# INFO1111: Computing 1A Professionalism

# 2025 Semester 1

# Self-Learning Report Task 2: Advanced: [Your tool/technology here]

# Student Name: ??

# Student ID: ??

# Submission number: ??[i.e. 2, or 3]

# Vercel website link (live site): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Github link: ?? Please share your github repository with your tutor only, don’t make it public

In addition, please submit a zip file of your codebase on canvas (this report should not be part of the zip file)

# **Instructions**

# ***Important:*** *This section should be removed prior to submission.*

# You should use this Word template to generate your self-learning report. Keep in mind the following key points:

# **Submissions**: There will be three opportunities during the semester to submit a self-learning. For each submission you can attempt one task (the Foundation Report is Task 1 ) and aim for a rating of ‘OK’ or ‘STRONG’. Each submission should use the same report template but amended to include new information. You can only attempt the Advanced Task (the Advanced Report is Task 2) after you have achieved a ‘STRONG’ on the Foundation Task.

# **Minimum requirement:** There is no minimum requirement

# **Using this template:** When completing each section you should remove the explanation text and replace it with your material.

# **Referencing:** You should also ensure that any resources you use are suitably referenced, and references are included into the reference list at the end of this document. You should use the IEEE reference style [1] (the reference included here shows you how this can be easily achieved)

# **Scenario**

In New South Wales, strata-titled apartment buildings are governed by the [Strata Schemes Management Act (2015)](https://classic.austlii.edu.au/au/legis/nsw/consol_act/ssma2015242/). Each building is subdivided into units, or lots, and are collectively part of the Owners Corporation (aka body corporate) which is responsible for things like the maintenance of common areas, and insurance for the building. For this, owners pay levies into an administration fund and capital works fund.

The act sets out the responsibilities of the Strata Committee, which are elected representatives of the owners, responsible for managing the body corporate. There must be a Treasurer, Secretary and Chairperson, and it can have other members, up to a maximum of 9.

Imagine you have been elected to the committee and are now managing the building yourself. Design a website to support the management of the building. For the advanced level, you should try and incorporate most of the following, if not already completed in the Foundation level:

* Document storage for unit owners to view things like the insurance certificate or financial reports
* General information about the building for the public
* Strata roll with contact details for unit owners and how many unit entitlements they have (ie, what proportion of the building do they own)
* Generating levy notices for unit owners
* Managing the budget
* Managing maintenance requests and tracking of work orders

You do not have to implement these features specifically, you can implement others too. This is just to give you some ideas about the context. You are free to come up with your own ideas relating to this context too.

# **Overview of the tool/technology to be self-learnt**

For Task 2: Advanced you need to select a topic of your choosing which should complement what you have already done in Task 1. For example, this may be an alternative cloud platform or web framework, or a database system that you did not use in Task 1. Or it may be more advanced features of a tool you already used in Task 1.

**Steps ratings for self-learning your selected technology**

The following is a list of steps you need to carry out to meet the goals of this report to achieve specific ratings. For each step you must provide evidence that you have successfully carried out that step, as described in Section 4 above.

**OK Rating**

1. To achieve an “OK” rating you will need to self-learn how to do and demonstrate all of the following using Vercel and PHP:
   1. PHP is not offered as one of the default runtimes or languages in Vercel. Investigate how to allow Vercel to run PHP scripts, and add this ability into your Vercel project. Create a PHP webpage in your website, with content relevant to the strata management scenario.
   2. Connect your Vercel project to a database. Explain and compare the different storage options when using Vercel, and how it differs to a traditional server architecture. Integrate functionality using the database on at least 3 pages of your website.
   3. Look into cookies and how they can be used to keep track of, for example, the currently logged in user. Provide functionality on your website that uses cookies in some purposeful way.
2. Demonstrate your understanding of the new tool/technology (this may be the database, or another tool).
   1. Identify three things you will do to demonstrate your understanding of the tool/technology you have chosen and your ability to use it. These must be creating a practical application or feature that is relevant to the strata management scenario.
   2. Application artefacts

* Include a description of what you actually created to demonstrate your understanding of the artefact (what does it do? How does it work? How did you create it, what could it be used for?) (50-100 words)
* Include any code or other related artefacts that you created (these should also be included in your GitHub repository).
* Include screengrabs to show what you have done and annotate these to explain what it is showing and what the application does, and how you achieved this.

1. Show that you have actually understood the tool or technology at a relatively advanced level. You will need to analyse it by e.g. comparing it to alternatives, identifying key strengths and weaknesses, and the areas where this tool is most effective.
   1. Strengths

What are the key strengths of the item you have learnt? (50-100 words)

* 1. Weaknesses

What are the key weaknesses of the item you have learnt? (50-100 words)

* 1. Usefulness

Describe one scenario under which you believe the topic you have learnt could be useful. (50-100 words)

* 1. Key Question 1

Describe how the tool you have used complements or contrasts with the work you did in your project for Self-Learning Task 1. (50-100 words)

* 1. Key Question 2

Describe how the tool fits or could fit into the web development process and tech stack of a web application. (50-100 words)

1. Demo what you have created to your tutor in the tutorial

**STRONG Rating**

To achieve a STRONG rating, in addition to the above, you will need to do the following.

1. More advanced applications of the tool to your project – you will need to identify these yourself, why they are considered to be ‘advanced’ and then show evidence to document how you accomplished them and what you achieved. If you are unsure about what may be considered ‘advanced’, please discuss with your tutor.
2. Alternative tools/technologies - analysis and comparative evaluation
   1. Identify 2 alternative tools/technologies that can be used instead of the one you chose for your topic. (e.g. if your topic was React, then you might identify Vue and Angular. Or if your topic was SQL, alternatives could be NoSQL and file blob storage)
3. Comparative Analysis
   1. Describe situations in which both your tool/technology and each of the identified alternatives would be preferred over the others (100-200 words).

