INFO1111: Computing 1A Professionalism 2025 Semester 1

Self-Learning Report

Task 1: Foundation: Learning Vercel

Student Name: ??

Student ID: ??

Submission number: ??[i.e. 1, 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 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 this report. 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:** Remember that in order to pass the unit, you must achieve at least a rating of 'OK' on 'Self-Learning Report (Task 1: Foundation)'.
- Using this template: When completing each section you should remove the explanation text and replace it with your material. Your report should begin with the "Background" section.
- 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 <u>Strata Schemes Management Act (2015)</u>. 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.

Overview of the tool/technology to be self-learnt

<u>Vercel</u> is a cloud platform for hosting web applications, particularly optimized for frontend frameworks and static sites. It enables developers to deploy web applications with ease, offering features like automatic CI/CD, serverless functions, and edge computing. Vercel supports popular frameworks like Next.js, React, Vue, and Svelte, allowing seamless deployment and scaling.

Knowing how to use Vercel and similar platforms to it is an important skill for several reasons:

- Real-world application: Vercel (and similar platforms) are widely used in the industry for hosting modern web applications. Learning to deploy and manage applications on Vercel is a valuable skill for frontend and full-stack developers.
- **Seamless deployment:** Vercel simplifies the deployment process with continuous integration and automatic previews, reducing the complexity of managing infrastructure.
- **Performance optimization:** Vercel provides built-in performance optimizations such as edge caching and automatic scaling, ensuring fast and reliable applications.
- Career readiness: Proficiency in using Vercel is beneficial for web development roles, as many companies leverage it or similar cloud platforms for rapid and efficient deployment workflows.

Steps and ratings for self-learning Vercel

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

OK Rating

To achieve an "OK" rating you will need to self-learn how to do and demonstrate all of the following using Vercel:

- 1. Create a new project, name it something of your choice related to the Strata Management scenario which your website will be about.
- 2. Deploy a simple web application using Next.js, React, or another framework / template of your choice. Modify it to suit the scenario.
- 3. Connect a GitHub repository to Vercel for automatic deployments.
- 4. Set up environment variables in the Vercel project.
- 5. Upload static assets to the project (eg, images, PDFs)

STRONG Rating

To achieve a "STRONG" rating in addition to the above you will need to self-learn how to do and demonstrate all of the following using Vercel:

- 6. Configure the project settings, using the vercel.json file. Explain what the different options are, their effects and uses cases. Look into deployment regions, cron jobs and custom build commands.
- 7. Investigate serverless edge functions and make 3 functions that achieve something related to the strata scenario. How are edge functions different from regular serverless functions?
- 8. Make at least 5 new webpages on your website and demonstrate some basic features of HTML, CSS and JavaScript.
- Create a HTML form to receive information from users through POST and GET requests. Explain the difference between these types of HTTP requests. Also, investigate HTTP status codes and how you can implement a redirect in a serverless function.

1. Background

1.1. Motivations for self-learning:

Complete the **Self-learning** survey: motivations to reflect what motivates you to self-learn (i.e. to teach yourself to know something or to do something).

In this section, please decide what your goal for this project will be — what will be the purpose of your web application deployed on Vercel?

1.2. Effective self-learning and its challenges:

- 1.2.1. What is the most effective way you currently self-learn?

 Write ~50 words describing what works best for you when self-learning.
- 1.2.2. What is the most difficult challenge for you when you are self-learning? Write ~50 words describing what you find difficult when self-learning.
- **2. Journal of self-learning activities and reflections.** Use the template **Journal of self-learning activities and 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.

3. Self-learning Plan

3.1. Goals:

Your goals for this report are to:

- 1. Demonstrate your knowledge (understanding) of Vercel by carrying out the steps 1-9 in the instructions.
- 2. Demonstrate your skill in applying that knowledge to creating a website project using Vercel by carrying out the steps 1-9 in the instructions.
- 3. Evaluate your self-learning processes.

3.2. Schedule

3.2.1. List and describe the steps you will take to execute your plan and when you will complete them.

STEPS NO	DESCRIPTION	DATE
1		

4. 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.

5. Evaluation

5.1. Knowledge and skills

QUESTIONS	YOUR ANSWER
To what extent did you reach the goals for this report?	
2. What barriers did you face in reaching the goals?	
3. What worked well for you in doing the report?	
4. What was frustrating?	
5. Other?	

5.2. 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 <u>University does not condone the use of the DeepSeek AI model</u>. All students have access to Microsoft Copilot for free, read more here: <u>How to use generative artificial intelligence in the</u>

<u>classroom - The University of Sydney</u>. You may also choose to use an Al-powered code editor (IDE) like <u>Cursor</u> or <u>Windsurf</u>.

QUESTIONS		YOUR ANSWER
1.	To what extent did you use generative AI in this task? Provide an example of where you used AI.	
2.	What kinds of prompts were helpful? Did you ask follow-up questions? For what kinds of things?	
3.	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?	
4.	Image 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?	
5.	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?	
6.	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?	
7.	Other?	

5.3. General self-learning learning processes

QUESTIONS	YOUR ANSWER
1. What worked?	
2. What didn't?	
3. What would you do differently?	
4. What did you learn about yourself?	
5. What recommendations would you make to your future self? What about your past self (before you started the task)?	
6. What would you recommend to someone else?	
7. Other?	

6. 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.

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Bibliography

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

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