# ­­SINGAPORE POLYTECHNIC

**SCHOOL OF COMPUTING**

Specialist Diploma in Full Stack Web Development (NSFSW)

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| Module Code | : | IT8906 |
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| Module Name | : | WEB AND MOBILE DEVELOPMENT USING FRAMEWORKS |
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| Acad Year/Semester | : | 2022/2023 Semester 2 |
|  |  |  |
| Set by | : | Jeremiah Ang |
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| Assignment Title | : | CA2 – React Routing & Redux |
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| Assignment Type | : | Individual |
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| Weighting | : | 30% |
|  |  |  |
| Deadline | : | End Week 16 (5th Feb 2023, 2359) |
| Deliverables | : | Application files (html, js, css, json etc) |
| Mode of Submission | : | Pushed to GitHub main branch |

WARNINGS:

Plagiarism means passing off as one's own the ideas, works, writings, etc., which belong to another person. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turning it in as your own, even if you would have the permission of that person. Plagiarism is a serious offence and disciplinary action will be taken against you. If you are guilty of plagiarism, you may fail all modules in the semester, or even be liable for expulsion.

50% of marks to be deducted for submission of assignment within ONE calendar day after the deadline. No marks shall be awarded for assignments submitted more than one day after the deadline.

**CA1 – React Core Concepts**

Students will enhance their CA1 to Reinforce their understanding of React Core Concepts.

**Assignment Objectives**

1. Reinforce understanding of Core Concept
2. Use React Router for Navigation
3. Use Redux to maintain states of application

**Assignment Instructions**

* You are to work on this project individually.
* The website you build will be a Movie Management System where admin will go in to manage the movies in their system
  1. Assume only admin have access to the system.
* Your website should be converted into a single page application, and should contain the following features:
  1. Update Movie
     1. Admin can select a movie from the list, admin will be redirect to another page to enter the new information.
     2. Returning to the list of movies should reflect the updated value
  2. Pin movies
     1. Admin can select up to 5 movies from the list to be pinned
     2. Admin can view pinned movies in a different page
* You are to use Context to
* Connecting to backend server/database not required
* Persistent storage is not required, the website should always start with a fix set of movies.

**Marking Scheme**

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| --- | --- |
| JSX   * Defining elements using JSX * Embedding JS expressions in JSX | 5% |
| Component   * Creating reusable components (e.g., as items in pin page) | 5% |
| States   * Using states in components (e.g., pinned/unpinned) | 5% |
| Events   * Detecting events to update states (e.g., updating movies, pinning/unpinning) | 5% |
| Conditional Rendering   * Using of Conditional AND or Ternary Operator to control what is displayed (e.g., pinned/unpinned) | 5% |
| List Rendering   * Using Loops or Array functions to create list of React Elements/Components (e.g., rendering pinned items) | 5% |
| Forms   * Tracking form’s state (e.g., updating movies) | 5% |
| Styling | 5% |
| React Router   * Create single page application (i.e., 1 index.html only) * Pass information between pages (e.g., Which item to update) | 10% |
| Redux   * Maintain site-wide states | 10% |
| Conformance to required features | 30% |
| Code quality   * Well and neatly indented * Sensible variable and component names * Sensible filenames | 10% |
| **Total** | **100%** |