



# Introduction to Creating Test Strategies



De Agile Testers



# Agenda

- ▶ What is a Test Strategy?
- ▶ What influences a Test Strategy?
- ▶ How do you create a Test Strategy?



# Main sources



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# The tool for today: Miro

[https://miro.com/app/board/o9J\\_IJ4ydAU=/](https://miro.com/app/board/o9J_IJ4ydAU=/)

To make it easy, go to: <http://bit.ly/MoT99minTS>





# Hi there!

Let's get to know each other a little better...

1. Where are you from?
2. What is your favorite thing to do outside of work?
3. What is your role within your company?
4. What is your experience with test strategies?

**Write your answers in the chat please!**

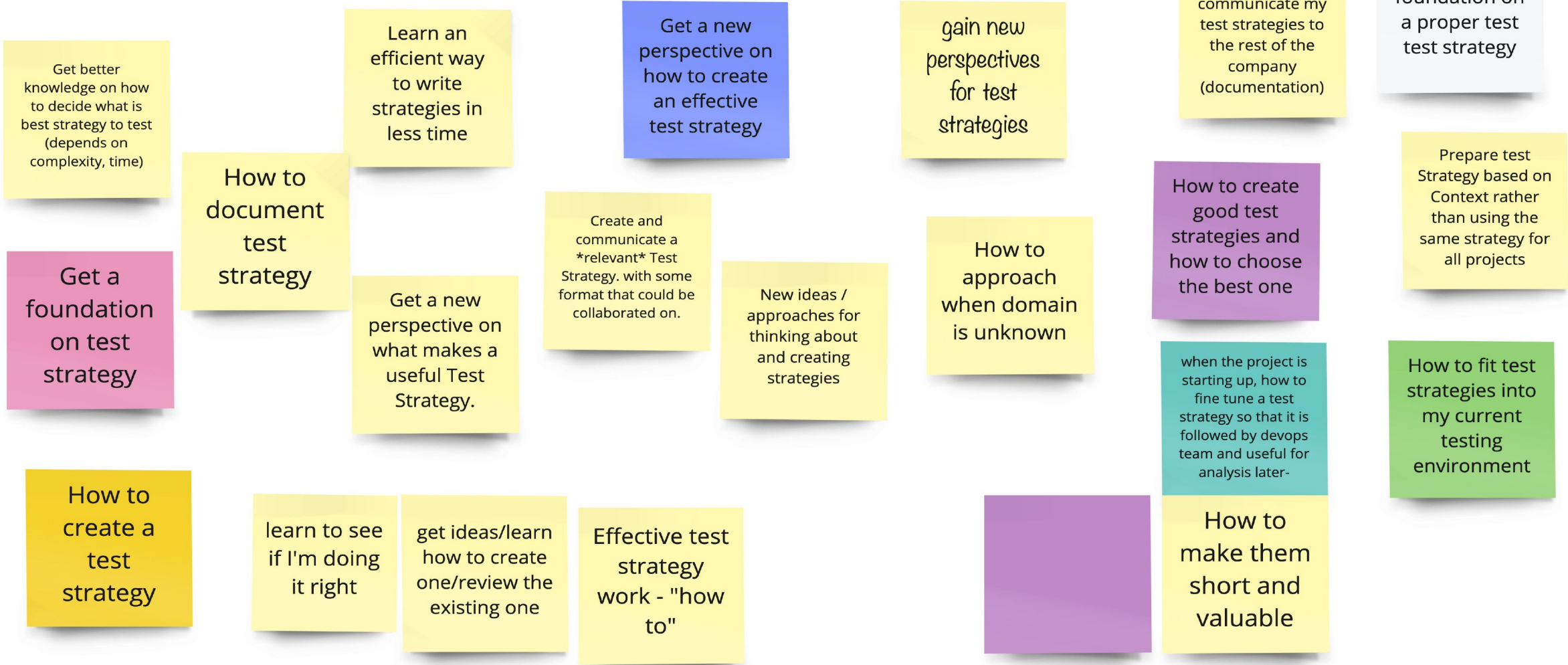


**What do you want to learn today?**

**Write your answers in Miro please!**



# What do you want to learn today?





# What is test strategy?

**Write your answers in Miro please!**





# What is test strategy?

- define goals
- define test data & how to find them
- define how to test (tools, documentation)
- define test success metrics

How to approach from testing perspective. Interm of planning, execution .  
To answer questions around What , How ,

a structural way to make decision on which tests need to be created

A long term vision that should guide the test efforts

General approach to testing.

