

CS 361 Caliper App

Problem Statement:

We need to train the users to properly use a caliper by application. Users will also be assessed on their skills to ensure that the application is effective.

Core Requirements:

Requirement Number	Requirement Description
1	Accept CAD data
2	Teach the user how to use caliper using a multimedia content delivery
3	Have user apply this information in a different simulated scenario by application
4	User can access and save their own process level on the app
5	User has the opportunity to provide feedback on the course
6	Test user before providing the information to obtain diagnostics

Software Components:

Software Name	Classification
Android Studio	Android Studio is for android platform that is used on the application. The Android studio will run on the
Java	Java can parse the data about caliper
MacOS: Xcode	Xcode can develop the MacOS app by swift code
Caliper Information	The caliper information is a collection of objects that will be used in teaching the user the proper way to use a caliper. It consists of the list of parts of the caliper and the video showing

	the proper use of the caliper. It is a collection of objects because it is similar pieces of information that will be used as part of our application. They will need to be modified to better fit into our program but they have all of the information needed.
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Core Requirements Solutions: Numbers correspond to requirements listed above

1. Application can use information about caliper
2. In order to provide the user with our application-specific learning content, we would create a web application using an HTML5 front end. Through this front end, the user would be able to navigate through our learning content in the form of text and videos related to the use of the caliper. HTML5 supports embedded video and vector graphics. We can also create HTML5 surveys to collect user feedback on the course.
3. Xcode can use swift code for Mac applications.
4. The Java can parse the data
<https://developer.android.com/training/basics/network-ops/xml>
5. The user will be able to provide feedback when finished with the course, to help further develop the applications ease of learning for others as well as spot any bugs that might have been overlooked.
6. Prior to the learning experience we would have the user take a test to assess their knowledge on a Caliper, using an Android app and Mac OS app. Then after teaching the user to use a Caliper correctly, we would have them repeat the same test from the beginning to show their results before and after to provide the user confidence in their skills and have diagnostics for the web application. All this data will also be stored in the application server data.