It’s Not So Bad 

User Instructions:

1. You will be given a blank state upon starting the app for the first time. When you start the app make sure to use the simulator’s preset location by going to debug -> simulate location -> New York. If the simulator is not running it might not let you do this so if you must, first start the simulator then do the simulate location procedure. To ensure that it is being simulated there should be a check mark next to New York.
2. To begin adding semesters, click the update button on the bottom left hand corner of the home screen.
3. To add semesters, click the add semester button on the top right hand corner and input your semester name. Add as many semesters as you wish.
4. To edit the individual weights/scores of a category click on the respective cell and move the respective weight and scores sliders to the desired amounts. Click update to confirm.
5. Back brings you back to the homepage. The total circle represents your average total grade (sum of all semester grades/number of semesters). Previous represents the total score of the previous semester and Current represents the total score of the current semester.
6. Clicking on the bottom right hand “my data” button brings you to your scores and weights over time. Scroll left and right to view all categories. The top right hand corner label and the data itself changes as the timer within this view controller rotates through your semester data every 3 seconds.
7. Back brings you back to the homepage again. Click on the top right hand life check button to be sent to a screen that pops up a YouTube video and small piece of advice. A sound should first play upon entering this screen depending on your score. The video and description varies based on your current semester’s highest weighted category’s score. We assume this is what is most important to you right now, so if you have less than or equal to an 85 in that category, it will display a video and description unique to that category. If you have a score that is greater than 85 in that category it will display a different video and description.
8. The bottom left hand assistance map button brings you to a map that displays useful businesses/stores near you based on your current scores. The businesses that it displays will vary depending on which category is your highest weighted category and what your score in that category is.
9. To check if CoreData is working you can simply close the app then restart the app again. Note* in simulator you might or might not need to do debug -> simulate location -> new york when running the app again. Right now we do not support deleting semesters but if you wish to start from a clean slate for testing purposes, uncommenting lines 286 and 287 in ViewControllerActual will delete all records in CoreData.

Compilation and Installation Instructions:

If using the simulator, make sure to use “iPhone 11 Pro Max”. The homepage circle sliders display is currently set based on iPhone 11 pro max dimensions, something that I plan to universalize in the future. In addition, if using an iPhone 11 Pro Max to run the app, make sure you have location services turned on and click the allow authorization button when instructed to do so in order to have access to the map service. This will automatically allow the app to track your current location while using the app and give you more accurate business/store recommendations. If using the simulator, use the simulator’s preset location that is closest to you by going to debug -> simulate location while running the app.

APIs Called

- UITableView/UIScrollView
- UIBezierPath
- MapKit
- WebKit
- CoreData
- CoreLocation
- CoreGraphics
- CoreAnimation
    - CALayer
    - CABasicAnimation
- AVFoundation

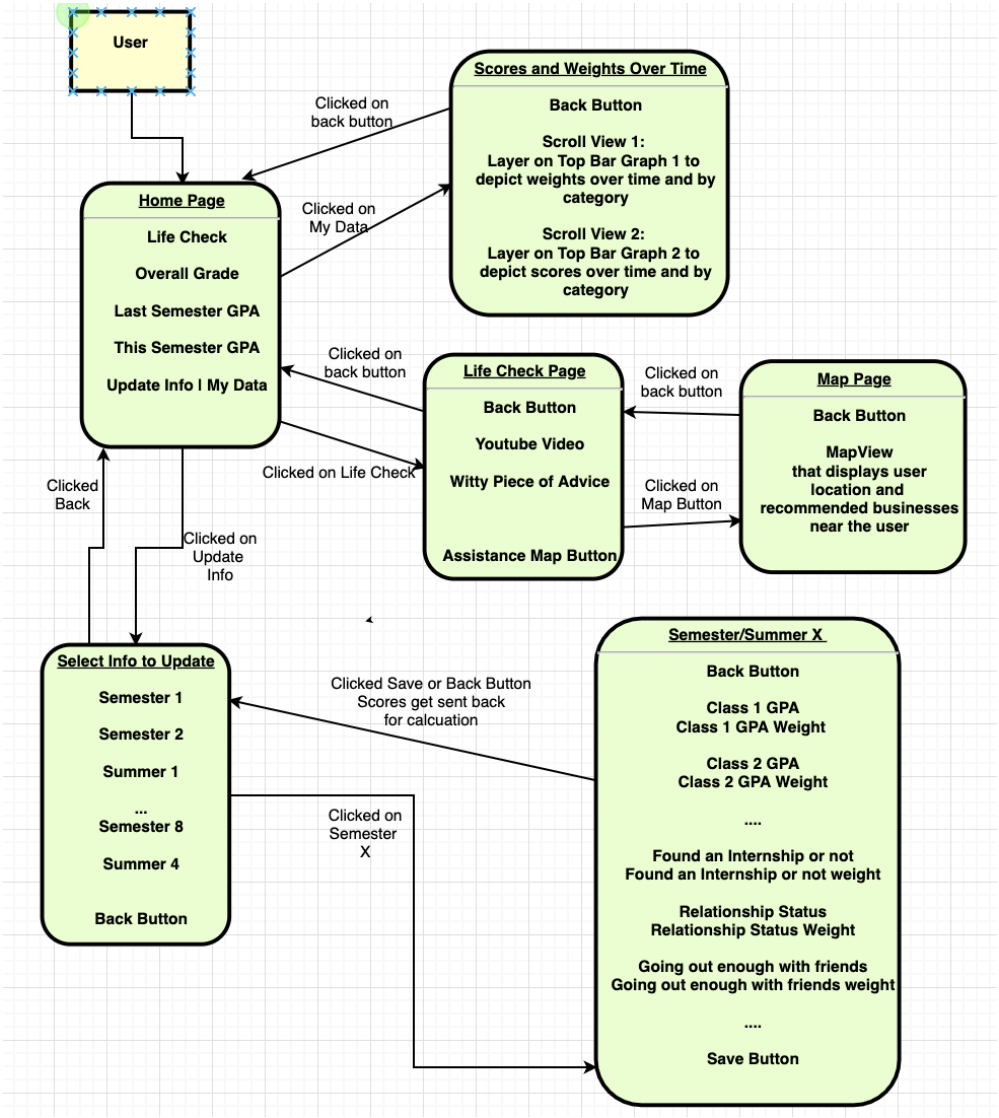
Sources of Existing Code that was Incorporated into the Project:

