Hoon 101: Intro to Hoon

Instructor: David Kerschner

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Office: Urbit Discord

Office hours: 5 pm to 6 pm PT on the weekdays (excluding US federal holidays)

Texts: https://urbit.org/docs/learn/hoon/hoon-tutorial

Course Description

Students will learn the basics of programming on Urbit in the Hoon programming language.

Three things will be assigned for the first five Mondays: a Tutorial reading lesson, a code-example walkthrough with ungraded optional exercises, and a mandatory coding assignment. The lessons from the Hoon Tutorial explains the fundamentals, while the walkthroughs will dive right into practical examples of the code.

The instructor is guaranteed to be available during office hours to help you with any of the course subject matter, and may be available during other times as well. Don't be shy about asking questions!

Objectives

Upon successful completion of this course students will have demonstrated the ability to:

- Read, understand, and comment basic Hoon programs
- Understand the four types of generators
- Understand the fundamentals of Hoon: the basics of the type system, the subject, and cores
- Given a basic set of requirements, write a generator capable of accepting defined input and producing correct output

Course Outline

Week 1

- Intro to Dojo
- Nouns
- Naked Generators

Week 2

Hoon Syntax

Week 3

- Gates
- Lists

Week 4

• The Subject

Week 5

Arms and Cores

Week 6

Doors

Grading System

Assignments are assigned on Mondays and are due by noon (Pacific Time) on the following Monday.

Assignments must be turned in by pasting any hoon code into a pastebin and submitting a link via this form. Any pastebin is acceptable, but if you don't have one you prefer use pastebin.com

Every week, one coding assignment worth 100 points will be assigned. As an additional weekly task in their submission to the email to the instructor, students are expected to tell us the what part of that week's materials they think needs to be made clearer. Please be specific!

Rules of the Road

- Feel free to help your fellow students, but please remember there is a big difference between helping someone and doing it for them.
- All students are expected to behave in the channels used for this course according to the decorum guidelines at https://urbit.org/docs/introduction/contributing/.

Assumptions

- You have the required familiarity with personal computers and software for this class.
- Urbit runs on Linux and Mac. If you're using Windows, you'll need to run Linux on a virtual machine, partition, or a server.
- You at least somewhat enjoy working with computers.
 - o You realize that learning something new isn't always easy!
 - o You realize that practice is required to become good at something!