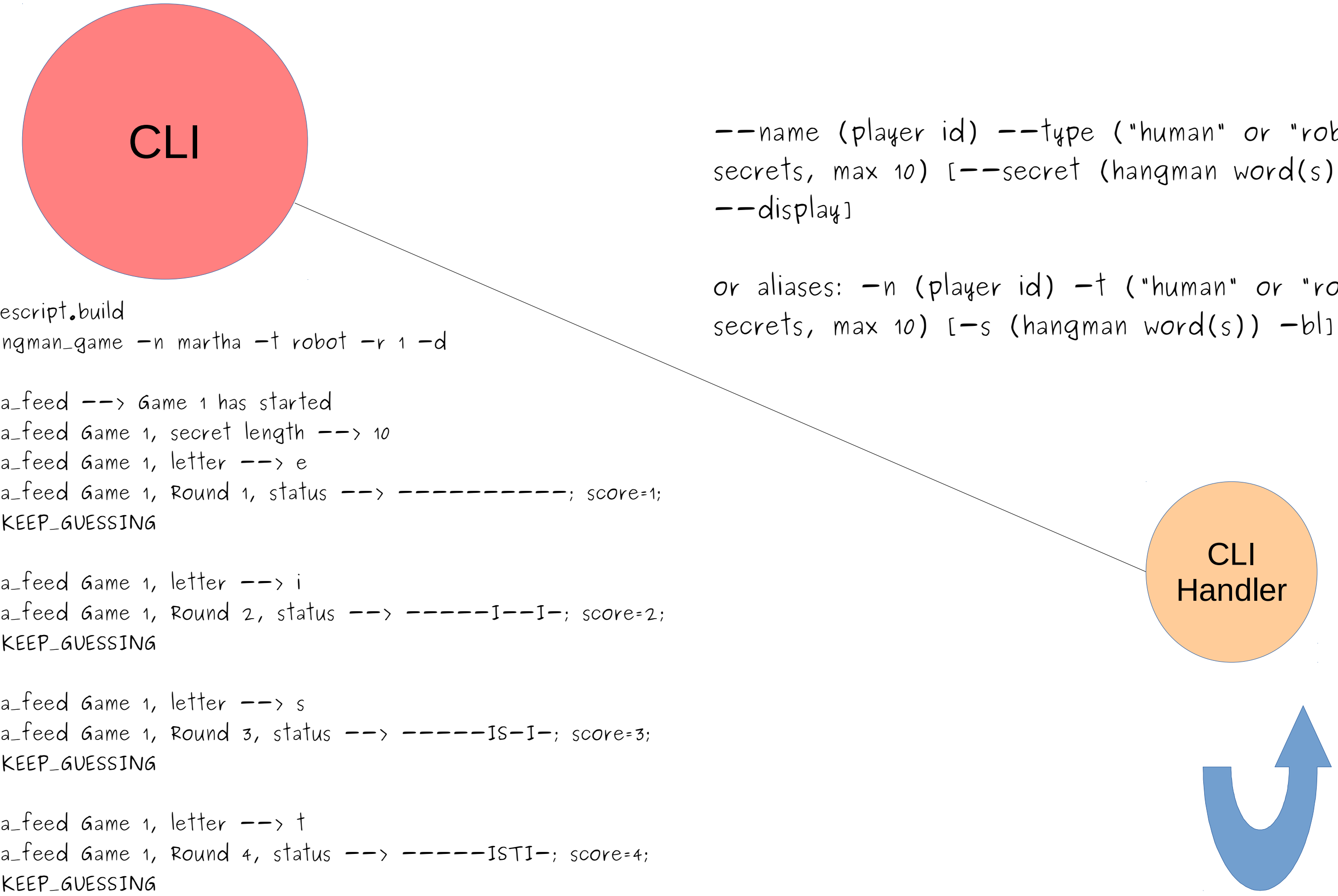


--name (player id) --type ("human" or "robot") --random (num random secrets, max 10) [--secret (hangman word(s)) --baseline] [--log --display]

