MINISTRY OF TESTING
ESSENTIALS

Software Testing Essentials Live
Day 3: Notes and reporting

Welcome back!

Day 1	Day 2	Day 3
Introduction	Risks	Oracles
Quality	Structuring tests	Communication
Testing requirements	Test Charters	Note-taking
Risks	Test Design	Reporting

Recap from yesterday

Reflection on test cases and exploratory testing
- How did they compare?
- Which do you remember more from?
- How do you feel about each approach looking back?

Knowing what we know?

ACTIVITY

🔍 "Search for bugs" activity (round 1)

As a group, reflect on your notes from your previous testing sessions that you've done over days 1 & 2.

List out all the bugs you have found during your testing.

What is AN ORACLE?

Testing community: "a mechanism for determining whether a test has passed or failed"

Me: "Anything that informs how you know what you know"

What is AN ORACLE?

Oracles can be used as heuristics.

There is also a heuristic to help you think about oracles:
> *FHICCUPS + B*

There are so many Oracles that help us (sometimes subconsciously):
> *Experience, people, existing knowledge, Alexa,*
>
> *old tales, muscle memory, emotions, etc…*

What are problems?

Problems are a matter or situation of difficulty that's regarded as having a negative impact.

Oracles help to detect problems

Oracles can be used to detect problems, even when there are no requirements or prior knowledge of the system.

Actively using a range of oracles in a conscious, intentional way helps us to increasingly inform our awareness of problems

What to do when you discover problems?

Discuss them!

ACTIVITY

🔍 "Search for bugs" activity (round 2)

As a group, repeat the previous activity of reflecting on your list of bugs that you've got from your previous testing sessions, but this time use a list of oracles.

How do you know they are bugs now?

How good were your testing notes, btw?

What should we report?

ACTIVITY

🔍 **What do we want to report?**

As a group, think about the many things we could report to help keep others informed and help them decide the quality of their product.

Add your ideas onto a Padlet board

ACTIVITY

🔍 Critique your notes

As a group, review your notes again, this time asking yourself the question: *'How do know you've done enough testing'*

Note down any observations, criticisms or improvements

How do we know we've done enough testing?

Time for a break (15 mins)

Communication

ACTIVITY

🔍 Communication types

As a group, go through the worksheet and fill in the first 2 questions, answering:

- What each communication type is?
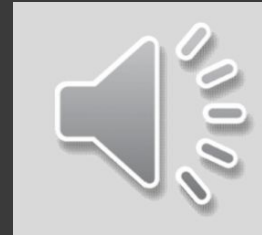- Why each type is useful?
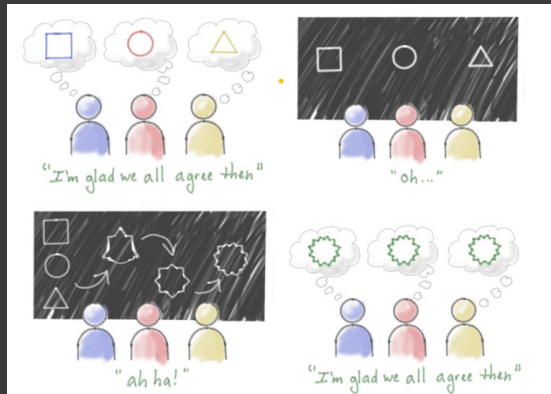
Different forms of communication

Written

As a… I want… So that…
Given… When… Then…
Requirements
Emails
Chat apps
Big documents with lots of words.

Verbal

Visual (Models)

Physical (Body Language)

The scale of influence

Directive   Non-Directive

Instruction	Advice	Opinion	Observation	Summary	Ask them	Silence
"Invite me to the meeting please."	"You should have a tester in this meeting."	"I think you'd benefit from having a tester in this discussion."	"I noticed that you haven't invited a tester to this meeting yet."	"Here's why you need a tester in the meeting..."	"Can I join this meeting to test the ideas?"	... (this could be akin to letting it fail to prove a point).