What to test?  
How to test?  
When to test?  
Who to test?

A guide to decide the best way to test each project

A document which includes the way tests will be done, the AC to exit the tests, environment, people involved, etc...

Guides what tests you will choose to run and how you will run them.

approach  
How to test this ?

A tool to describe what to test, when and how

identify ways to find out risks and enable devops to think of them and handle them during dev and post production phase

Document which describes the testing approach

How you approach the testing of a product throughout the SDLC

Who, What Where and when

Something that outlines:  
- what is important to test  
- what we are testing,  
- how we are doing it  
- what we aren't testing  
- What risks / unknowns there are

An approach to the testing carried in the project baed on the scope

a preliminary outline of what is needed to successfully test a feature for release

a focal point of thought that your tests refer back to

an overview of the more detailed tests/an approach to testing (defined at lower levels)





# What words come to mind when you think about Test Strategy?

Write your answers in Miro please!



# What words come to mind when you think about Test Strategy?

Planning

Go to Documentation when an reference needed

test coverage for all code changes

guide

Answer to the question :  
- how to?  
- what ?  
- until when ?

organized thorough

risks

application type

re-useable to a certain extend

Communicating to the team what is in your head.

3 amigos

define what kind of testing is useful in the project

living doc of reqs!?

Quality criteria  
Risks assessment

Project, Specific, Share info

Test types, team, timelines, heuristics

communicating what is in your head to the rest of the team.

hard to maintain

A document that is written and then gathers dust on a shelf

guideline

always changing game plan

analyze planning execution

- a direction  
- conditions  
- steps  
-guide  
- not too specific



# What is a test strategy?

- **Strategy:** “The set of ideas that guide your **test design** or **choice of tests** to be performed.”
- **Logistics:** “The set of ideas that guide your **application of resources** to fulfilling the test strategy.”
- **Plan:** “The set of ideas that guide your **test project**.”

**Plan = Strategy + Logistics**



# What is a test strategy?

A test strategy is **NOT** a document!

A test strategy is a **set of ideas** that guide your test design. It is a **mental model** of which only some parts will be visualized by documenting them.



# What is a test strategy?

## Test Strategy

- ▶ Test strategy contains the ideas that guide your testing effort; and deals with **what** to test, and **how** to do it.  
(Some people mean test plan or test process, which is unfortunate...)
- ▶ It is in the combination of **WHAT** and **HOW** you find the real strategy.
  - If you separate the **WHAT** and the **HOW**, it becomes general and quite useless.
- ▶ There is always a strategy, but seldom communicated
- ▶ It is not written in order to show how smart you are, it is written to communicate your ideas to (at least) two audiences:
  - Stakeholders
  - Testers



# What influences a test strategy?

1. **Step 1:** Take 3 minutes to write down a list of everything that influences a test strategy
2. **Step 2:** Now put your list on Miro





