**Poker Javascript**

**Design**

Poker Ruby has similar design in Poker Design doc

def best\_hands(hands)

create Poker object for each hand

then compare each to find the winner

class Poker

parse hand

check for flush, straight

create kinds

call score\_hand() =>

[ score, ranks\_values(Map object)]

see four\_languages/README.md

four\_languages/poker/doc/Poker\_Design.docs

**Some technical highlights:**

\_use ES6 syntax: =>, const, let, spread operater

\_ use Map class to creat ranks\_map object, use Map.get, Map.set, Map.entries

\_ use map() for array

\_ use String.indexOf to convert character array to integer array

ranks\_ary.push(RANKS\_INDEX.indexOf(e))

\_ reverse sort array: ranks\_ary.sort( (a,b) => b - a )

\_ use Array.from in compare two Map objects by their keys

const keys1\_iterator = map1.keys()

const keys1 = Array.from(keys1\_iterator)

\_ sort reverse Map values :

const ranks\_values = new Map([...this.ranks\_map.entries()].sort((a,b) => b[1] - a[1]) )

\_ I have to write three compare functions:

compArray(a,b) => -1, 0 , 1 to compare two arrays

compKind(a,b) => true, false to compare two arrays

compMap(map1, map2) => -1, 0, 1 to compare two Map objects

**Testing**

17 tests compare different combination of hands: flush vs straight, square vs full house, two squares,….

\_ **use jest** to do Poker unit tests. Jest is newer and **better than jasmine**. jest designs to test web application

\_ It has asynchronous testing – Callbacks, Promises(resolve/reject) or (Async/await),

\_ Some features are similar to RSpec: Setup(beforeEach, beforeAll), Teardown(afterEach, afterAll). Grouping test with “describe()”, some Matchers like toBe, toContain, toMartch, , toBeDefined, toHaveLength, toBeGreateThan, toThrow, toBeInstanceOf, …

\_ mocking an entire package or single function

\_Snapshot testing: compare html tags of two views.

I create poker\_jest project

cd /Users/local-kieu/programming\_skills/four\_languages/poker/javascript/poker\_jest

**$ jest poker.test.js**

PASS ./poker.test.js

✓ nothing\_vs\_one\_pair (5ms)

✓ two\_pairs (1ms)

✓ one\_pair\_vs\_double\_pair

✓ two\_double\_pair

✓ double\_pair\_vs\_three (1ms)

✓ two\_three

✓ three\_vs\_straight

✓ two\_straight (1ms)

✓ straight\_vs\_flush

✓ two\_flush

✓ flush\_vs\_full (1ms)

✓ two\_full

✓ full\_vs\_square

✓ two\_square (1ms)

✓ square\_vs\_straigth\_flush

✓ ace\_low\_straight

✓ three\_hand\_with\_tie (1ms)

Test Suites: 1 passed, 1 total

Tests: 17 passed, 17 total

Snapshots: 0 total

Time: 0.99s, estimated 1s

Ran all test suites matching /poker.test.js/i.

Harmony-2:poker\_jest local-kieu$