MAKERS

Portfolio of working examples - Guidance

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Introduction

The purpose of the portfolio is to demonstrate your competence across the Knowledge, skills and behaviours for the Devops apprenticeship. The final portfolio is produced for 2 main reasons - Inform all stakeholders (the employer, Makers and the apprentice) that you are ready to be considered for EPA (End Point Assessment) and to prepare you for your final professional discussion. This is not a piece of work that is marked and graded towards your apprenticeship but must be completed to demonstrate your ability.

The Portfolio of working examples should contain projects which have been completed in the apprenticeship placement, and which, taken together, cover the totality of the Knowledge, Skills and Behaviours. Apprentices are encouraged to develop and maintain examples of their work throughout their apprenticeship - these small pieces are called projects.

The final portfolio is created throughout your apprenticeship. Each week when completing your retro diary you should think about the knowledge, skills and behaviours and then consider what work you have completed and is this work good enough to turn into a project for the portfolio. At the end of the

placement period when you think you are ready for EPA you will share your portfolio of working examples with your line manager and placement coach at Makers to demonstrate all the knowledge, skills and behaviours have been addressed and you are ready for gateway.

The Projects

A project is a discreet piece of work you've completed for your organisation (they cannot be training tasks). They could be any size: They could be big, covering every knowledge, skill and behaviour and every stage of the software development lifecycle; They could be small, covering just a couple of knowledge, skills and behaviours; They could be sized anywhere between these two extremes. The average number of projects in a portfolio is 4- 5 but every portfolio is different and could be more or less.

The Makers assessors only have access to this work, they don't know you and don't know how great you are at your job…. You have to show them! You will be completing work from day one, but your final professional discussion could be over 1 year later, therefore it is important this work can be used by you in the discussion. To aid your memory of the completed tasks, ensure you keep focused talking points that demonstrate the knowledge, skills and behaviours have been addressed.

Don't presume anything, the company may well be ‘well known’ it does not mean everyone understands the type of work you will be completing for them. You need to explain whether it was an epic/ticket/small coding job and be very clear of your part in the job, if you were a team, state what you did within the team, including any time you reached out for help. Be careful about using abbreviations, acronyms, or jargon that hasn't been explained/ expanded upon before use. This is for both technical or organisational abbreviations. **Remember to use the ‘I’ not ‘we’.**

What your portfolio will demonstrate

Before you complete any work you need to be confident you know why you are creating this and the end purpose. For the portfolio of working examples you are demonstrating to all stakeholders (the employer, Makers and the apprentice) that you have completed all the knowledge, skills and behaviours and are ready to enter gateway. Gateway will be assessed and you will be graded pass, merit or distinction.

The professional discussion focussed on only 20 of the Knowledge, Skills and Behaviours so when writing your portfolio you should focus on demonstrating these -

K3	How to use data ethically and the implications for wider society, with respect to the use of data, automation and artificial intelligence within the context of relevant data protection policy and legislation.
K6	A range of problem solving techniques appropriate to the task at hand, such as affinity mapping, impact maps, plan-do-check-act/Deming.
K9	Different organisational cultures, the development frameworks utilised and how they can both complement each other and introduce constraints on delivery.
K18	Roles within a multidisciplinary team and the interfaces with other areas of an organisation.
K19	Different methods of communication and choosing the appropriate one - e.g. face-to-face (synchronous, high bandwidth), instant messaging, email (asynchronous, low bandwidth), visualisations vs. words.
K20	Pair/mob programming techniques and when to use each technique.
K22	How their occupation fits into the wider digital landscape and any current or future regulatory requirements.
K23	The importance of continual improvement within a blameless culture.
K24	The difference between Software-as-a-Service (SaaS) v bespoke v enterprise tooling and how to make an informed choice that suits each use case.
K25	Maintain an awareness of cloud certification requirements.
S1	Communicate credibly with technical and non-technical people at all levels, using a range of methods; e.g. ‘Show and Tell’ and ‘Demonstrations’.
S2	Work within different organisational cultures with both internal and external parties
S4	Initiate and facilitate knowledge sharing and technical collaboration
S8	Work in agile, multi-disciplinary delivery teams, taking a flexible, collaborative and pragmatic approach to delivering tasks.
S13	Engage in productive pair/mob programming.
S16	Invest in continuous learning, both your own development and others, ensuring learning activities dovetail with changing job requirements. Keep up with cutting edge.
S21	Application of lightweight modelling techniques, such as whiteboarding, in order to gain consensus as a team on evolving architecture.
B1	Exhibits enthusiasm, openness and an aptitude for working as part of a collaborative community; e.g. sharing best practice, pairing with team members, learning from others and engaging in peer review practices.
B2	Invests time and effort in their own development, recognising that technology evolves at a rapid rate.
B4	Is inclusive, professional and maintains a blameless culture.