The majority of the code was written from scratch with the help of online tutorials.
The part of the code that was pre-existing and incorporated into the project are the Bar Graph classes and setup for those classes:

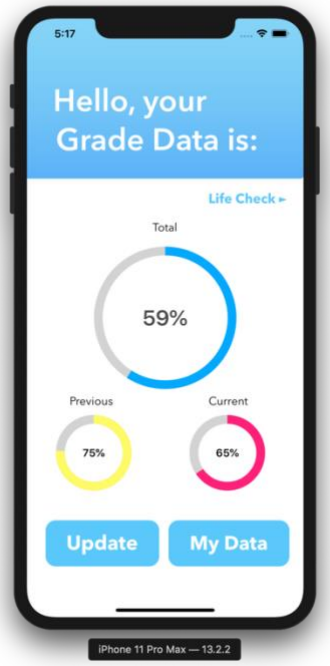
- CALayerExtension.swift
- DataEntry.swift
- CurvedBarChart.swift
- CurvedBarChartPresenter.swift
- BasicBarChart.swift
- BasicBarChartPresenter.swift
- BasicBarEntry.swift
- CustomSegments.swift
- UIBezierPathExtension.swift

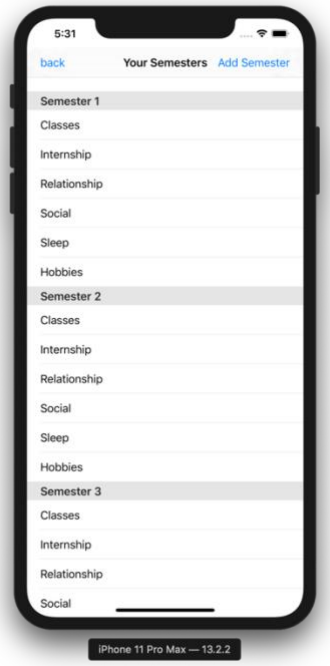
A link to these files is given here: https://github.com/danielgindi/Charts

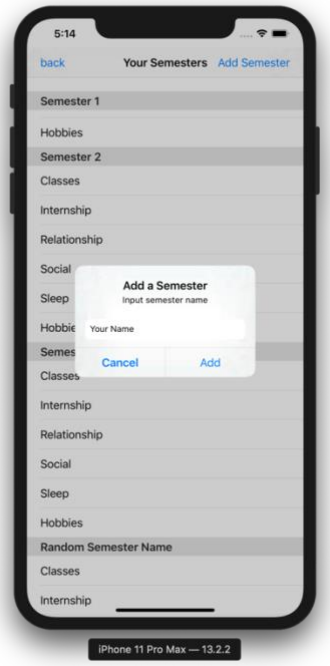
Flowchart:

