

# DIGITOPOLY

```
struct state {  
    int turn;  
    int players;    // 0-3 = player, 4 = banker  
    int [5] funds;  
    ... // display info only  
};
```

## Software (board)

### - GPIO toggling/timer

```
struct coord {  
    int x;  
    int y;  
    int sensor;  
};
```

- Move motor with GPIO pins
  - ↳ Move both motors with GPIO pins in tandem
- Create coordinate system in code
- Identify way to detect current position
  - Hall effect sensor
  - Camera vision
  - ...
- Create test suite to move from every tile to every tile
  - Verify physical movement
  - Verify sensor detection
  - Verify fine/coarse movement
  - Verify all-around-board movement
- Test game piece movement
  - with 1, 2, 3, 4 pieces
- Write code for game rules.

## Dice:

- GPIO pin toggling
- SPI/I<sup>2</sup>C test
- ↕ Comm with IMU
- Test BT pairing
- Optimize for low power/ULP
- Test wireless charging coil
- Determine V/I characteristics
  - wattage
  - battery capacity
- Test dice charge/discharge time