

# Assignment Brief

<b>Qualification (s)</b>	UG: Web & App Development		
<b>Pearson Unit &amp; Number</b>	Unit 49: App Development Framework		
<b>Facilitator</b>	Prasanna Vaikunthavasan		
<b>Assessor</b>	Prasanna Vaikunthavasan		
<b>Written by</b>	Prasanna Vaikunthavasan		
<b>Date Issued</b>	Tuesday, December 15, 2020		
<b>Submission Deadline</b>	<b>Friday, January 22, 2021</b>	<b>Time</b>	<b>6.30 PM</b>
<b>Assignment Title</b>	Application Development (React Native/Expo)		

## Important

80% attendance will be mandatory to submit this assignment. Resubmissions will affect your course duration and assessed only with a pass result. For any improper submission or if your DVD is unreadable, your assignment will be considered as a non-submission.

## Submission Format

Create a GitHub repository named 'YourStudentID – YourFirstName – APP'. Your entire project should be available on this link.

There should be 2 folders and a file in the root directory of your repository.

### Folders

- Project – Your Code Submission Folder
- Report (Your report in .pdf type should be added inside this folder)

### File

- README.md file (giving all information about the project including your details)

Sharing a GitHub Repository link with your Module Leader is your submission. No links will be accepted after the submission deadline and all links given will be treated as final. (Strictly no editing of any code on the repo after the deadline is elapsed.)

All information sources and resources, including websites used to complete this assignment, must be stated and correctly referenced (eg. Harvard Referencing). No credit will be given for extensive copying from information sources and checks for plagiarism may be made on your submitted work.

## Resources

1. React Native documentation - <https://facebook.github.io/react-native/docs/getting-started>
2. Expo Documentation - <https://docs.expo.io/versions/latest/>
3. Module contents shared during the classes. (Slides, Practical Guides etc)

## Assignment Brief and Guidance

The assignment will test on the knowledge about different mobile application frameworks and the ability to read a use case and suggest a most suitable framework. At the end of the assignment there will be a GitHub repository hosted with code for an application and a report stating how the application was developed. Please find the use case requirement below and the respective task.

“ToDoNotes” is a mobile application which helps students to add Todo’s/Reminders and keep track to make sure nothing is neglected. The application should have the below basic features.

- Ability to type and input a Todo item
- Ability to view the Todo item which was inserted
- Ability to mark (strikethrough) an item when done
- Ability to delete all added Todo items from a button

This application should be developed in a short time as the students are almost at the end of the semester. Anybody should be able to access this application and it should be having a very good user experience so the students will enjoy it.

### Task 1 (Mobile Application Framework)

1. With your knowledge on application development frameworks provide the framework solution you would propose to develop “ToDoNotes”. Justify your answer.
2. Compare and contrast your frameworks with other available mobile frameworks stating the pros and cons (3 points each for pros and cons)
3. Suggest a value-added feature for “ToDoNotes” showing your creativity
4. What are the considerations done when deciding a mobile application framework?
5. State your favorite mobile application explaining why

### Task 2 (Git)

Create a new repository in your GitHub account. Make sure to use the correct naming convention. ‘YourStudentID – YourFirstName – APP’. Add a ReadMe file and give all information about your project. Clone the project to your machine (GitHub/Sourcetree) and add the following folders.

- Report – Contains a pdf file with answers to Task 1 (YourName.pdf)
- Project – Contains an App.js file for the answer to Task 3

### Task 3 (React Native/ Expo)

Using Expo Snack web client (<https://snack.expo.io/>) create a new project for the requirement “ToDoNotes”. Once done save your expo project and copy the contents to the App.js file in your cloned repository in GitHub. (Refer Task 2). Commit your changes with the message “ToDoNotes Code” and push your code to GitHub. Take a picture of the app running on your mobile and include in the Report.

Learning Outcomes & Assessment Criteria		
Pass	Merit	Distinction
<b>LO1</b> Explain the features of app development frameworks, and their use in the development process		<b>D1</b> Critically evaluate the benefits of different app development frameworks for projects on different mobile platforms
<b>P1</b> Discuss the function and use of app development frameworks <b>P2</b> Explain the relationship between app development frameworks and programming languages for different mobile platforms	<b>M1</b> Compare the features and functions of native and hybrid app development frameworks	
<b>LO2</b> Select an app development framework, based on the needs and requirements of a given brief		<b>D2</b> Produce a functional app prototype, using a selected app development framework, based on research and analysis of the potential benefits of the framework
<b>P3</b> Evaluate a brief to establish project aims and objectives <b>P4</b> Test app development frameworks, to identify the system to be used to meet requirements of a brief	<b>M2</b> Justify the selection of an app development framework based on technical features, design features and long-term code maintenance and updating	
<b>LO3</b> Develop a functional app prototype, for a defined mobile platform, using industry-standard tools and techniques		<b>D3</b> Critically analyze the development processes, highlighting potential strategies for improving future development projects
<b>P5</b> Use a selected app development framework, wireframing and testing to develop an app prototype <b>P6</b> Compile and debug app development code, to support a functional app prototype	<b>M3</b> Use version control systems to manage code development and plan for future updates	
<b>LO4</b> Analyze the development process and result of using a selected app development framework		
<b>P7</b> Review the code and interface development process, in relation to meeting milestones and deadlines <b>P8</b> analyze the way that the selected app development framework has enabled an effective development processing features and long-term code maintenance and updating	<b>M4</b> Critically evaluate the use of an alternative app development framework and how this would impact on future development projects	