

WEEK 01

1. READINGS

- *A Study in Algorithms* Prependix
- *Programming Erlang: Software for a Concurrent World* 2nd Edition - Chapters 3 and 4. (Available for free online in the BYU-Idaho library)

2. PREPARATION FOR TASKS (INDIVIDUAL)

If, and *only if* you can truthfully assert the truthfulness of each statement below are you ready to start the tasks for this week.

2.1. Reading Comprehension Self-Check.

- I know the difference between a variable and an atom.
- I know variables are immutable.
- I know how to prepend elements to a list.
- I know how to remove the first item of a list.
- I know the difference between a *function* and a *fun*.
- I know how to write a *function* with parameters and a value.
- I know how to write a recursive *function* with parameters and a value.
- I know how to write a *fun* with parameters and a value.
- I know why Erlang programmers write functions that have a *fun* as a parameter.
- I know Erlang's map, filter, and reduce functions.

2.2. Memory Self-Check (Individual).

2.2.1. *Code*. Use Erlang to create working versions of two of the algorithms for which pseudocode is in *Functional Levitin - Things to Know*.

3. WEEK 1 TASKS (TEAM)

3.1. **Code**. Use Erlang to create working versions of all the algorithms for which pseudocode is in *Functional Levitin - Things to Know* and *Functional Levitin - Chapter 1*.