



Software Testing Essentials Live Day 1: Quality & Requirements

Agenda



Day 1

Introduction

Quality

Testing requirements

Risks

Day 2

Risks

Structuring tests

Test Charters

Test Design

Day 3

Oracles

Communication

Note-taking

Reporting



How this course will work

So that you are aware, this course follows the Ministry of Testing Code of Conduct rules, which we've shared with you already and you should have read.

This is a safe space!

There's no such thing as a silly question.

Please be respectful to one another 😊



Lets get set up

Let's make sure we can all connect into our smaller groups ok!



Welcome to the Restful-Booker-Platform project



Preparing your portfolios



ACTIVITY



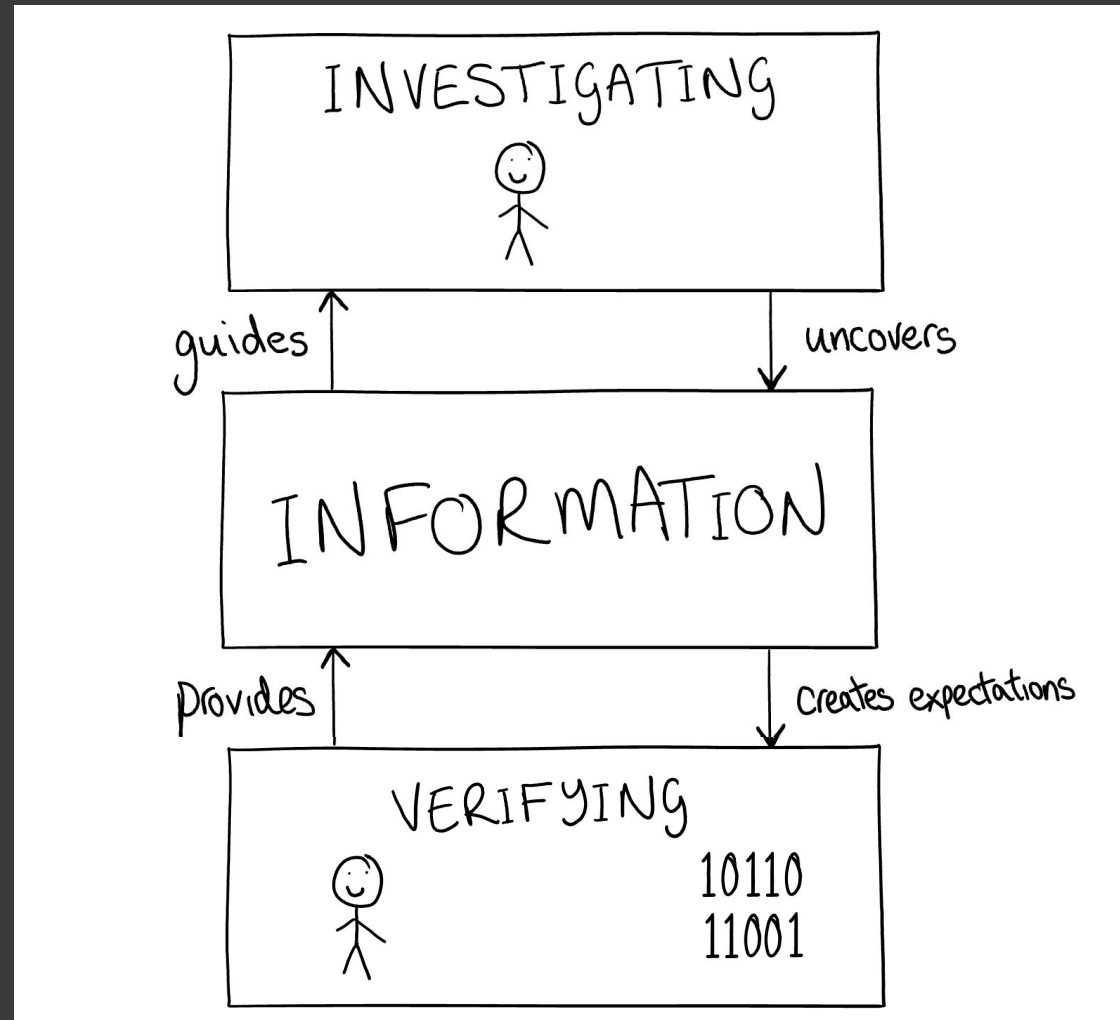
Icebreaker activity

Work in your groups and share your definitions of what testing is (from the Essentials Online video course).

