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**Assignment 2**

**Software Design:**

I used a navigation controller with two table view controllers for the first few screens. I looked at the CTA train tracker app as a base and used that as a reference. Instead of displaying the wait times all on one screen, I have the user select the exact stop they want and then the wait times are displayed. In total it has 3 screens.

Diagram

Description automatically generated

**Swift Files:**

* trainStops.swift: Holds all of the train stops information for all of the different lines
* trainLines.swift: Holds all of the train lines information for the CTA
* LinesTableViewController.swift: Table view controller for the train lines
* stopsTableViewController.swift: Table view controller for the CTA train stops
* detailViewController: Displays the arrival times for each stop

Diagram

Description automatically generated

**Error Handling:**

I have two cases for error handling. One is for invalid data and the other is for missing data. In the CTA data, there is three levels I had to work with to get to the data I needed. When looking for those exact entries, I used guard calls and throwing of errors if it fails to find it. This allows it to keep running if incorrect or data is missing.

**Cyclic References:**

I only used weak references in my code, so the classes referring to one another cannot have a cyclic reference among them.