

# Criteria A - Planning

## Description of Scenario

My client is my IB Physics teacher, Mr. X. IB Physics is a challenging class for many people, and Mr. X would like students to be able to quickly and easily access learning and studying resources to augment their learning. Students are often searching for easy and accessible review materials, so in our first meeting, he told me he would like an application that students can use to review flashcards related to IB Physics topics and read short summaries of the topics (see appendix for details).

Thanks to modern technology, there are a plethora of ways to distribute information at a large scale. To solve my clients problem, I need to create a way for IB Physics students to access and easily navigate useful learning resources to augment their learning in IB Physics. A mobile application is a great way to create an easily accessible and easy to navigate interface with information. To reach any students that do not have access to phones, a web application should also be available. I can solve my client's problem by developing a cross platform application that serves as a resource hub for IB Physics students.

## Rationale for Solution

To reach the most students possible, the product should be available on ios and android. So, I will use react-native. React-native is an open source mobile application framework developed by Facebook. It allows application developers to design applications in ReactJS for multiple platforms. Because this is my first time using react-native, I decided to make use of the Expo framework to increase the efficiency of my development. The Expo managed workflow will allow me to easily test my code across multiple platforms, and program the application in mostly one language, Typescript. My familiarity with javascript should help with learning Typescript. A limitation of using the Expo managed workflow is that it makes it harder to implement all fully native features for each platform, but that won't be a problem that affects this project. Mr. X liked the review content found on [ibphysics.org](http://ibphysics.org). So, in the interest of time, instead of writing new review material I will add links to [ibphysics.org](http://ibphysics.org) and other resources for the actual content. I will also use quizlet material Mr. X liked to create the flashcard content in the app.

## Success Criteria

- Users will be able to access flashcards specific to IB Physics topics.
- Users will be able to access good resources for studying each topic.
- The application will be compatible with android and ios devices.
- The application will follow the Apple Human Interface Guidelines.

- The application will have a digital version of the IB Physics Data Booklet.
- The application will have a page listing each IB Physics SL topic.