### Tool/Technology Selection

* 1. What is the tool/technology you have selected? You cannot choose a tool that you are doing in the Skills group project, nor a tool that you will be learning later in your degree (eg, C is taught in COMP2017, and Java is taught in INFO1113). You can however choose tools that make use of these (for example, the Java Spring framework).
  2. Why have you selected this tool/technology?
     1. Compare how your chosen tool complements your learning and project in Task 1.
     2. Decide what you will use this new tool to develop or create. Is it an enhancement of your existing project in Task 1? Is it something completely different?
  3. What benefits do you think learning this tool/technology will give you in the IT industry?

### Journal of self-learning activities and reflections. *Use the template* *Journal of self-learning activities an reflections*) *to record each of your activities as you do them, along with your thoughts about the activity. Submit this journal weekly to show and discuss in each week’s tutorial. Use the journal as a source of information for sections 5 and 6 of this template.*

### Self-learning Plan

* 1. **Goals**:

Your goals for this report are to:

1. Demonstrate your knowledge (understanding) of the tool/technology you have selected by carrying out the steps specified in the instructions.
2. Demonstrate your skill in applying that knowledge to create artefacts using your tool/technology by carrying out the steps specified in the instructions.
3. Analyse, compare and evaluate your tool/technology in a broader context by carrying out the steps specified in the instructions.
4. Evaluate your self-learning processes.
   1. **Resources**
      1. **Information resources required**

*Identify the resources you plan to us*e *(add more rows if required).*

|  |  |  |  |
| --- | --- | --- | --- |
| **TITLE** | **AUTHOR** | **PURPOSE** | **REFERENCE & LINK** |
| *What is the title of the resource?* | *Who is the author of the resource?* | *What will you use this resource for (e.g. learning how to create a project).* | *Include the reference for the source and the link (shorten the link if it is long).* |
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* 1. **Schedule**
     1. *List and describe the steps you will take to execute your plan and when you will complete them.*

|  |  |  |
| --- | --- | --- |
| **STEPS NO** | **DESCRIPTION** | **DATE** |
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### Results: evidence of the steps you have attempted from the instructions

Provide evidence for each step you have completed (e.g. in the form of screenshots with annotations that explain what you have done in this screenshot and how it represents that). Document your process of accomplishing the requirements step by step, including how you achieved each one.

### Evaluation

* 1. Knowledge and skills

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| --- | --- |
| **QUESTIONS** | **YOUR ANSWER** |
| 1. To what extent did you reach the goals for this report? |  |
| 1. What barriers did you face in reaching the goals? |  |
| 1. What worked well for you in doing the report? |  |
| 1. What was frustrating? |  |
| 1. Other?..... |  |

* 1. Reflect on your use of generative AI. Keep in mind, for this assignment any use of AI to write code and help with your learning is allowed an encouraged, however the [University does not condone the use of the DeepSeek AI model](https://www.sydney.edu.au/news-opinion/news/2025/02/06/australia-bans-deepseek-from-government-devices-experts-react.html). All students have access to Microsoft Copilot for free, read more here: [How to use generative artificial intelligence in the classroom - The University of Sydney](https://www.sydney.edu.au/study/student-life/student-news/2024/08/05/how-to-use-generative-artificial-intelligence-in-the-classroom.html). You may also choose to use an AI-powered code editor (IDE) like [Cursor](https://www.cursor.com/en) or [Windsurf](https://codeium.com/windsurf).

|  |  |
| --- | --- |
| **QUESTIONS** | **YOUR ANSWER** |
| 1. To what extent did you use generative AI in this task? Provide an example of where you used AI. |  |
| 1. What kinds of prompts were helpful? Did you ask follow-up questions? For what kinds of things? |  |
| 1. What kinds of prompts were not helpful? Were there any instances of the AI model giving output which did not work or was not expected? |  |
| 1. Imagine that AI was unavailable or its use was prohibited. Do you think you would you have been able to achieve the goals for this task? Why / why not? |  |
| 1. Do you think that this task has improved your confidence with using AI? What new use cases of generative AI did you discover, and what applications do you think they will have for you in the future? |  |
| 1. Identify and compare the aspects of the task that AI could help with, and the aspects that AI could not help with. Do you think that in the future, AI capabilities might expand even further to cover more of those things? How would you expect your role to adapt, if you imagine that this task was part of your job? |  |
| 1. Other?..... |  |

* 1. Self-learning learning processes

|  |  |
| --- | --- |
| **QUESTIONS** | **YOUR ANSWER** |
| 1. What worked? |  |
| 1. What didn’t? |  |
| 1. What would you do differently? |  |
| 1. What did you learn about yourself? |  |
| 1. What recommendation would you make to your future self? |  |
| 1. What would you recommend to someone else? |  |
| 1. Other?..... |  |

### Learning sources

Learning Source - What source did you use? (Note: Include source details such as links to websites, videos etc.). Contribution to Learning - How did the source contribute to your learning (i.e. what did you use the source for?). You may use information from your Journal for this.

|  |  |
| --- | --- |
| Learning Source - What source did you use? (Note: Include source details such as links to websites, videos etc.). | Contribution to Learning - How did the source contribute to your learning (i.e. what did you use the source for)? |
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Bibliography

[1] The University of Sydney, \_Referencing and citation styles: IEEE,\_ 2022, see https:

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