# What influences a test strategy?







# Building a strategy

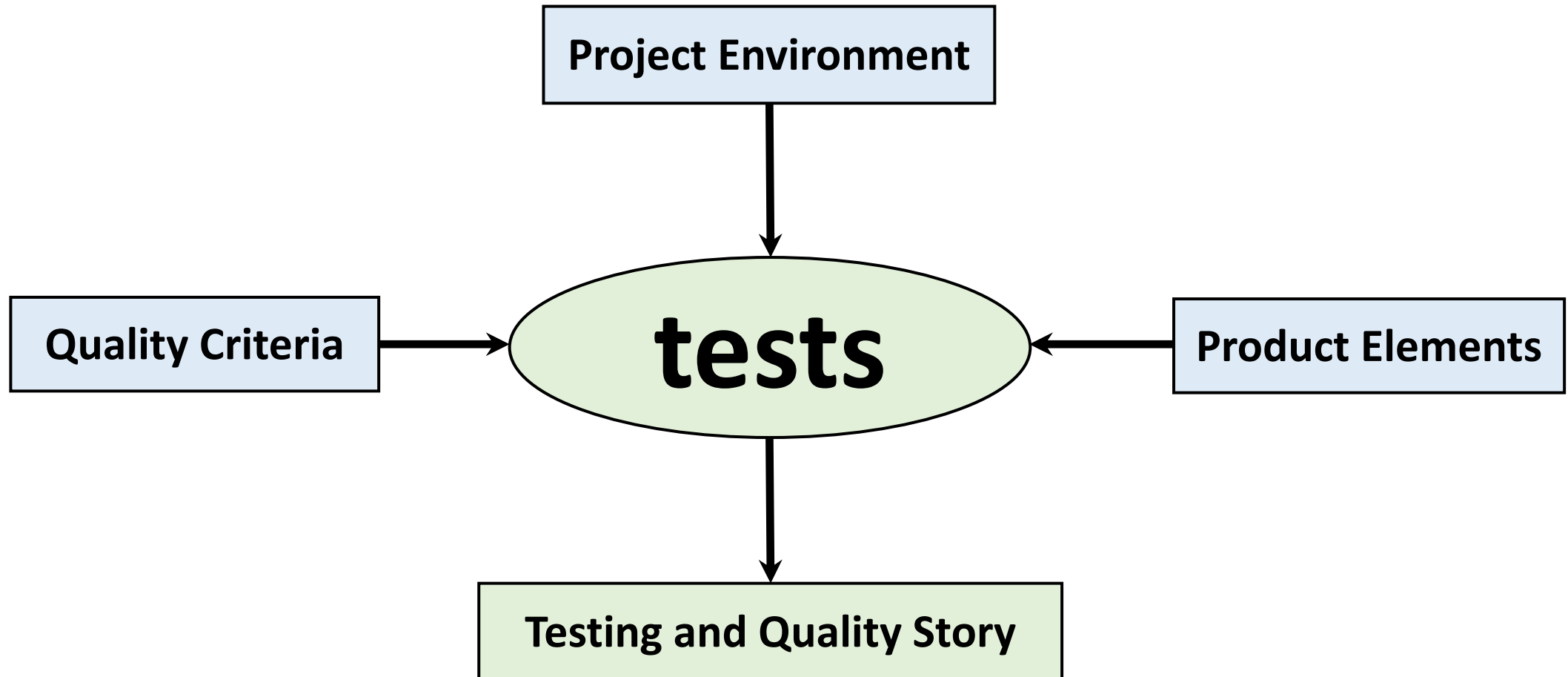
1. Embrace the **bootstrap approach**. Accept that any deep learning or real innovation is a confusing process at first, but it gets rapidly better.
2. Apply **structuring heuristics**. Stop worrying about best practices, and start curating your fallible methods for solving problems.
3. Build good **mental models**. Your mental models of the product control your testing of it. Better models mean better testing.



# How do you create a test strategy?

1. Missions for testing
2. Context: project environment
3. Quality criteria
4. Product analysis
5. Risks
6. Oracles & Information resources
7. Testing strategies

# A Heuristic Test Strategy Model





# Exercise

*'Wix Casies'*



**Casies**



# Wix Casies!

- This is gonna be a **pressure cooker**. A fast pace learning experience.
- I want you to create a **test strategy for a real product in 45 minutes**.
- I'll guide you through the steps.
- It is gonna be fast pace, **don't try to be perfect nor complete**.



# How do you create a test strategy?

1. Missions for testing
2. Context: project environment
3. Quality criteria
4. Product analysis
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6. Oracles & Information resources
7. Testing strategies



# Mission

## 1. Missions for testing

### **Your mission for today:**

Casies is webshop build with the Wix platform where customers can buy a case for their mobile phone. Your mission is to find problems we want to fix before release. The owner of the website needs information to decide if this webshop can be released.



# Context

1. Missions for testing
2. Context: project environment

Because we only have 99 min we'll skip this for now.





# Quality criteria

1. Missions for testing
2. Context: project environment
3. Quality criteria

## Most important quality criteria:

- Usability & charisma
- Reliability and security of the purchase process
- Functionality
  - Find, sort & filter
  - Purchase, cart, payment



# Product analysis

1. Missions for testing
2. Context: project environment
3. Quality criteria
4. Product analysis

Do a product analysis and create a product coverage outline (PCO).  
Model the product and find aspects of the product that you might wish to cover in some test.



# What is a PCO?

A product coverage outline is a detailed, working reference used to answer questions such as:

- **What could we test?**
- **What should we test?**
- **What are we testing?**
- **What did we test?**
- **What did we NOT test?**

It may be in plain text or in mindmap form. It may even be a diagram, or a set of Post-Its.