"The Scale of influence" – by Julie Starr (from her book: "Brilliant Coaching")

Why deep communication skills are so important

- Talking about your testing - showing your work and your value

- Test reporting - aiding decision making regarding the product and the project

- Raising awareness about the craft to overcome misunderstandings in your team and company

Communication challenges

Words can be interpreted in different ways

The story of how my wife almost killed me due to misinterpreting words…

Communication challenges in software projects

- Assumptions and ambiguity!!

- False belief with being "on the same page"

ACTIVITY

🔍 Critical thinking paragraph

The procedure is actually quite simple. First you sort things into different groups; of course one group may be sufficient depending on how much things there are. If you have to go somewhere else due to lack of facilities that's the next step, otherwise you are pretty well set to start. It is important not to over-do things, i.e. it is better to do too few things at once, than too many. In the short run this may not seem important, but complications can easily arise. An error can be expensive as well. At first, the whole procedure will seem complicated; soon however, it will become just another facet of life. It is difficult to foresee any end to the necessity of this task in the immediate future, but then, one can never tell. After the procedure is completed, one arranges the things into different groups again. Then they can be put into their appropriate places.

1) *What is this passage about?*

2) *Where could you go if you lack the facilities? (List 3 possible answers)*

3) *How can an error be expensive? (List 5 possible answers)*

ACTIVITY

🔍 Taboo - verbal communication challenge

Taboo rules:

Taboo is a word, guessing, and party game. The objective of the game is for a player to supply clues to the group for them to guess a specific word supplied to the player. The player supplying the clues, can't say the word or use other specific related words though.

Volunteer needed! Who wants to be the player?

ACTIVITY

🔍 Tongue tied

As a group, take turns to talk uninterrupted for 2 minutes each.

Pick a topic to talk about. It could be related to testing, to current affairs, what you are having for dinner, or even the weather... But you need to talk continuously without long silent breaks.

While each individual is speaking, the rest of the team should be actively listening to what is being said.

ACTIVITY

🔍 Pictionary

Guess what the image is!

Pictionary is a word guessing game with someone drawing images to try to represent the word, with the group trying to guess the answer within a given timeframe.

ACTIVITY

🔍 Communication challenges

As a group, go through the worksheet and fill in the final 2 questions, answering:

- What the challenges are with each communication type?
- Some ideas on how to overcome the challenges

Time for lunch (1 hour)

Note taking

ACTIVITY

🔍 Research activity

Using the research worksheet, spend time searching for different note taking styles and related tools you can use to capture notes

Note taking – Mind maps

Approach

- Start with an initial root node
- Ideas and observations are connected of children nodes
- You can use icons / colours for observations
- Try only using three words

Tools

- MindMup
- XMind
- FreeMind
- Good ol' pen and paper

Note taking – Audio/Visual

Approach

- Use audio tools to record conversations to review later (ask for permission first!)
- Use a screen recorder to record your work as you test
- Screenshots

Tools

- Quicktime
- Field recorder
- Your phone
- Zoom

Note taking – Sketch notes

Approach

- Using a combination of images and text to capture notes
- Images captured aren't standard but mean something to you (for example a 'lock' image)

Tools

- Pen and paper
- Drawing tools / devices

ACTIVITY

🔍 Tombola activity

Each of the note taking styles we've captured has been added to a randomiser. Use the randomiser to select a note taking style.

Once everyone has a note taking style, begin a new exploratory testing session with a new charter

Types of reporting

Report types - Bug reports

Bug ID: RBP-01

Summary: Booking a room - the phone number field only accepts phone number greater than 11 digits.

Description: In some countries (including the UK) it's possible that phone numbers only have 10 digits. (See more info on UK phone number formats here: https://en.wikipedia.org/wiki/Telephone_numbers_in_the_United_Kingdom. This potentially prevents people from Brampton from booking a B&B room.

Severity: Moderate

Priority: 2

Steps to reproduce: 1) Browse to the homepage. 2) Click on the "Book this room" button". 3) Enter a 10 digit phone number in the "phone" field. 4) View the error message for the phone field.

