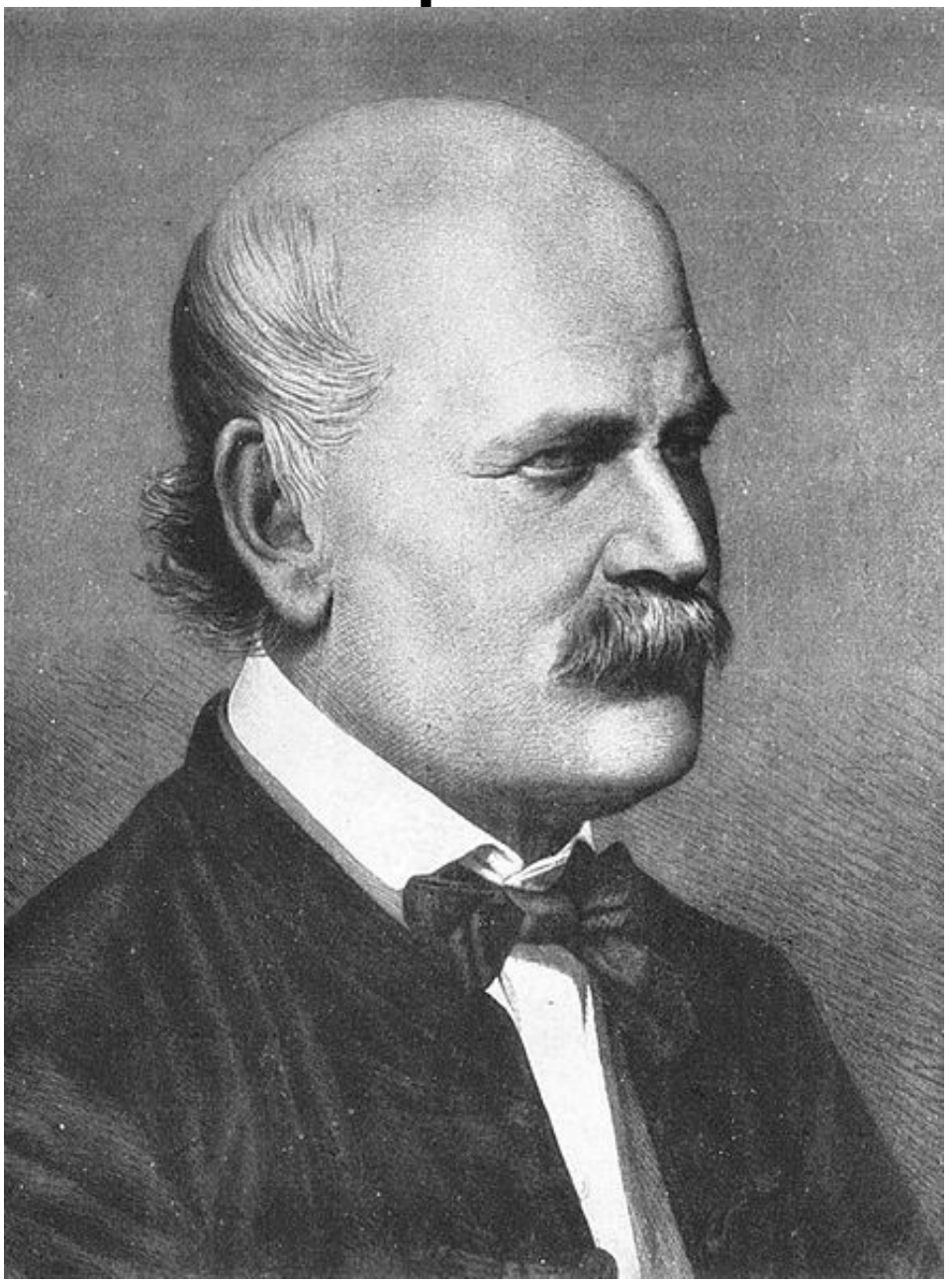