Add your definitions to the Club thread in our Essentials course area (if you haven't already done so)

club.ministryoftesting.com/t/lesson-5-activity-1-how-would-you-describe-what-testing-is

What is testing, Dan and Mark?





What is quality?

ACTIVITY



“Build a high quality pizza” activity (part 1)

As a group write down the **attributes** that make a high quality pizza

- **Goal:** 10 minutes to build your pizza
- **Consider attributes like:**
 - Types of toppings
 - Type of base
 - Dietary requirements
- **Share your Pizza on The Club**

ACTIVITY



“Build a high quality pizza” activity (part 2)

Pizza battle

- In your groups, review the other group pizza submissions
- You have 10 minutes to critique and compare your pizza and the other groups pizza and answer the questions on the worksheet you will be given
- Try to identify what attributes you agree on and which you disagree on. Take notes!



**Time for a break
(15 mins)**

ACTIVITY



“What is quality?” activity

Get into your group

- As a group write down a description of:
 - What quality is
 - Why awareness of quality is important to delivering software
- Goal: 20 minutes to capture your descriptions and share on The Club

What is quality, Dan & Mark?



- Correctness
(Relating to the adherence to explicit expectations based on wants and needs)
- Goodness
(Relating to the emotive experience of using something)
- Usefulness
(Relating to the value and worth of something)



**Time for lunch
(1 hour)**



Quality characteristics

What is a quality characteristic?



A quality characteristic is a specific way of interpreting the quality of a thing.

For example:

The speed of a calculator

The availability of a GP booking system

The audio quality of an MP3 player

The data quality of a news article

The accessibility of a website

The mobile OS integration quality of a mobile app

ACTIVITY



“Quality characteristics wall” activity (part 1)

Get into your smaller groups

- **Goal:** 10 minutes to discuss and capture different quality characteristics you could consider when evaluating your product
- **Take brief notes on:**
 - The names of the characteristics
 - A brief description of the characteristic

ACTIVITY



“Quality characteristics wall” activity

Share activity

- Load up the Quality characteristic Padlet board:
<https://padlet.com/ministryoftesting/bqef15rji0jxx5c9>
- As a group research and add different Quality characteristics to the board
- Don't worry about duplicates

Class Feedback

- As groups review the wall and identify characteristics you missed that would be useful for you



Working with requirements

ACTIVITY



“Requirements testing game” activity (round 1)

- In your groups pair up (or get into threes)
- Nominate one person to write requirements and one person to develop the requirements
- The ‘Developer’ can then take a break for five minutes
- The ‘B.A.’ will be given **five minutes** to write requirements that describes a ‘product’
- Requirements have to be captured in written form

ACTIVITY



“Requirements testing game” activity (round 2)

- The 'B.A.' hands over what requirements they have created to the 'Developer'
- The 'Developer' has **five minutes** to draw what the requirements has set out

ACTIVITY



“Requirements testing game” activity - Reveal

- Compare your images and let's discuss how it went?

A definition of requirements



Any artefact that explicitly captures and conveys information around stakeholders' explicit wants or needs