# What is on a PCO?

- The short answer is “**product factors that could matter**”.
- A product factor is **something about the product that you might wish to cover in some test**.
- Put these factors on the PCO if there is some chance you would otherwise forget or neglect them.
- Factors include things users see, and things they don't see; what the product is; what the product does; the data it processes; the interfaces that it provides or uses; platform elements; and even kinds of things users might do with the product; and relationships between the product and time.
  - See the Product Elements section of the Heuristic Test Strategy Model



# What is not on a PCO?

- Do not include **test procedures or test activities**. Instead a PCO represents the “ingredients” that you might cover in the testing.
- Do not include **risks**. Because the same risk can apply to many different factors in a PCO, having risks in a separate outline give more flexibility.
- Do not include **logistical notes about the test project**. A PCO is not a test plan, it is a working reference for considering what to test.

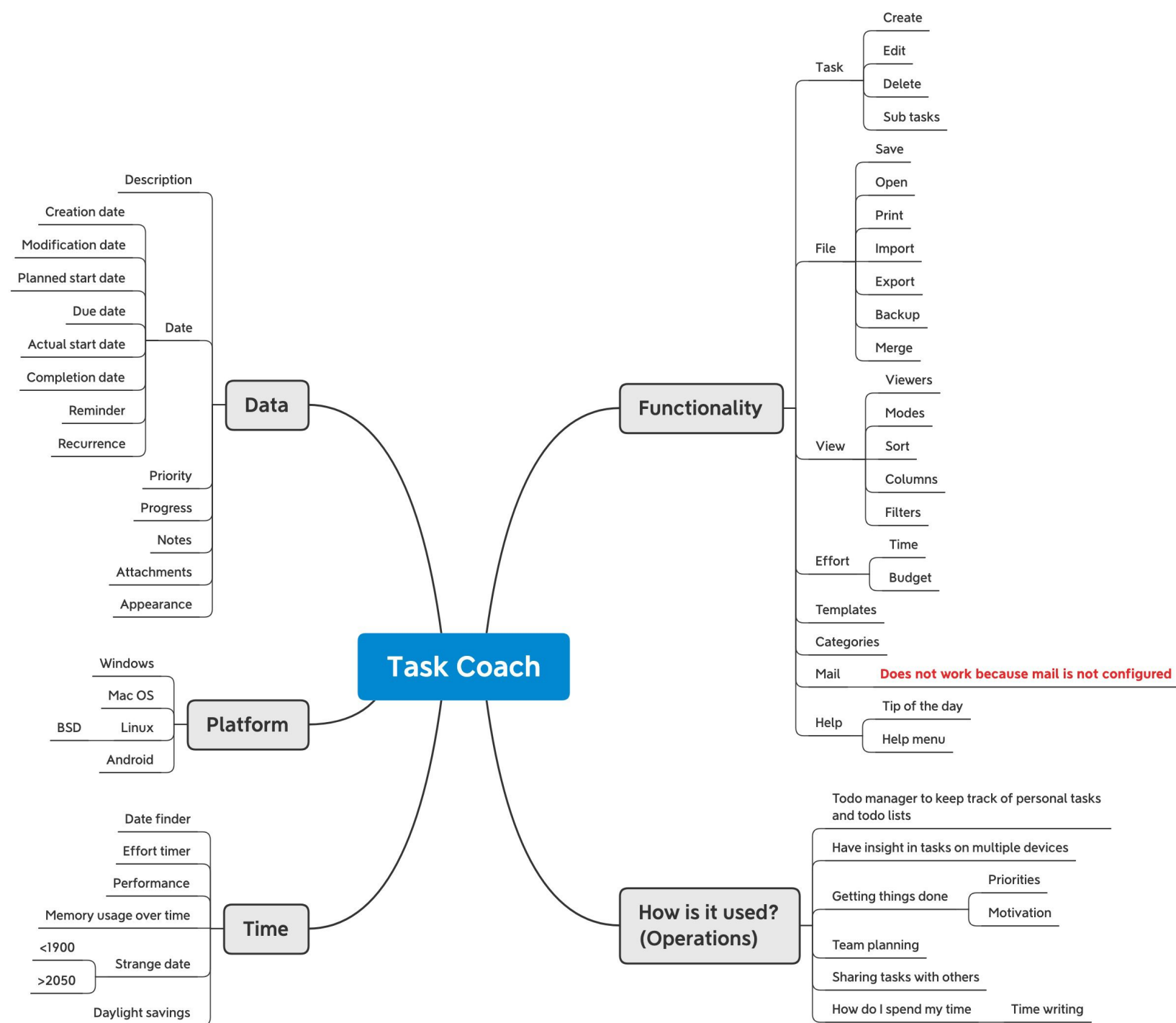


# Example PCO

The screenshot shows a task management application window with a menu bar (File, Edit, View, New, Actions, Help) and a toolbar. The main area is divided into a 'Tasks' pane and a 'Categories' pane. The 'Tasks' pane displays a list of tasks with columns for Subject, Planned start date, and Due date. The task 'Make dentist appointment' is selected and highlighted in blue. The 'Categories' pane shows a tree view with 'Private' and 'Work' categories. The status bar at the bottom indicates 'Tasks: 1 selected, 6 visible, 6 total' and 'Status: 0 overdue, 0 late, 1 inactive, 1 completed'.