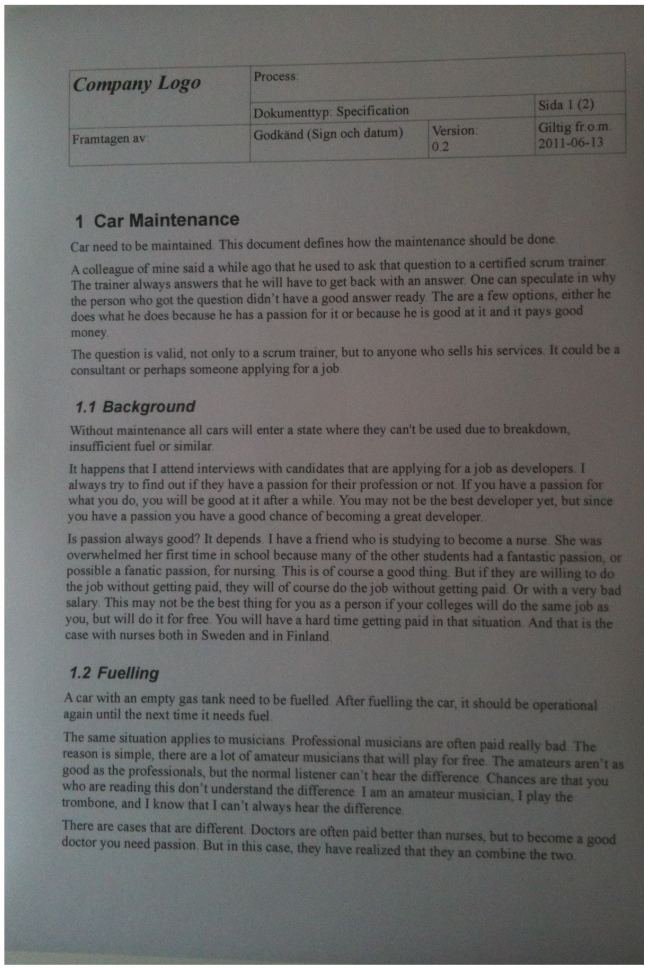
Good practices



