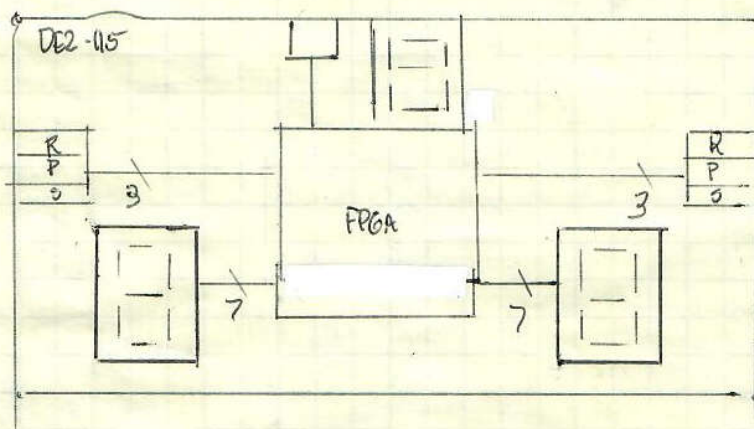


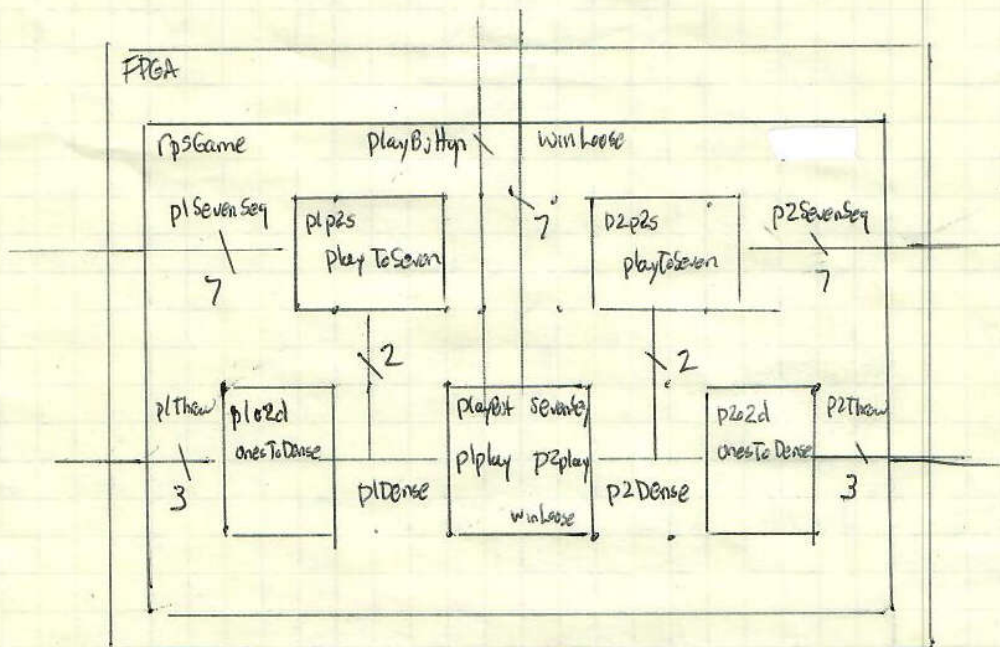
# Rock, Paper, Scissors

- 2 player each "throws" a play
- Circular rule for win, loose or draw

Player 1



Player 2



\* Create module interface & internal logic

```
module onesToDense ( throw, play );
```

```
    output wire [1:0] play;  
    input wire [2:0] throw;
```

```
    <stuff>
```

```
endmodule
```

\* Instantiate modules:

```
module rpsGame ( plThrow, ... );
```

```
    input wire [2:0] plThrow;  
    wire [1:0] plDense;
```

```
    onesToDense plD2d ( plThrow, plDense );
```

```
endmodule
```

- names outside module may be different inside module
- logic inside module cannot "see" signals outside.