How to present your portfolio

Overview

There is no set format for assessment and there are no templates. It is expected that each project will be different from any others so unique to you. There is no set format for this portfolio, some learners may wish to: Have a Github repo, a website, an ebook, a notion doc, a slideshow or word proccesed document.

We do feel word processed documents are often the most suitable choice. They provide an easy way of searching the whole portfolio, they allow the assessors to add in line comments to your work to provide suggestions for improvement and they easily allow versioning between stages.

Starting your project

Once you have thought about the format that suits you, one of the best ways of structuring your first submission is to use the stage 0 knowledge check. This provides details for what needs to be included. You need to choose suitable headings and subheadings to do this.

How to demonstrate you have met the KSBs

As you break down the tickets you need to find a way of showing you have met the KSBs. The way we think works best is to have a mapping table of all the tickets you are presenting like or similar to the example below

KSB	**KSB description**	**Where I have met this standard (ticket/page link) ((there can be multiple entries))**	**Overview of how i met it (1 or 2 sentences only) ((If you make this clear in the explanation of the project you do not need this overview column))**

As well as the table of the KSBs, at the end of a paragraph(s) or sentence(s) where the KSB is demonstrated you should include the KSB/KSBs. See the Lorem Ipsum paragraph below as an example:

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. (K6, S21, B1)

Explaining your projects

For each of your projects you need to break down the steps from when you took the project on to its completion.

You could use the **STAR** method to explain your work.

- **S**ituation – What was the project that you were working on? This is the main opportunity to provide occupational context. Can you link this to an occupational duty?
- **T**ask – How and why was the task set to you?
- **A**ction – This is the segment in which you should do a work through of what you did (you don't need to include every single step but the most noteworthy achievements and a picture can be worth a thousand words!).

- **R**esult – What was the end outcome (usually achieved through reflection).

To ensure you effectively demonstrate your competency, you should ensure that your narratives contain answers to the following questions:

- ❖ WHAT
  - ➢ What did you do?
  - ➢ What deliverables did you produce?
- ❖ HOW
  - ➢ How did you do it?
  - ➢ What was your process?
  - ➢ What problems did you overcome, and how?
- ❖ WITH WHOM
  - ➢ Who did you do it with?
  - ➢ Who did you do it for?
  - ➢ At what level did you interact with the team, clients and/or other stakeholders?
- ❖ WHY
  - ➢ Why did you do it?
  - ➢ What was the context?
  - ➢ What was the business need?
  - ➢ What impact did your work have?

The Timeline of assessment

Within your apprenticeship you will have 4 releases (called stages) for the assessor to see your work. This will give you the opportunity to produce a portfolio which will enable you to be ready for your professional discussion.