An example of a requirement

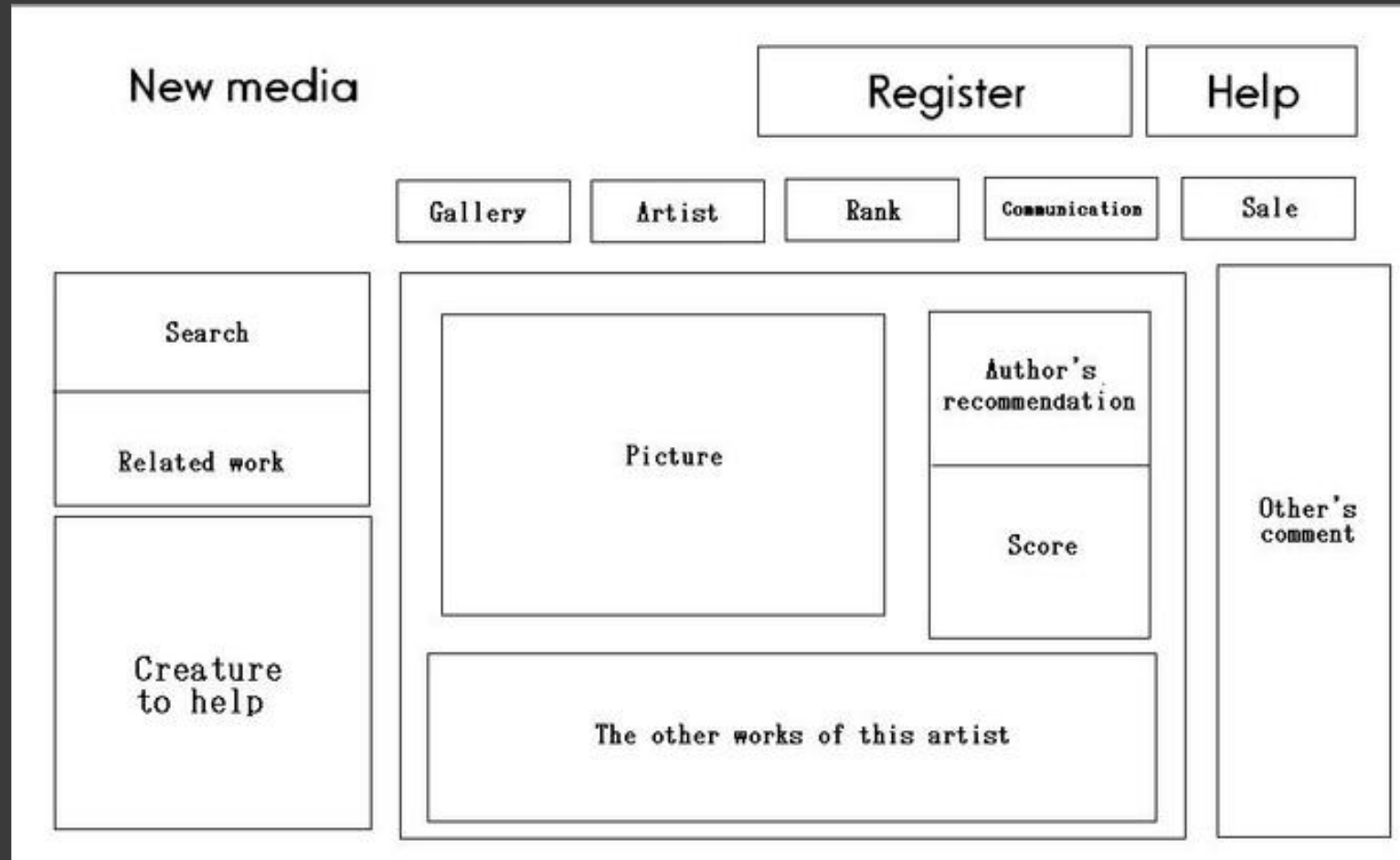
*As an online shopper
I want the choice of purchasing items without
having to log in, by using "guest checkout"
So that I can buy items quicker without my
personal data being stored in an account
profile.*

An example of a requirement



*'8.3: The search results should be ordered by
ID'*

An example of a requirement



An example of a requirement



Given I am on the checkout page

When I add the "next day" shipping option

Then the "next day" shipping charge is added

Explicit vs Implicit vs Tacit requirements



Explicit info

Info that's been written down, drawn or verbally shared openly

Tacit info

Info that can't physically be shared as it can only be understood through experience

Implicit info

Info that hasn't been explicitly shared but has been implied or anticipated to be an obvious expectation

