

Self-Learning Tool Proposal

In INFO1111 one of your 3 key Areas is Self-Learning. You will be spending a significant portion of your time in this unit developing your own understanding of a tool for which no learning material or activities will be provided to you by the teaching staff of this unit. This tool will be one you select.

However, a key aspect of self-learning is self-assessment. Most of the time when you are learning something on your own, nobody is there to give you an exam, or mark your assignment to give you a % mark that tells you 'yes I learned that'. So you need to be capable of answering for yourself whether you have learned something – and to what extent.

Because of this, in INFO1111 you will not only be asked to learn something on your own – you will (in part) be *writing your own assignment specification and marking criteria*.

This is a significant challenge, because obviously you *will* be assessed by us as to whether you have achieved something, and to what Level 0-4 you have achieved it. Your specification and marking criteria are the outcome of this first submitted work in the Self-Learning Area.

Step 1: Fill in the Self-Assessment Instrument.

There are many things out there to learn. A large part of your tool proposal is the choice of which of the near-infinite things you might choose, and more importantly, why you chose it. This is not something we can answer for you – we know have you enrolled in INFO1111, and that limits 'everything' down to 'computing tools', but what tools make the most sense for you will be based on your answers to the self-assessment instrument.

Furthermore, most things will have pre-requisite knowledge. Just like you can't enrol in COMP2017 until you have completed INFO1113 – because you need the knowledge from INFO1113 to succeed in COMP2017 – there will be things you might want to learn, but can't yet because you need to learn other things first. So another part of the self-assessment instrument is about you reflecting on what you already know, and what might be a logical 'next step'.

Step 2: Select a Domain and Tool

Once you have filled in this basic understanding of yourself, you must then use it to select what you are going to learn. The Domain should match one of the majors for the Bachelor of Advanced Computing: Computer Science, Software Development, Computational Data Science, or Information Systems (note that this does NOT need to match what you are enrolled in!). Because you will need a second Domain as well, we will call this domain the 'Tool Domain'.

Within this tool domain, you should then select a tool. There are a few ways you can do this – here is a recommended approach:

- Start out by investigating your domain. We have provided you with some general ideas/categories to get yourself thinking. Find what tools are available to you to learn.
- Come up with a shortlist of tools that you feel match what you have written in your self-assessment instrument – tools that might help with identified needs, career ambitions, advance existing experience, etc.
- Now see what resources are available for each of your shortlisted tools. How easy or difficult do you think it will be to use those resources to learn your chosen tool?
- Once you have an idea of your tools, select one that you think represents
 - Benefit to yourself based on your personal goals/ambitions

- Something that you think you can start learning right away, without needing to learn a bunch of other things first
- Something that you think is ‘feasible’ – that is, something you think you can arrive at a good working understanding of over the next couple of months of this semester.
- Something unrelated to anything someone in your group has chosen
- Something that you **do not already know and are not being taught elsewhere** – it might sound like a good way to sneak through this requirement, but one of the things you will be assessed on is a reflection on your learning methods and journey. This will be *exceedingly difficult* if you have not actually done proper self-learning, please don’t fall into this trap.

Step 3: Confirm your intended tool with your tutor

During your tutorial, you should discuss your intended tool with your tutor. They will be reviewing it on the following criteria:

- **Relevance:** Is the tool relevant to INFO1111 and one of the primary computing Domains?
- **Benefit:** Can you show that the tool is likely to provide some benefit to you as identified in your Self-Assessment Instrument?
- **Novelty:** Is the tool something you have not already learned, and are not enrolled to learn at the moment? (and have any of your groupmates chosen something similar?)
- **Scope:** Does the tool have sufficient complexity that you are likely to be able to specify the necessary Levels to learn?
- **Approachability:** Do you have the background knowledge required (if any) to be able to start learning this tool right away?
- **Resources:** Have you obtained some starting resources for learning this tool?

You should do this in your tutorial – there will be time allocated for this in tutorials 3 and 4. To ensure that this process does not take time it should not require, have the answers to these questions ready to go – if you do not your tutor is likely to move on to the next student who wants to review their tool choice. You will need all of this information written up for your Proposal and Report Introduction anyway.

Step 4: Pick a ‘Domain of Application’

Don’t let the name confuse you – this is not your primary tool Domain, e.g computer science or information systems. It is a domain outside of computing that you intend to imagine the use of your tool in. For example with git, your domain of application might be public health, or sports, or finance. The idea is that you are imagining a real-world situation, and your tool is part of a computing project related to that domain of application.

