Date: Sep. 24 2020

To: CS4500 Staff

From: Jake Hansen and Nick Thompson

Subject: TAHBPL assignment experiences in Racket

We approached the TAHBPL assignments wanting to develop as much familiarity with Racket as possible. To that end, we approached the assignments by laying out the assignment, writing & testing the code, resolving edge case behaviors, and then iteratively examining and improving areas that felt substandard. For assignments B through D we were able to complete nearly all of the work by pair programming over Screen.io, and we were able to have one person typing and one watching the code. With that method we were able to catch a number of errors, and we thought it was generally effective and much better than working separately. For assignment E we had to begin the work separately because our class schedules conflicted, and after meeting up to complete the assignment, we found that the debugging cycle took notably longer. This also had to do with the fact that we wrote a somewhat intricate script using contract based data generation to generate a random JSON file for testing. The generated JSON file did expose at least one issue in our code, which we were able to fix. Overall, we were able to test out a wide range of Racket features over the course of these assignments, and we found some areas in which we learned the most were tangential to the assignment, such as writing tests using threading and contract based data generation.