

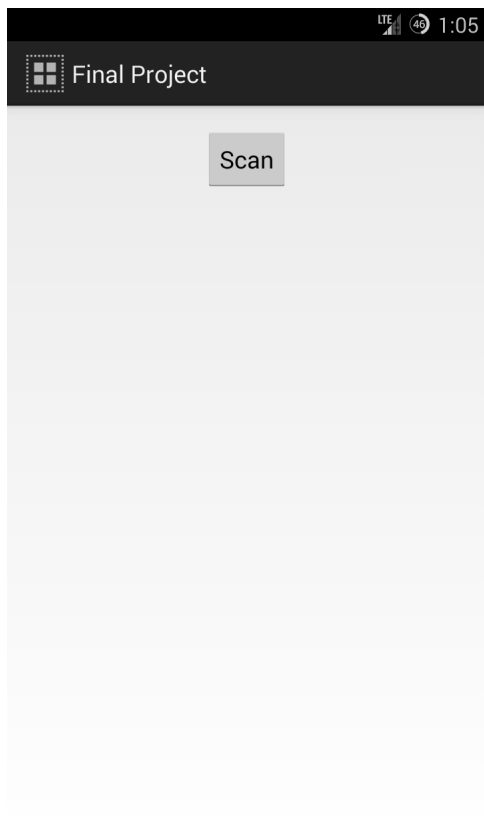
Final Project Report

For my final project, I have created a book barcode scanner app. My original idea was to start with the camera application created for mini project 4, however after researching how to add barcode scanning functionality, I realized that I had to start from scratch to take advantage of the scanning libraries. The first library I looked at using was "[ZXing](#)". After looking through their documentation, I found out that the device had to have the ZXing app installed in order for my app to use the functionality. This did not seem ideal, so I instead went with the [ZBarScanner](#). This was very simple to implement, only requiring adding the library to the project, and the insertion of just a few lines of code. After getting the scanner to return the proper ISBN number from a barcode, the next thing I implemented was the addition of the Google Books API to return information about the book, including the book's title, author, cover image, reader ratings, publish date, synopsis, and description. These are all displayed in the app by parsing through the returned JSON from Google Books. I also downloaded the book image from Google Books. I was able to find a suitable star icon on the web to display the average rating. These features cover what I presented in my project presentation the last week of class.

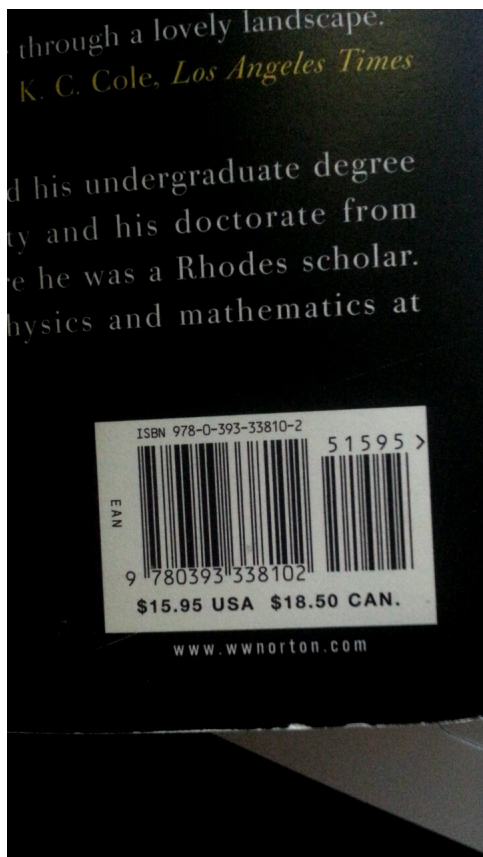
I also added two additional functions to the app: the ability to launch the book preview, and to launch the web browser to view the book's page in Google Books. To open the preview, I had to create an HTML file (located in the assets folder in the project). This was done with the help of the [Google Books Preview Wizard](#).

To use the app, launch it, and then press the scan button (the only button currently displayed). This will launch the camera, and once it finds a suitable barcode, it will return to the main app view. This happens automatically, and the user only needs to point the camera at the barcode. If the app reads a barcode that is either not in Google Books or not in the proper ISBN format, it will display "Not found" on the main screen. If the barcode does yield a result from Google Books, then it will display it. To view the preview, if available, press the "Preview" button. To view the webpage, press the "Web" button. To scan a new book, press the "Scan" button at the top again to launch the scanner.

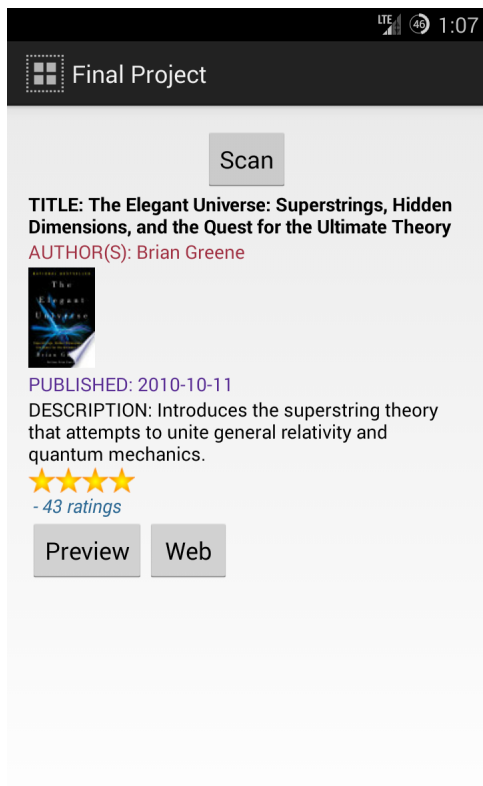
In the future, I think I would like to add a social element to it, so you can share what you are reading with your Facebook friends, and tell them your thoughts so far.



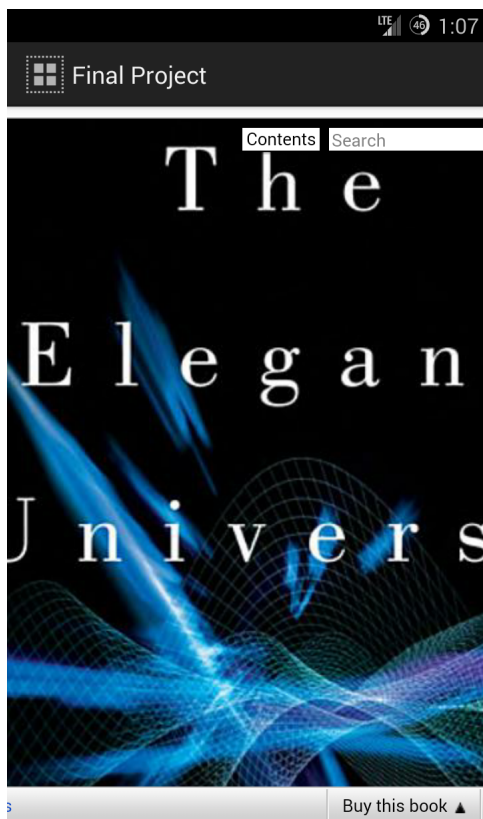
Initial View



Scanner View



Results View



Preview View