Specifications

- Always written

A specification



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Framtagen av:	Godkänd (Sign och datum)	Version: 0.2	Giltig fr.o.m. 2011-06-13

1 Car Maintenance

Car need to be maintained. This document defines how the maintenance should be done.

A colleague of mine said a while ago that he used to ask that question to a certified scrum trainer. The trainer always answers that he will have to get back with an answer. One can speculate in why the person who got the question didn't have a good answer ready. The are a few options, either he does what he does because he has a passion for it or because he is good at it and it pays good money.

The question is valid, not only to a scrum trainer, but to anyone who sells his services. It could be a consultant or perhaps someone applying for a job.

1.1 Background

Without maintenance all cars will enter a state where they can't be used due to breakdown, insufficient fuel or similar.

It happens that I attend interviews with candidates that are applying for a job as developers. I always try to find out if they have a passion for their profession or not. If you have a passion for what you do, you will be good at it after a while. You may not be the best developer yet, but since you have a passion you have a good chance of becoming a great developer.

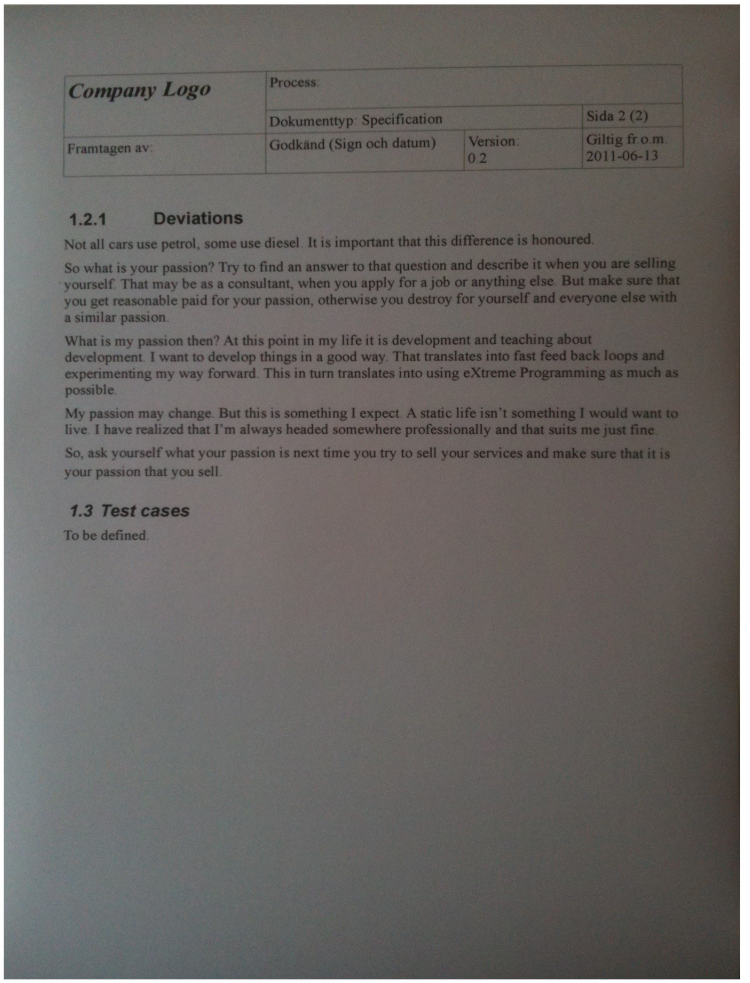
Is passion always good? It depends. I have a friend who is studying to become a nurse. She was overwhelmed her first time in school because many of the other students had a fantastic passion, or possible a fanatic passion, for nursing. This is of course a good thing. But if they are willing to do the job without getting paid, they will of course do the job without getting paid. Or with a very bad salary. This may not be the best thing for you as a person if your colleges will do the same job as you, but will do it for free. You will have a hard time getting paid in that situation. And that is the case with nurses both in Sweden and in Finland.

1.2 Fuelling

A car with an empty gas tank need to be fuelled. After fuelling the car, it should be operational again until the next time it needs fuel.

The same situation applies to musicians. Professional musicians are often paid really bad. The reason is simple, there are a lot of amateur musicians that will play for free. The amateurs aren't as good as the professionals, but the normal listener can't hear the difference. Chances are that you who are reading this don't understand the difference. I am an amateur musician, I play the trombone, and I know that I can't always hear the difference.

There are cases that are different. Doctors are often paid better than nurses, but to become a good doctor you need passion. But in this case, they have realized that they an combine the two.



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1.2.1 Deviations

Not all cars use petrol, some use diesel. It is important that this difference is honoured.

So what is your passion? Try to find an answer to that question and describe it when you are selling yourself. That may be as a consultant, when you apply for a job or anything else. But make sure that you get reasonable paid for your passion, otherwise you destroy for yourself and everyone else with a similar passion.

What is my passion then? At this point in my life it is development and teaching about development. I want to develop things in a good way. That translates into fast feed back loops and experimenting my way forward. This in turn translates into using eXtreme Programming as much as possible.