The Stages

- **Stage 0** - an introduction, description of role and intro to the company/team the learner is working with, including 1 project. Set out your design idea - and get a green light to go forth/ make sure you are on the right track. The stage 0 knowledge check is a good checklist of what needs to be included at this stage. Max recommended 4000 words.
- **Stage 1** - the portfolio with at least 2-3 projects showing working examples of at least 40% of the KSBs. The balance to be struck is a good enough demonstration to gain useful feedback from the assessment team. Max recommended 10000 words.
- **Stage 2** - the portfolio release should be at least 80% complete with evidence for all KSBs, most fully demonstrated.Max 15000 words.
- **Stage 3** - the learner thinks their portfolio covers all KSBs and wants this validated by the assessment team. Max 15000 words
- **Gateway** - This is expected when everything is fully completed.

The releases are soft touch approaches to assessment as the portfolio itself is not assessed, the outcome of these releases will be feedback by:

- **Qualitative** comments - some areas of strengths, areas for improvement - next steps
- **Quantitative** - how many of the KSB's have been met

Although this timeline may not be for all learners, a rough timeline may look like:

Months 1-4	SD Bootcamp	**Training**
Months 5-6	DO Bootcamp	
Month 7-8	**Stage** 0	**Placement**
Month 9-11	**Stage** 1	
Month 12-14	**Stage** 2	
Month 12- 14	Review 1 (Can only be booked once **Stage** 2 is completed)	
Month 14- 15	**Stage** 3	
Month 15-17	Gateway (your portfolio of working examples would be complete)	
Month 15-17	Review 2 (Can only be booked once **Stage** 3 is completed)	
Month 17	Preparation for Gateway - EPA	
Month 18-22	Gateway	**Assessment**

The Knowledge checker

The knowledge check must be completed before each release of your portfolio, you are likely to have around 4-5 projects on average within your portfolio. After you have submitted a project the assessors will pick the project up and give feedback to you either confirming the KSB'S you have chosen or giving you feedback as to why they have not met. This document gives you more information on what you can expect. NOTE: There is a different knowledge checker for stage 0 and then you use the same one for each of Stage 1 and 2 and 3

Reviews with the assessment team

During Placement there are also 2 reviews that take place. The goal of these reviews are to prepare you for the end point assessment activities; as well as provide feedback on how gateway ready you are. Each review will be over Zoom with an assessor and should take between 45 - 75 mins - you should find a quiet place for this to take place. Reviews will be booked with your placement coach The following document provides more details

Pass and Distinction Criteria

The table below outlines the assessment method 2 KSBs and differences between pass and distinction. It is good to consider this when thinking about your professional discussion

Pass - Meets all the pass criteria	**Distinction - meets all the distinction criteria**
Organisational Culture	
Explains how an organisation's culture can both provide creative freedom and introduce constraints. Explains the connection between culture and the organisation's potential for continuous improvement with both internal and external parties. **(K9, K23, S2)**	Explains the mindsets that underpin organisational culture - e.g. outcome versus activity driven, collaboration versus silos, accountability, trust and empowerment and their impact on the organisation. Assesses the difference between risk avoidance and risk acceptance and how these link to culture
Data Ethics	
Identifies relevant data protection legislation and assesses its impact on the ethical use of customer data, as well as its relevance to emerging technologies, such as Artificial Intelligence and Machine Learning. **(K3)**	
Problem Solving	
Identifies different problem solving techniques and evaluates how they use modelling approaches that are best suited to each technique in order to gain consensus as a team. **(K6, S21)**	Describes how they facilitated an incident postmortem/lessons learned session. Explains the root cause analysis process. Gains consensus on an improvement plan, including accountabilities and the implementation timeline.
The Profession in Context	
Identifies the typical multi-disciplinary team roles and explains how they fit within the organisation and the wider digital landscape. Explains how they completed a task, deploying a flexible, collaborative and pragmatic approach with peers and other stakeholders. Describes examples of different communication methods used when dealing with internal and external stakeholders Explains how they have acted in an inclusive and professional manner. **(K18, K19, K22, S8, B4)**	
Tooling & Technology	
Explains the difference between the various types of implementation - on premise v SaaS, open source v enterprise, bespoke v off-the-shelf. Explains an example of having utilised the right type of tool for a particular task, describing the pros and cons of the alternatives. **(K24)**	Justifies their choice of tooling and the potential impact of making an alternative choice explaining the cause and effect of making the wrong decision.