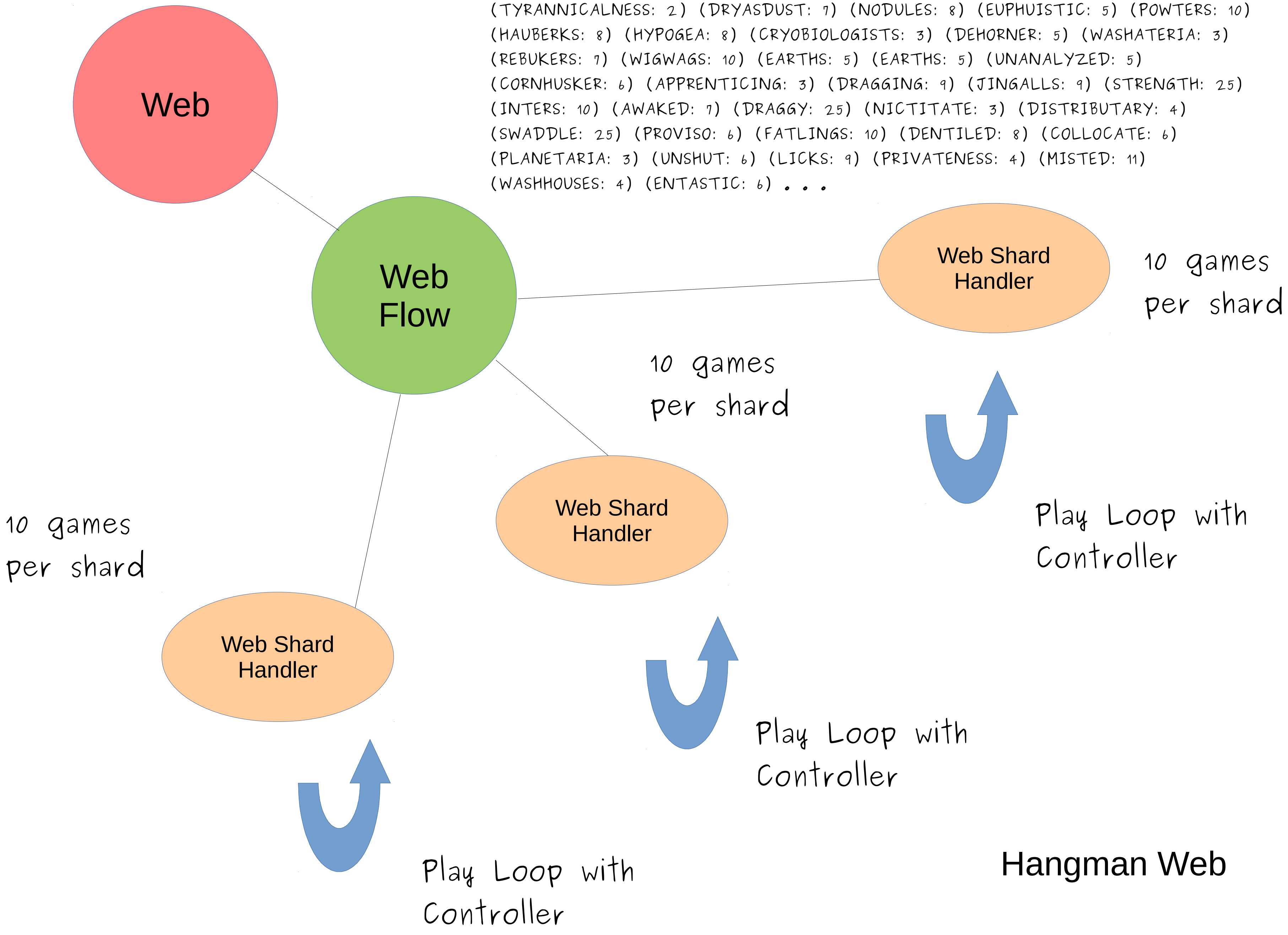
or aliases: -n (player id) -t ("human" or "robot") -r (num random secrets, max 10) [-s (hangman word(s)) -bl] [-l -d]

```
$ mix escript.build
$ ./hangman_game -n martha -t robot -r 1 -d

#martha_feed --> Game 1 has started
#martha_feed Game 1, secret length --> 10
#martha_feed Game 1, letter --> e
#martha_feed Game 1, Round 1, status --> ----------; score=1;
status=KEEP_GUESSING

#martha_feed Game 1, letter --> i
#martha_feed Game 1, Round 2, status --> -----I--I-; score=2;
status=KEEP_GUESSING

#martha_feed Game 1, letter --> s
#martha_feed Game 1, Round 3, status --> -----IS-I-; score=3;
status=KEEP_GUESSING

#martha_feed Game 1, letter --> t
#martha_feed Game 1, Round 4, status --> -----ISTI-; score=4;
status=KEEP_GUESSING

#martha_feed Game 1, letter --> a
#martha_feed Game 1, Round 5, status --> ---A-ISTI-; score=5;
status=KEEP_GUESSING

#martha_feed Game 1, letter --> r
#martha_feed Game 1, Round 6, status --> ---A-ISTI-; score=6;
status=KEEP_GUESSING

#martha_feed Game 1, letter --> d
#martha_feed Game 1, Round 7, status --> D--A-ISTI-; score=7;
status=KEEP_GUESSING

#martha_feed Game 1, word --> dynamistic
#martha_feed Game 1, Round 8, status --> DYNAMISTIC; score=7; status=GAME_WON

#martha_feed Game Over!! --> Game Over! Average Score: 7.0, # Games: 1, Scores:
 (DYNAMISTIC: 7)
```