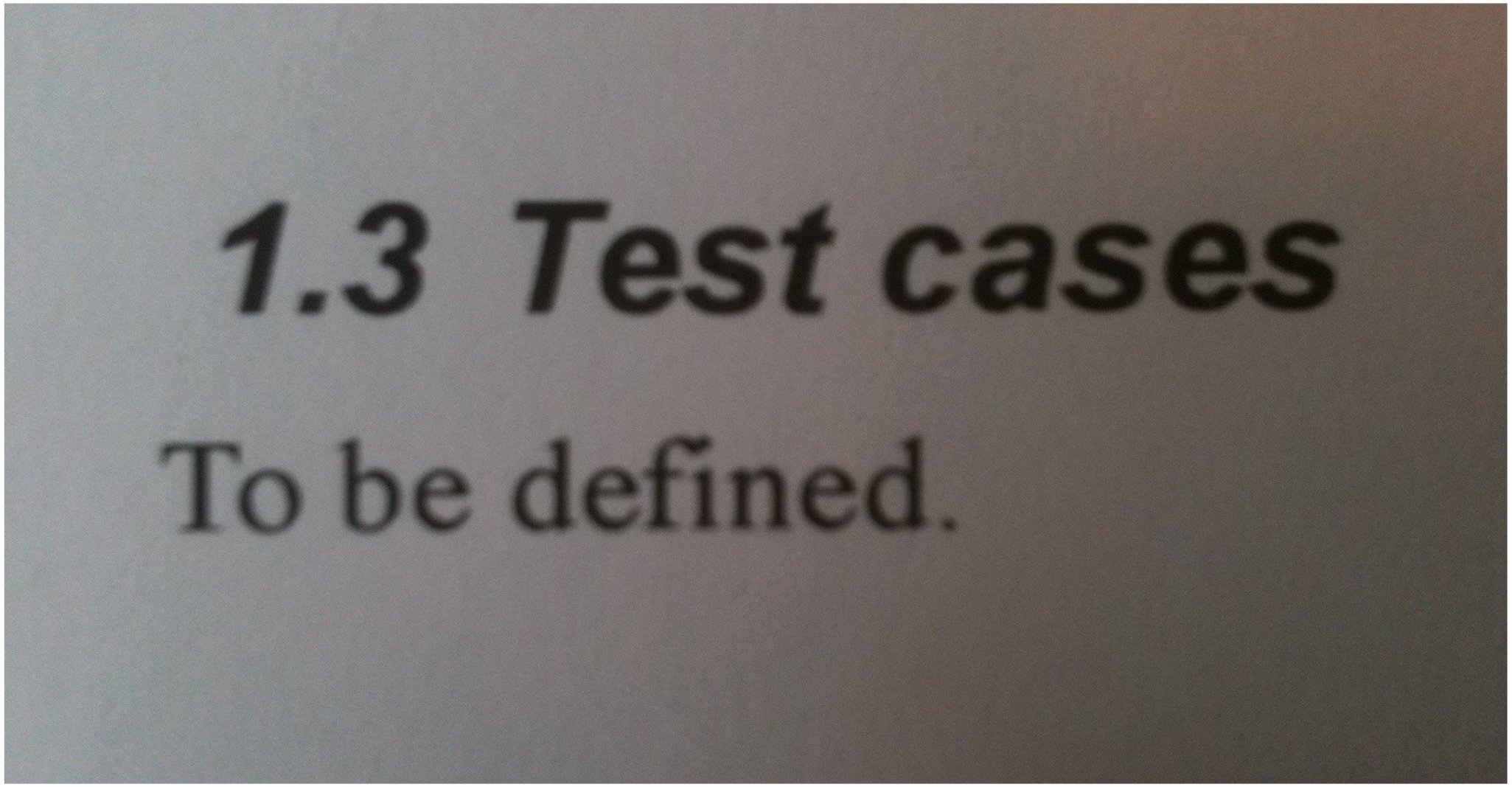
My passion may change. But this is something I expect. A static life isn't something I would want to live. I have realized that I'm always headed somewhere professionally and that suits me just fine.

So, ask yourself what your passion is next time you try to sell your services and make sure that it is your passion that you sell.

1.3 Test cases

To be defined.

A specification



Definition of done

- Everybody knows when a functionality is done

Common language

- No need for a common language
- No need for system metaphors
- The same view of the system

Version Control System

- A shared disk should be enough
- Clear Case

Continuous integration

- A waste of resources
- Have developers chase down missing files

Code ownership

- One developer owns the code in each module
- Forbid other developers to edit that code

Pair programming

- Inefficient
- Expensive

Refactoring

- Avoid re-doing things
- Get it right the first time

Non functional requirements

- Define load test as

  “Must cope with high load”

Load test

- Should be done when the system is ready
- Use the right tools

Functional testing

- Manual
- Through the user interface

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Test the easy parts first

- Postpone testing of difficult cases as long as possible

Stable areas

- Prefer to test stable areas to avoid hassle with bug reports

Test even

- All parts of the system are equally important
- Test all parts evenly
- No part should get tested more then anything else

