

# Interview Coding Assignment

Cisco - Android/iOS/Desktop

## Welcome!

This coding interview assignment is part of the third round of interviews for the Unified Client integration team in WebEx Intelligence.

Thank you for your willingness to take the time to complete this. We expect it will take around 2-3 hours. Please let us know if it's an unreasonable request; we would be more than happy to review a public Github repo you have authored in lieu of this assignment as long as it's in the appropriate framework/language. You own the code that you produce, and we encourage you to post your solution publicly on Github for future reference. We won't use your intellectual property here at Cisco.

## Goals:

We want to give you the opportunity to show us a few things about your engineering abilities including:

- How you think about data structures and algorithms when solving problems.
- How you utilize the standard libraries in the language/platform you are using.
- How you structure your code and interfaces.
- How you approach testing and documentation

## Submission:

You are encouraged to publish your work to public Github where we can review it together in a Webex call. Please don't feel compelled to work extra hours on this assignment, you may outline work which you don't have time to complete in the README.md and we can discuss it.

## Assignment:

Implement a local data storage class supplemented by an in-memory LRU cache. The data storage may use something like sqlite3 for persistence. The LRU cache should be your own implementation built on data structures/algorithms available in the standard library for your language/platform. The class should implement the methods `put()` and `get()`, and provide some way to designate if an object acquired by `get()` has been mutated by the application. Mutated objects should be written back to persistent storage on eviction from the LRU.