Screenshots/videos: n/a

Environment info: Chrome v83.0.4103.61

Labels: #Data, #ClientSideRules, #BookingForm

Reporter: Dan Ashby

Assignee: Mark Winteringham

Report types - Testing dash

FEATURE/ USER STORY	TESTING EFFORT	TEST COVERAGE	PERCEIVED QUALITY	COMMENTS	LINK TO RISK MAP	LINK TO TESTING NOTES
User Story 1	Low	3	:)	Thorough exploratory testing has been conducted, please see the testing notes.		
User Story 2	High	1+	:)	Quality is perceived to be high based on restricted test coverage.		
User Story 3	Won't Test	0	:(	Due to release deadlines, no exploratory testing will be done on this story.		
User Story 4	Yet To Start	2+	-			
User Story 5	Blocked	2	:|	Testing is blocked by bug #99		
User Story 6	Paused	1	:(	Testing has been paused due to a change in requirement.		
User Story 7	Done	2+	:)	Testing has completed and confidence is high re this feature		

Report types - Quality dash
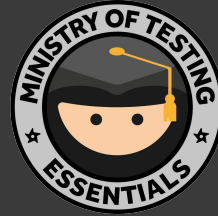
Process Adoption (Leading Indicators)

Processes	Perception
Risk Mapping	🟩
Test Driven Development	🟨
Behaviour Driven Development	🟨
Domain Driven Design	🟥
Deep Work Sessions	🟩
Session Based Test Mgmt	🟨
Rolling Wave Planning	🟥
Tech Debt Payback Plan	🟩
Quality Debt Payback Plan	🟨
CI/CD Pipe Improvements	🟩
Roadmap Maintenance	🟥
Story Mapping	🟩
Example Mapping	🟨

Prod Bugs Quality Indicators (Trailing Indicators)

Open Prod Bugs: **9** ↑

OOSLA: **2**

Prod Bugs last week: **1** ↓

Severities:

Sev1	Sev2	Sev3
1	3	5
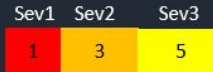
Business Metrics (Trailing Indicators)

P&L Churn	**35%**
Conversion	**+5%** ↑
User Growth	**+3%** ↑
User Traffic	**150K**

Engineering / Release Quality Indicators (Trailing Indicators)

