



# DMIT2008 Assignment 4 Pt. B

Task: Loan Calculator Application React Principles Update

Due: Midnight on Friday December 7<sup>th</sup>, 2018

Weight: 10%

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## Overview

This is it. This is your chance now to apply greater learning and understanding of the principles of React in this simple application. You will be tasked with further updating part A of this assignment with a full React App implementation, taking into account the current issues with the way the app is built. You will have been provided with an overview of what's currently implemented as anti-patterns in the part A solution, and provided some starting points for where to begin moving forward.

## Expectations

- Remove two-way data binding wherever possible
- Apply the React data flow principle of 'one single source of truth'
  - Try to have application state (i.e. current loan and loans array) managed at the highest level and utilize props for sub-components to assist rendering
- The grading for this assignment cannot be outlined as explicitly as previous assignments as there are several ways to achieve the desired results
  - What matters is that you have applied principles laid out by the React project and that you can defend your decisions based on these principles
- **Any other requirements as laid out by your instructor in class**

## Delivery

Zip your project folder and submit it to Moodle by the deadline.

- **Do not include the node\_modules/ directory in your zip package.**

Seek help if you need it. **Late submissions will not be graded.**

## Grading Key

| Tasks   | Grade | Marks | Total |
|---|-------|-------|-------|
| <b>React App</b> <ul style="list-style-type: none"> <li>Removed two-way data binding</li> <li>Applied React data flow and management best practices, as explained by the React project documentation and contributors</li> </ul>  |       | 5     | 5     |
| <b>Write-up</b> <ul style="list-style-type: none"> <li>500-750 word write-up describing your implementation architecture, why you chose to do things the way you did (e.g. changes, updates, etc.), and how they relate to the React development principles. Include any additional thoughts you may have on the development process (e.g. things you liked, disliked, had trouble with, etc.)</li> </ul> |       | 5     | 5     |
| <b>Code Readability and Efficiency</b> <ul style="list-style-type: none"> <li>Efficient and maintainable techniques</li> <li>Code format</li> <li>Well documented</li> <li>Etc.</li> </ul> <p>Utilizes your own written code (i.e. not gathered from online sources such as StackOverflow)</p>  |       | -5    | -5    |

|             |  |    |
|-------------|--|----|
| TOTAL MARKS |  | 10 |
|-------------|--|----|

## Marking Rubric

| Marks  | 5 Marks Criteria [minus]  |
|--------|---|
| 5 [0]  | Task was completed with the highest of proficiency, adhering to best practices, and followed subject matter guidelines. The task was completed to a professional standard.  |
| 4 [-1] | Task was completed well, with some minor mistakes. Well above average work, shows good understanding of the task, and a high degree of competence.                          |
| 3 [-2] | Task was completed satisfactorily. Some features are missing or incorrectly implemented. Shows a moderate level of understanding in the task with room for improvement.     |
| 2 [-3] | Task completion is below average, the task was poorly completed. Shows understanding of the task and the requirements to implement, but implementation was poorly executed. |
| 1 [-4] | Some of the task was completed. Shows a lack of understanding in the subject matter and very poor execution.  |
| 0 [-5] | Not completed.  |

| Marks  | 3 Marks Criteria [minus]  |
|--------|---|
| 3 [0]  | Task was completed well, adhering to best practices, and followed subject matter guidelines.  |
| 2 [-1] | Task was completed satisfactorily. Some features are missing or incorrectly implemented. Shows a moderate level of understanding in the task with room for improvement. |
| 1 [-2] | Some of the task was completed. Shows a lack of understanding in the subject matter and very poor execution.  |
| 0 [-3] | Shows a little to no degree of competence in completing the task; not completed.  |

| Marks | 1 Marks Criteria              |
|-------|-------------------------------|
| 1     | Task completed satisfactorily |
| 0     | Task was not completed        |