ACTIVITY

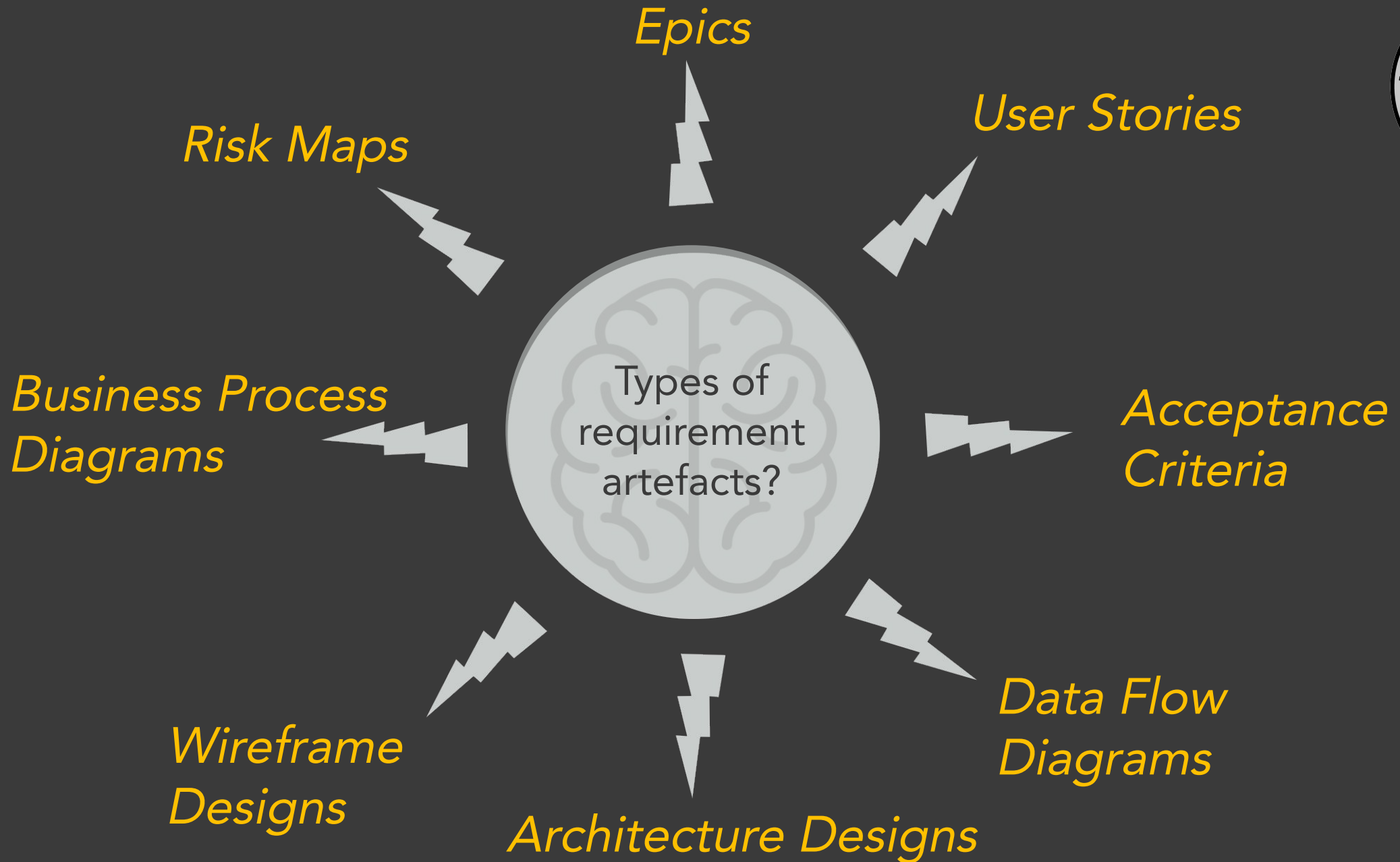


Research activity

Research different types of requirements.

Capture them on Padlet and discuss them:

<https://padlet.com/ministryoftesting/wvf4nz39x3eg7awt>

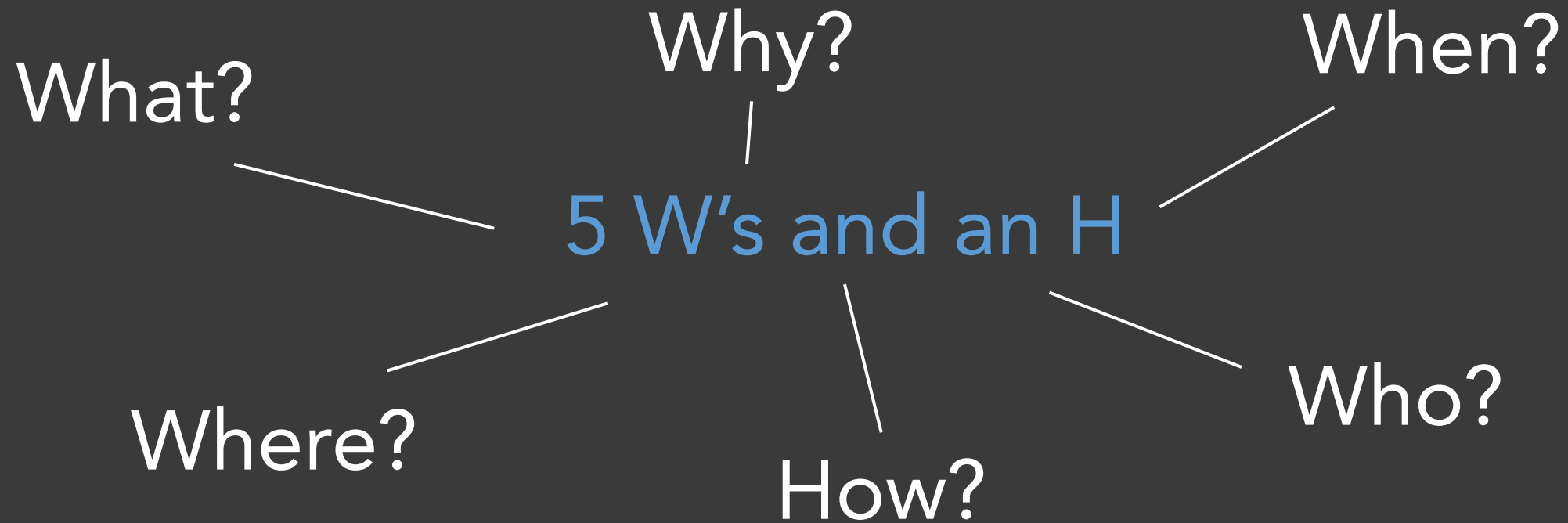


Requirements Testing Techniques



5 W's and an H

Requirements Testing Techniques



Requirements Testing Techniques



“What **if**...?”

“What **else**...?”

Requirements Testing Techniques



Whiteboarding

Mind-mapping

Sketchnoting

Modelling

DEMO: Testing a Requirement



*'The search results are ordered by
relevance'*

DEMO: Testing a Requirement



*'The search results are ordered by
relevance'*

ACTIVITY



“Test a requirement” activity

Get into your groups

- Review the four user stories that will be shared with you
- Pick one of the user stories and begin to come up with questions for the product owner
- Ask the product owner each question to learn more about what they want and discover more information
- Once you’ve run out of questions, move to the next user story



**Time for a break
(15 mins)**



Test with a quality focus

ACTIVITY



“Testing with a quality focus” activity

Get into your groups

- Pick a quality characteristic from your “quality characteristics wall”
- Explore the requirements and capture relevant details that can help you judge whether the quality characteristic matters to your product owner or not
- **Goal:** 15 minutes to assess as many characteristics as possible



Working with risk

ACTIVITY



“What are risks?” activity

- Individually: spend 2 minutes to make notes and write your own definition of risk
- Get into groups: share your definition of what a risk is with your group, listen, compare and discuss!

A definition of risks

In the context of software development



Risks are potential problems that might negatively impact the product, project or business

Relationship between Quality and Risks



Quality and Risks are
two sides of the same coin

We care about creating something that has high quality, so we identify risks and test to discover information related to those risks, which forms our perception of quality.

Day 1 recap!



Quality

- Identify that quality means different things to different people
- Describe what quality is and why it is important in delivering software
- Distinguish that there are many different quality characteristics
- Discuss how quality relates to testing
- Assess the product quality characteristics that are most important for your team and in your context

Testing Requirements/Ideas

- Discuss why testing requirements is important and how to do it
- Describe the different types of requirement artefacts
- Use a range of techniques to test requirements

Risks

- Describe what risk is and how it relates to quality