Number of releases last week: **15** ↓

Release success: **68%**

DoD Adherence: **100%**

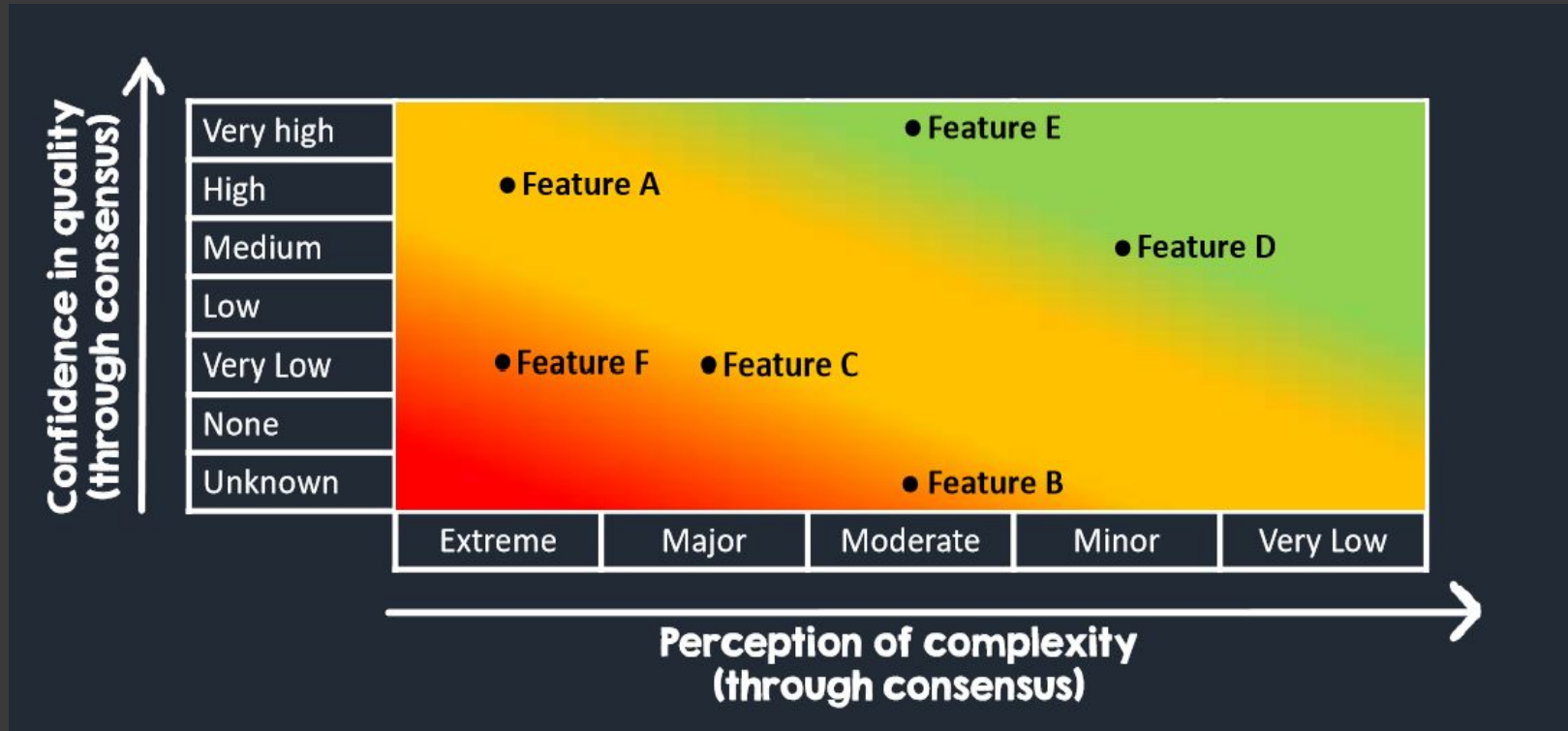Rollbacks: **5**

Customer Verbatims (Trailing Indicators)

"I like the new desktop browser view"

"You shouldn't have gotten rid of this feature…"

"Here's an idea - I would really like this"

"This is so unusable, it's causing me so much despair! ☹ "

Report types - Visualisations

ACTIVITY

🔍 Research reports activity

As a group, research different types of reports and review what you like and dislike about them. Add the things you like to the Padlet board we worked with in the previous activity.

Building a report

ACTIVITY

🔍 Build a report template

As a group, decide what details and metrics you would like to store in a test report and build a template that will be filled in a future activity

ACTIVITY

🔍 Build and fill in a report activity

As a group, decide what details and metrics you would like to store in a test report and build a template that will be filled in a future activity. Then fill in your report with information that you feel the product owners need to make a judgement on the quality of their product.

Draw on information from the various notes you captured in each testing session.

ACTIVITY

🔍 Review each others report

Each group will share their report with another group for review.

As a group, review the shared report and create a feedback document of things you like, things that could be improved and things you feel are missing.

ACTIVITY

🔍 Start building your portfolio

Take some time to begin work on putting together a way of presenting their portfolio. As a group, we can discuss ideas and ways of showing off all the excellent work you've done and how you rock at testing!

Day 3 recap!

Oracles
- Identify oracles to use during testing
- Discover problems and issues using oracles

Communications
- Describe different forms of communication and why communication is important
- Discuss the challenges surrounding communication and how to overcome them
- Explain your testing activities and what you have learnt during testing

Note-taking
- Identify the need for good note-taking skills
- Name different note-taking approaches
- Apply different note-taking approaches to different testing scenarios
- Compare different note-taking approaches with one another

Reporting
- Identify what to report from your testing
- Review structured approaches to reporting your testing
- Design a report that conveys your testing

Course recap

Day 1

Introduction
Quality
Testing requirements
Risks

Day 2

Risks
Structuring tests
Test Charters
Test Design

Day 3

Oracles
Communication
Note-taking
Reporting