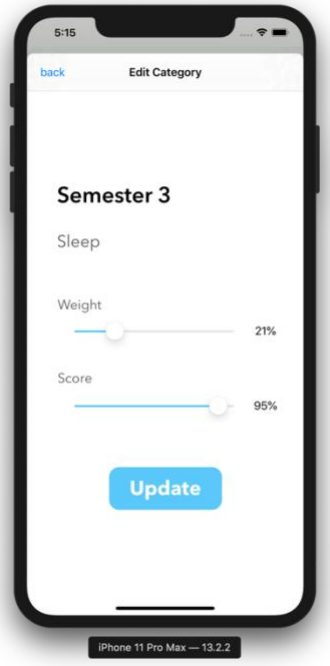

User
Scores and Weights Over Time
Back Button
Scroll View 1:
Layer on Top Bar Graph 1 to depict weights over time and by category
Scroll View 2:
Layer on Top Bar Graph 2 to depict scores over time and by category
Clicked on back button
Clicked on My Data
Home Page
Life Check
Overall Grade
Last Semester GPA
This Semester GPA
Update Info I My Data
Clicked on back button
Life Check Page
Back Button
Youtube Video
Witty Piece of Advice
Assistance Map Button
Clicked on back button
Map Page
Back Button
MapView that displays user location and recommended businesses near the user
Clicked on Life Check
Clicked on Map Button
Clicked Back
Clicked on Update Info
Select Info to Update
Semester 1
Semester 2
Summer 1
...
Semester 8
Summer 4
Back Button
Clicked Save or Back Button Scores get sent back for calcuation
Clicked on Semester X
Semester/Summer X
Back Button
Class 1 GPA
Class 1 GPA Weight
Class 2 GPA
Class 2 GPA Weight
....
Found an Internship or not
Found an Internship or not weight
Relationship Status
Relationship Status Weight
Going out enough with friends
Going out enough with friends weight
....
Save Button

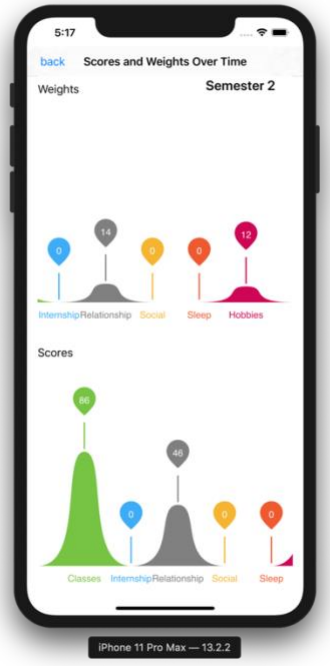
Sample Screens:

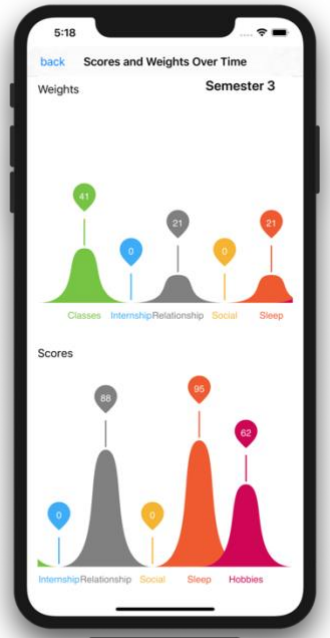




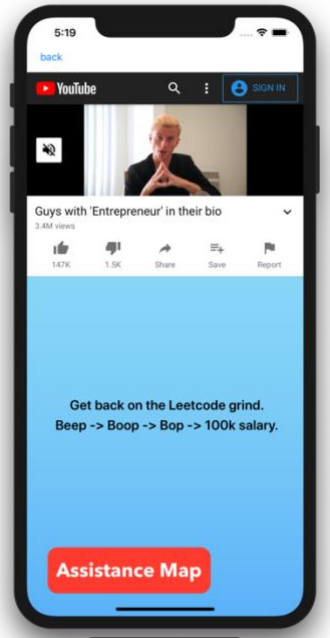




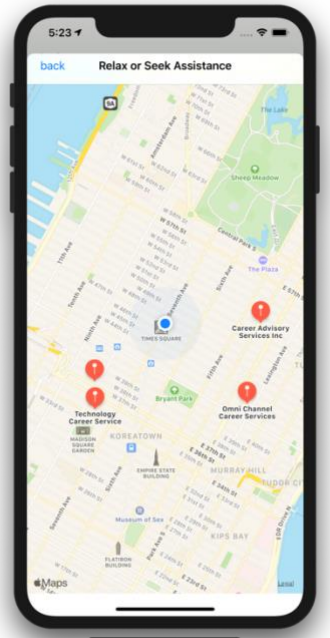




iPhone 11 Pro Max — 13.2.2



iPhone 11 Pro Max — 13.2.2



iPhone 11 Pro Max — 13.2.2