# Purpose

The purpose of this document is to capture an initial Cognitive walkthrough using the set of “Personas” of the current Essential Eight Security Mitigation Toolkit and referring to the High-Level User Flow diagrams.

Appendix A contains the current list of Personas used as the basis for this walkthrough. Appendix B contains the current high level user flows and Appendix C contains a summary and guide of the process.

# Cognitive Walkthrough

The main assumption for this process was that we will not differentiate between each individual question and treat the process of answering one question the same as ansering all questions.

## TASK ONE – Home Page

### Question: Will the user try and achieve the right outcome?

#### Graham

* Will assume “Get Started” is where he should start but will not be prepared for what is going to happen next. i.e. There are going to be 32 questions that you will need to complete before we can calculate your maturity level.
* When Graham gets to the end there is no framework for him to process the outcome. He will have many questions that will not be answered. For example: This will produce 8 maturity levels (What do they mean? What do I have to do to change them?)

#### Sally

* Sally may come across terms she may not understand
* She has less time to invest in the product as her core business is supporting the selling of real estate
* Sally wants to be educated - without a guide, she may not even use it.
* Sally wants this to be a bit more graphical
* Will have a similar problem regarding the maturity levels to Graham

#### Malcom

* Wants a high-level link between company’s requirements and ASD Essential Eight
* Assess whether employees will benefit from the tool
* Will delegate web application use to junior employees
* Malcom concerned about data collected and retained. Needs to be able to trust the system.

#### General comments and observations

* Front Page need to include the following
  + Purpose & Framework overview. What is this all about?
  + Security Statement - link to more Governance and Compliance information. Why should I trust this?
  + Benefit eta - Process expectation. Why do this? (secure use strategies – not using company devices)
  + Explanation and/or link to ASD 8. Learn more.
* For the Grahams – rethink the Get Started link and allow for brief overview before starting. To ensure they are engaged before starting.
* For the Sally’s - Include more FAQ or “Learn more”
* For the Malcom’s – Needs to clearly see the link to ASD8 (logo), Australian government, endorsement.

### Will the user notice that the correct action is available to them?

Assuming that the correct action is to press “Get Started”

#### Graham

* Yes

#### Sally

* Possibly

#### Malcom

* Yes

#### General

* “Get Started” is ambiguous. There needs to be separate actions, instead of just one. For example: “Find out more”, “Start my assessment”, “Find out why this is secure”

### Will the user associate the correct action with the outcome they expect to achieve?

#### Graham

* No, because he will not understand the process and could end up confused and misinterpret the process and results.

#### Sally

* No, she will think this is for information rather than starting an assessment.

#### Malcom

* The action Malcom is looking for is not there to be pressed. However, a quick look using “Get started” might not satisfy his assessment prior to assigning to his team to complete.

#### General

* The question has been raised to what this web-app is above and beyond what the ASD8 PDF document is providing.
* The calls to action need reviewing.

### If the correct action is performed; will the user see that progress is being made towards their intended outcome?

#### Graham

* Not sure. There is no progress bar indicating the length of the journey.

#### Sally

* We do not believe she will not get to the end.

#### Malcom

* He might like to revisit the questions and see what his staff entered and then also with an option to change the answers, and then re-assess the maturity level.

#### General

* There is an assumption that 33 questions could take an hour or more to complete. This brings up the issue of ensuring that users are have a mechanism to start, stop, pause, and resume the questionnaire? What if they want to stop and do some research internally on the site?
* There is a need for a guide to the time required to complete and some percentage complete during the questions.
* If you answer yes to all 33 questions you get a 3 maturity Level.
* This is not understanding of what the levels means.

# The top three (3) takeaways from this assessment that needs to be addressed

1. The assessment should not be started unless there is minimal education piece with options to skip and/or learn more this includes the process and the how maturity level is generated (especially for Graham and Sally).
2. There needs to be more visible information on Governance, Compliance, and Government endorsement (especially for Malcom)
3. The home page needs to be revisited to accommodate all three Personas: Graham; Sally; and Malcom.

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# APPENDIX A – PDF of UX Personas



# APPENDIX B – High Level User Flows



# APPENDIX C – How to do a Cognitive Walk though

# About a Cognitive Workflow

Cognitive walkthroughs are used to examine the usability of a product. They are designed to see whether or not a new user can easily carry out tasks within a given system. It is a task-specific approach to usability (in contrast to heuristic evaluation which is a more holistic usability inspection). The idea is that if given a choice – most users prefer to do things to learn a product rather than to read a manual or follow a set of instructions. Please see Figure One.

https://www.interaction-design.org/literature/article/how-to-conduct-a-cognitive-walkthrough

Chart, bubble chart

Description automatically generated

*Figure One – Diagram of User Experience*

## Tasks Become Processes

Tasks are then divided up into a simple process to follow. So, for example, the log in process on a website might look like this:

* Open browser
* Navigate to site
* Click login button
* Enter user name in user name field
* Enter password in password field
* Click the login button

If the task is too complex to write in a list format – a diagram can be used instead.

## The Four Questions to be asked during a Cognitive Walkthrough

Blackmon, Polson, et al. in 2002 in their paper “Cognitive walkthrough for the Web” offer four questions to be used by an assessor during a cognitive walkthrough:

* Will the user try and achieve the right outcome?
* Will the user notice that the correct action is available to them?
* Will the user associate the correct action with the outcome they expect to achieve?
* If the correct action is performed; will the user see that progress is being made towards their intended outcome?

The assessor performs each action in any given task process and asks the four questions above. Let’s take a look at each question more closely and see what they’re trying to achieve:

### Will the user try and achieve the right outcome?

This question is trying to examine whether the interface is making assumptions about a user’s level of experience or knowledge that aren’t accurate. It can also help identify when a user’s expectations of an action don’t align with the actual action taken because they are using other reference points and becoming confused (for example, the use of language in your product is in common usage in other products and means something else).

### Will the user notice that the correct action is available to them?

Hidden or obscured controls are a problem for users. The more data that you present and the more choice that you present; the less likely it is that a user will know what to do. If you bury a control in a menu system rather than having it present while an action is taking place, the same is true; your users won’t know what to do.

### Will the user associate the correct action with the outcome they expect to achieve?

If your use of language is poor, for example you use overly complex words or industry jargon, it can be hard for a user to work out what is needed to achieve their outcome. This is also true when you use complex actions (think Ctrl+Alt+Del – it may be something you’re intimately familiar with now – if you use Windows – but it’s not exactly intuitive is it?) to carry out an action.

### If the correct action is performed; will the user see that progress is being made towards their intended outcome?

This will help you investigate when feedback in the system is missing, badly worded, easy to miss or plain old ambiguous. You need to let your users know about the progress they are making in the task. It’s why computer games use loading screens to signify moving on to the next level and why it’s always a good idea to have a “thank you” note when a customer finishes making an order.

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