

Robert Mullins  
Final Project iOS

The project I have developed is an app designed to test network throughput. It tests the download speed of the currently utilized network by connecting to an Ubuntu server hosted on DigitalOcean that contains an image. The image is downloaded to the application, the size of the download is determined upon request, and a timer is set up using two Date objects; one upon start and one upon end. When the download is complete (at the point that the image loads completely into the hidden imageview on the test screen), the end date is created and the difference between the two times is calculated. Using that, along with the size of the image converted into megabits, is used to determine the download speed. Once that calculation is finished, the value is rounded off and set to the label assigned to display the speed to the user.

The user can navigate back to the home screen, and then to an “about” page to see some data about the project and how it works.

In order to run the application, the user will select the “Test Away!” button to navigate to the view where the test will take place. Upon clicking the “Run Test” button, the test will begin in the background. The label will change text to “Loading...” to let the user know that their test request has been registered by the app. Once complete, the speed will be displayed in place of that placeholder text. The user can also navigate to the about page with “Back” -> “About this App”. Then, return to the test screen again with “Back” -> “Test Away!”.