Continuous Learning & Development	
Explains the CPD undertaken by themselves in order to keep up with cutting edge technologies and maintain appropriate certifications. Explains how they invest in others continuous learning and activities and the impact this has on their own development. **(K25, S16, B2)**	Gives examples of how their CPD has had a positive impact on theirs and their team's work. Explains how this has helped them perform their role better and make better technology choices
Peer review	
Explains the benefits, in terms of security and overall quality, of subjecting written code to the scrutiny of others. Explains how they collaborate on code through pair/mob commits. **(K20, S13)**	
Communicating and Knowledge Sharing	
Explains when they have: a) lead a demonstration or discussion in an engaging manner, communicating at the right level to suit technical and non-technical audiences. b) worked collaboratively to share knowledge through, for example, blog posts and pairing on tasks. **(S1, S4, B1)**	

Additional advice on breaking down the portfolio

If you feel you would like more ideas than the information above and in the knowledge checks, the following section provides more detail breaking down what you should include in your portfolio.

Starting your project

Once you have thought about the layout that suits you it is important to introduce yourself and the company - understanding your story and how you got here is important. You need to choose the heading and sub heading to do this.

Everyone works at different companies and it is hard to understand the business from merely a name. You need to introduce the company, use the headings and subheading you feel comfortable with to tell us all about the company, a little about their values and ethos. Then think about the working team, the stakeholders and environment you are in, paint us a picture of what this is, your daily/weekly life. What is the communication methods used when dealing with internal and external stakeholders? You could bring in here about the company's methodology. Are they Agile? and how this works in practice - especially how you link into this. Think about the legislation you have had to consider such as your

working environment - health and safety, data protection legislation and the ethical use of customer data

As you break down the tickets it may be useful to have a mapping table of all the tickets you are presenting such as the date completed, name of the ticket, a brief description, what knowledge, skills and behaviours are covered. It could look like this-

The ticket

Once you have done an introduction you can start on describing the ticket/task you are working on. Refer back to earlier in the document and the star method. You need to in detail set the scene:

How did you get the ticket?

What was the situation?

Are you a team?

How will you work?

Were there any meetings prior to the ticket?

Were you involved in the meeting and if so how did you contribute?

Explain what is the organisation's culture?

Do you have to break the ticket into tasks?

What legislation have you had to consider in this project?

So much detail is required here so think carefully about your headings and sub headings.

Outline the tools and techniques you will be using explaining how you choose the right type of tool for a particular task, describing the pros and cons of the alternatives. Considering company protocols as well as industry standards.

You may want to highlight any learning or research you had to undertake to complete this task - however small.

You need to remember to add detail, go through the knowledge, skills and behaviours you are aiming to demonstrate. For each knowledge, skill and behaviour you should be talking about **HOW** you applied it and **WHY** you applied it. Where you can add screenshots of evidence making sure this is references in the text and is clearly labelled.

Make sure it is clear what was your part of the ticket, when did you pair or mob, outline how this worked and the benefit for the ticket/task.

No one expects there to have been no problems along the way, explain how you have solved issues, who did you consult? Did you use any problem solving techniques?

Conclusion

Each project must have it’s own conclusion, at the start you will have described what you set out to accomplish - talk us through did this happen?

What lessons have been learned?

Finally what did the business get from you completing this project? Think about the aims of the business and how you have worked towards them and show us you understand the aims.

From all at Makers good luck

Version Control

Version #	Date	Updated by	Description
V1.2	July 22	Catherine	Changing wording from Releases to stages
V1.3	Oct 22	Ben	Tidying, index added