Subject	Planned start date	Due date
Prepare workshop	23/07/2020 12:00	13/08/2020 18:00
Make example PCO		10/08/2020 18:00
Create menti wordcloud slide		13/08/2020 18:00
Create Jamboard		13/08/2020 18:00
Make dentist appointment		14/08/2020 18:00
Get insurance		

# Example PCO



Watch my video where I make a PCO here:  
<https://youtu.be/NUojNfDjljw>



# Product analysis

1. Missions for testing
2. Context: project environment
3. Quality criteria
4. Product analysis

Do a product analysis and create a product coverage outline (PCO).  
Model the product and find aspects of the product that you might wish to cover in some test.





# Risks

1. Missions for testing
2. Context: project environment
3. Quality criteria
4. Product analysis
5. Risks

Do a risk analysis and make a list of risks.



# Oracles & Information resources

1. Missions for testing
2. Context: project environment
3. Quality criteria
4. Product analysis
5. Risks
6. Oracles & Information resources

Because we only have 99 min we'll skip this for now.



# Testing strategies

1. Missions for testing
2. Context: project environment
3. Quality criteria
4. Product analysis
5. Risks
6. Oracles & Information resources
7. Testing strategies

Make a test strategy for Casies. Use the information from the previous steps.



# Wrap-up

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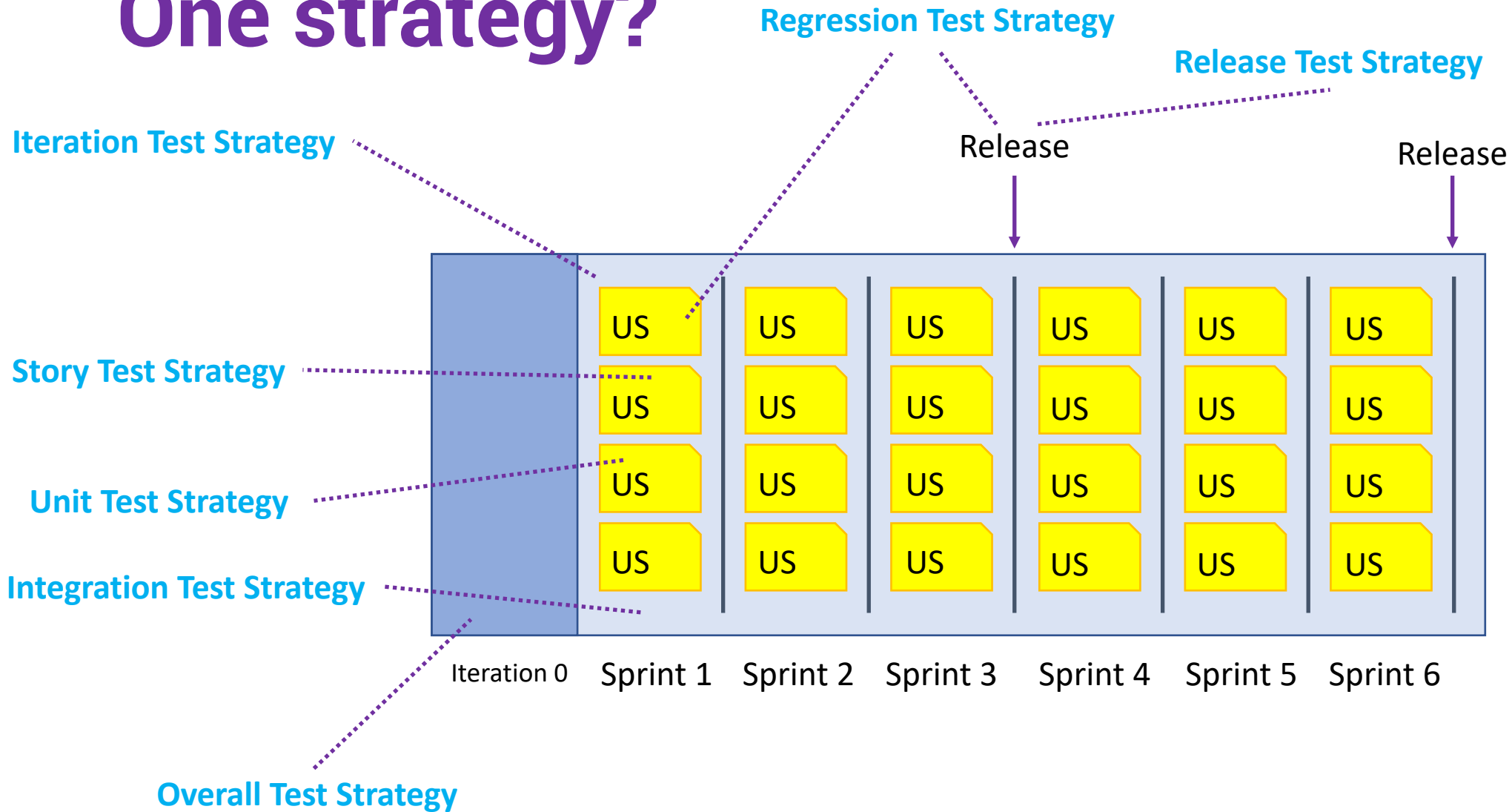