Corner cases

- Focus on corner cases
- The most common cases will be tested anyway

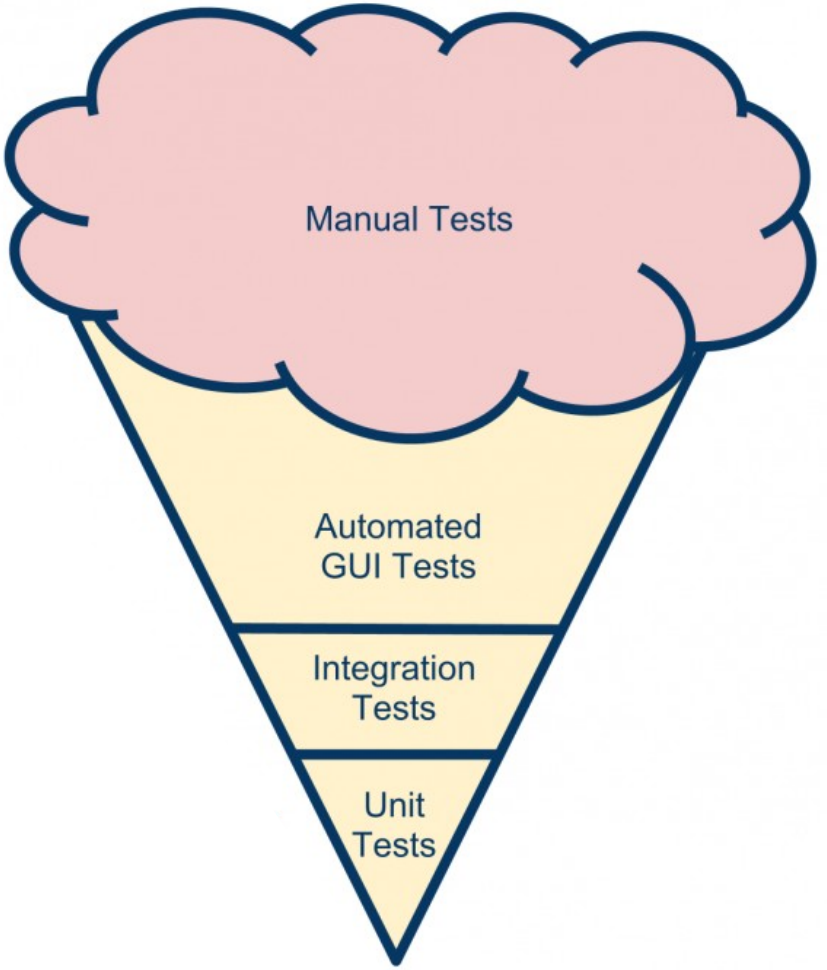
Colours

- Do not be afraid to use colours
- Red and green are great colours to mix

Automation

- Testing should be done manually
- It is to important to be left to a computer
- Only a human being can judge a user interface

Automation



http://watirmelon.com/tag/ice-cream-cone/


STOP

Not

- All I have said here is wrong
- Negate everything

Agile manifesto

- Individuals and interactions
  - over processes and tools
- Working software
  - over comprehensive documentation
- Customer collaboration
  - over contract negotiation
- Responding to change
  - over following a plan

Principles behind the Agile manifesto

- Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
- Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
- Business people and developers must work together daily throughout the project.
- Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- Working software is the primary measure of progress.
- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- Continuous attention to technical excellence and good design enhances agility.
- Simplicity - the art of maximizing the amount of work not done - is essential.
- The best architectures, requirements, and designs emerge from self-organizing teams.
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

XP principles

- Fine scale feedback
  - Pair programming
  - Planning game
  - Test-driven development
  - Whole team
- Continuous process
  - Continuous integration
  - Refactoring or design improvement
  - Small releases
- Shared understanding
  - Coding standards
  - Collective code ownership
  - Simple design
  - System metaphor
- Programmer welfare
  - Sustainable pace

Resources

- Agile manifesto - http://agilemanifesto.org/
- XP - http://www.extremeprogramming.org/
- My blog - http://thomassundberg.wordpress.com/

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