Play Loop with Controller

Hangman Command Line

```
HTTPoison.get http://127.0.0.1:3737/hangman?name=typhoon&random=200

(ULTRAPRACTICAL: 2) (HOOTCH: 6) (TAXED: 25) (PROSPECTORS: 4) (MALIGN: 7)
(TYRANNICALNESS: 2) (DRYASDUST: 7) (NODULES: 8) (EUPHUISTIC: 5) (POWTERS: 10)
(HAUBERKS: 8) (HYPOGEA: 8) (CRYOBIOLOGISTS: 3) (DEHORNER: 5) (WASHATERIA: 3)
(REBUKERS: 7) (WIGWAGS: 10) (EARTHS: 5) (EARTHS: 5) (UNANALYZED: 5)
(CORNHUSKER: 6) (APPRENTICING: 3) (DRAGGING: 9) (JINGALLS: 9) (STRENGTH: 25)
(INTERS: 10) (AWAKED: 7) (DRAGGY: 25) (NICTITATE: 3) (DISTRIBUTARY: 4)
(SWADDLE: 25) (PROVISO: 6) (FATLINGS: 10) (DENTILED: 8) (COLLOCATE: 6)
(PLANETARIA: 3) (UNSHUT: 6) (LICKS: 9) (PRIVATENESS: 4) (MISTED: 11)
(WASHHOUSES: 4) (ENTASTIC: 6) . . .
```