# A good Test Strategy is

- Product-Specific
- Risk-focused
- Mission-focused
- Diversified
- Practical
- Resource effective
- Anchored
- Changing all the time



# One strategy?





**Comments, feedback,  
stories or questions ??**

# Thank you!

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# References and more info



- ▶ Rapid software testing - <https://www.rapid-software-testing.com>
- ▶ Heuristic Test Strategy Model - <https://www.satisfice.com/download/heuristic-test-strategy-model>
- ▶ Creating a Test Strategy - <https://www.huibschoots.nl/wordpress/?p=2726>
- ▶ Ask me anything: Test Strategies (Ministry of Testing) - <https://club.ministryoftesting.com/t/ask-me-anything-test-strategies/36305>
- ▶ EuroStar tutorial "Test Strategy - Next Level" by Rikard Edgren - [http://thetesteye.com/presentations/Edgren\\_Tutorial\\_TestStrategyNextLevel.pdf](http://thetesteye.com/presentations/Edgren_Tutorial_TestStrategyNextLevel.pdf)
- ▶ Considerations when testing a software application in a context-driven way - <https://www.huibschoots.nl/wordpress/?p=2781>
- ▶ Test Eye Software Quality characteristics - [http://thetesteye.com/posters/TheTestEye\\_SoftwareQualityCharacteristics.pdf](http://thetesteye.com/posters/TheTestEye_SoftwareQualityCharacteristics.pdf)
- ▶ Example Test Strategy - [http://thetesteye.com/examples/Example\\_WorkRaveTestStrategy.pdf](http://thetesteye.com/examples/Example_WorkRaveTestStrategy.pdf)
- ▶ Example Test Analysis - [http://thetesteye.com/examples/ScreenPluck\\_TestAnalysis.pdf](http://thetesteye.com/examples/ScreenPluck_TestAnalysis.pdf)
- ▶ About (mental) models - [https://fs.blog/mental-models/#building\\_a\\_latticework\\_of\\_mental\\_models](https://fs.blog/mental-models/#building_a_latticework_of_mental_models)
- ▶ Michael Bolton on Risk analysis - <https://youtu.be/g97mMeC9EIE>
- ▶ Round Earth Test Strategy - <https://www.satisfice.com/blog/archives/4947>
- ▶ Risk Storming - <https://www.ministryoftesting.com/testsphere/riskstorming> (online Riskstorming: <https://riskstormingonline.com/>)
- ▶ Team Guide to Software Testability - <http://leanpub.com/softwaretestability>
- ▶ Heuristics of Software Testability - <https://www.satisfice.com/download/heuristics-of-software-testability>
- ▶ Collected useful links on my website - <http://www.huibschoots.nl/links>



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