Step 5: Fill out a Tool Proposal

You have been provided with a sample Self-learning Tool proposal for Git, which has the different levels 1-4 indicated if ‘git’ was your chosen tool. You have also been provided with a template for your own tool proposal.

Fill out this proposal, and for each level select something for your chosen tool that you believe meets the following criteria:

Level 1: Basic Application

Shows you can apply your tool to solve simple problems. This will be demonstrated by a part of your final written report where you include evidence of something or things you have created using your chosen tool to solve hypothetical problems you have found or developed related to your domain of application.

Level 2: Basic Knowledge

Shows you can identify when and if this tool might be appropriate to use on a given project. This will be demonstrated by another part of your final written report where you analyse how relevant your tool might be to different situations in your domain of application. This must include a SWOT analysis of your tool in this domain of application, and include examples of when it would be useful and when it wouldn't, and why.

Level 3: Advanced Application

Shows you can apply your tool to solve advanced problems. These problems should require an in-depth understanding of advanced features of your tool. This will be demonstrated by both a section in your final written report, and a live demonstration of what you have created and how to your marker (which must be applicable to your domain of application).

Level 4: Advanced Knowledge

Shows you can compare and contrast your chosen tool with other related tools, and demonstrate an informed decision regarding tool choice. This requires you to learn not just about your own tool, but about others it might be in competition with depending on the circumstances in your domain of application. This will be demonstrated by both a section in your final written report, and questions your marker will ask you during your live demonstration. Note that to achieve Level 4 your overall report must itself be written as a self-learning resource for others – that is, what you write should be useful for someone like you who wants to learn the same tool.

Next Step:

This step is a blend of application and knowledge. It should include aspects of application and knowledge that go beyond what you have set out to achieve for levels 1-4.

There are 2 reasons why you must include this – first, we want you to continue learning your tool after you finish INFO1111! If it is a benefit to you to learn it, then obviously it makes sense to keep going. Deciding in advance what you will do (whether in the gap between semester 1 and 2, or later on) is the first step to making sure you do.

Second, if we believe that what you have chosen at any particular level is too simple/easy, we will take from higher levels and merge down – so things you have chosen for Level 3 Advanced Application might be dropped into Level 1 Basic Application. 'Next Step' is also there so if you run out of things, we can take from here and add them into the relevant Levels rather than making you submit a new Proposal.

Step 6: Write up your initial Report

You will eventually be submitting a Report as part of your Self-Learning Area assessment. Some of the information you need for this report you have already obtained – your tool domain and tool choice, the link it has to your personal goals, your domain of application, and initial self-learning resources. Partly to ensure that you do go through this process properly so we can be confident you

have the opportunity to succeed, and partly so we have the opportunity to give you feedback on your writing, you will be submitting this initial 'chunk' of your Report along with your Tool Proposal.

Use the Report Introduction Template to fill out this information.

Step 7: Submit

You must then submit a single PDF document containing:

- Your completed Self-Assessment Instrument
- Your completed Tool Proposal template with Starting Resources list
- Your completed 'Report Introduction' template

Make sure that each of these are clearly readable in the PDF document that you create – it is better to embed tables rather than screenshots, and if needed most PDF tools can combine portrait and landscape pages in a single document.

Step 8: After submission

Once you have submitted your proposal it will be assessed by the teaching team to see if it matches the above requirements. As previously mentioned, any Levels that are deemed too simple/easy will have more difficult elements from higher Levels moved down. Once this process has completed you can end up with 1 of 3 outcomes:

- **Approved.** Your full Levels 1-4 proposal is approved, either as it was submitted, or with modifications made by the teaching team. You should now begin work on your Level 1 goal.
- **Approved Incomplete.** Your proposal is approved, but not all the way to Level 4. This usually means we ran out of elements to 'push down' from higher levels. You may work on your approved goals until you run out of approved goals, and reach the Level that corresponds to that. You may optionally resubmit an extended Proposal to see if you can be approved for further Levels. Note that this resubmission has a **2-week lag**. You will not receive approval or rejection until 2 weeks after you have submitted a new Proposal. There is no due date, but if you run out of weeks before the end of the semester you are no longer able to be approved for new Levels.
- **Rejected.** Your proposal is not approved for any levels, and you will need to resubmit a new proposal. This follows the same 2-week lag as other modifications.

In all cases where you need to resubmit you are invited to discuss your proposal with your tutor, make use of Ed, office hours (TODO – do you have office hours?) etc. to avoid wasting 2 weeks.

You will also receive feedback on your Report Introduction which you should use to improve this before you continue writing your Report.