

Project Documentation

Two Big To Fail: Levi Emery and Jake Thornton

The app initially started as an MBTA tracker so that we could track when the next trains were coming using the MBTA API. The API proved to be rather complex and poorly organized by the MBTA itself. They are currently in the process of creating a new API and they acknowledge the current one's shortcomings. After struggling with the MBTA idea, we moved to a new idea: a GPA Calculator.

This app calculates a Grade Point Average on a four point scale. The app has two activities that make up most of the code: the main activity and the activity after the button push. In the main activity, a screen pops up that shows five lines for edited text. On the left hand side, the user is asked to enter their score in the class out of 100. On the right hand side, the user inputs the class's credit amount. The app works for a maximum of five classes. If the user wants to calculate a GPA of less than five, zeros have to be entered on the unused user input lines. When the button on the bottom of the screen is pushed, the grades out of 100 are converted to their four point scale equivalent using Java. The new number is then multiplied by the number of credits. This process repeats for all five classes and is stored in a running sum, which is then divided by the total number of credits to return the GPA value. The next screen then displays the user's GPA and total number of credits.

We thought this app was necessary because students are always worrying about their current academic standing. GPA is the best metric available for measuring academic success. Rather than do the math themselves, students using this app would be able instantaneously measure their academic success. This app is of course targeted to college students, who we believe would find it very useful. Truly, students of any age can use this app. Though some high schools use different GPA scales, the majority use a four point scale which further proves the app's usefulness to students of all ages.