Web

Web Flow

Web Shard Handler

10 games per shard

Play Loop with Controller

Web Shard Handler

10 games per shard

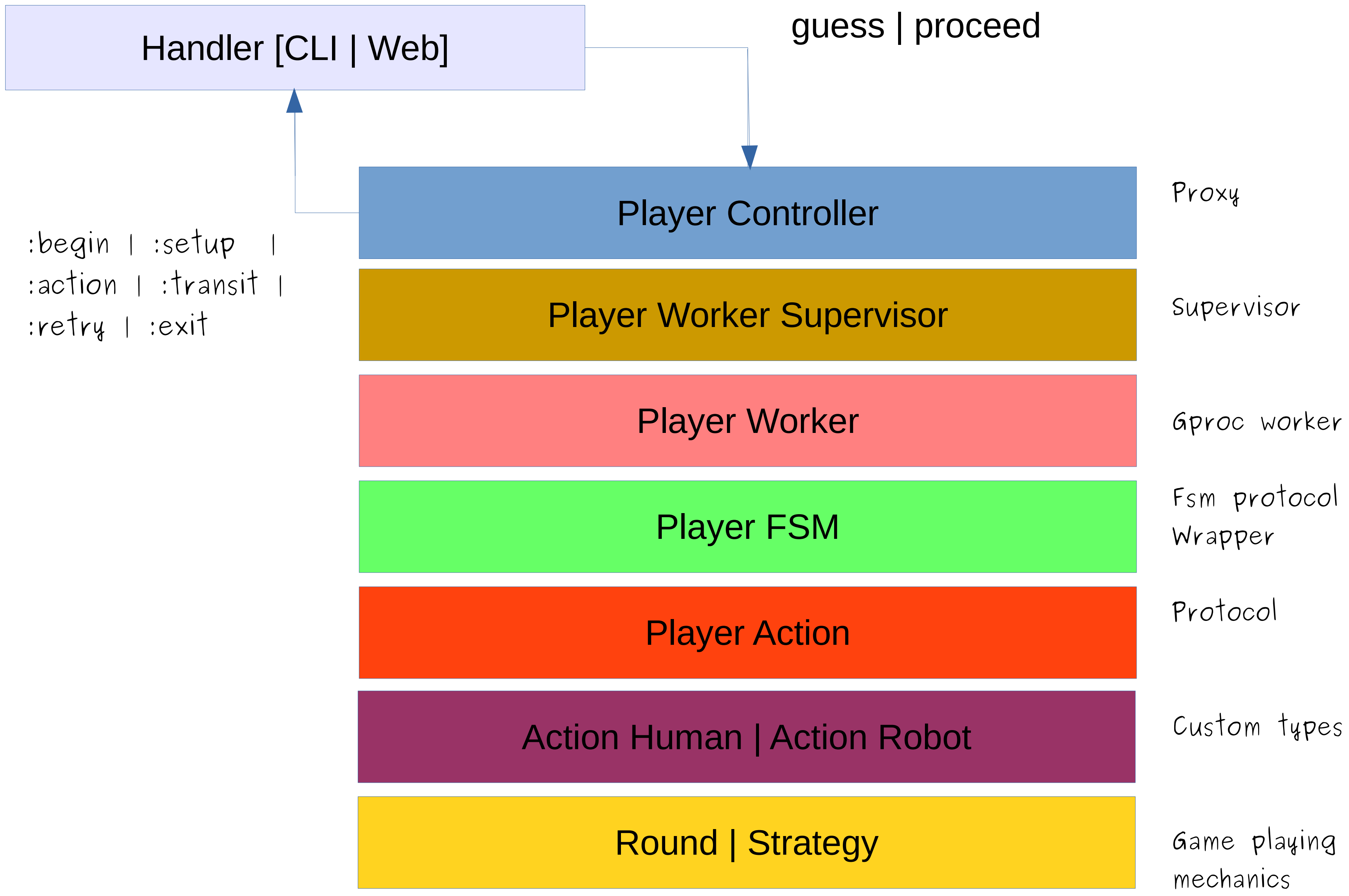
Play Loop with Controller

Web Shard Handler

10 games per shard

Play Loop with Controller

Hangman Web



Handler [CLI | Web]

guess | proceed

:begin | :setup |
:action | :transit |
:retry | :exit

Player Controller

Proxy

Player Worker Supervisor

Supervisor

Player Worker

Gproc worker

Player FSM

Fsm protocol
Wrapper

Player Action

Protocol

Action Human | Action Robot

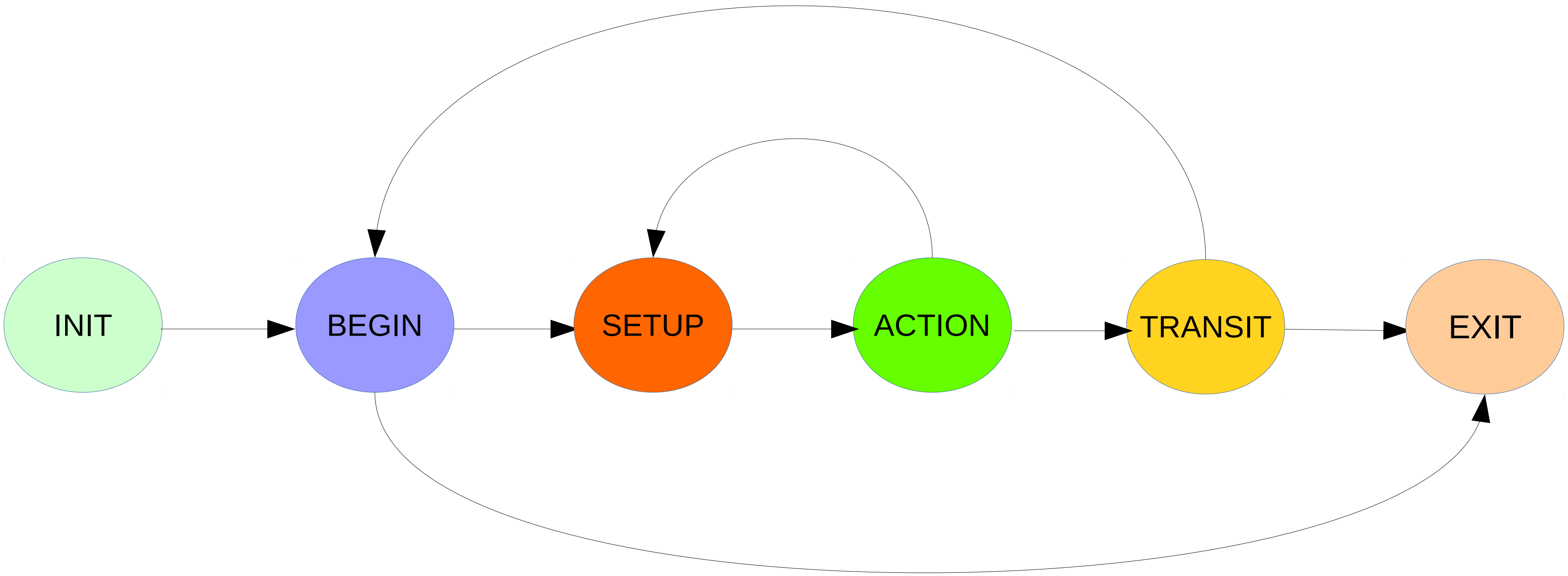
Custom types

Round | Strategy

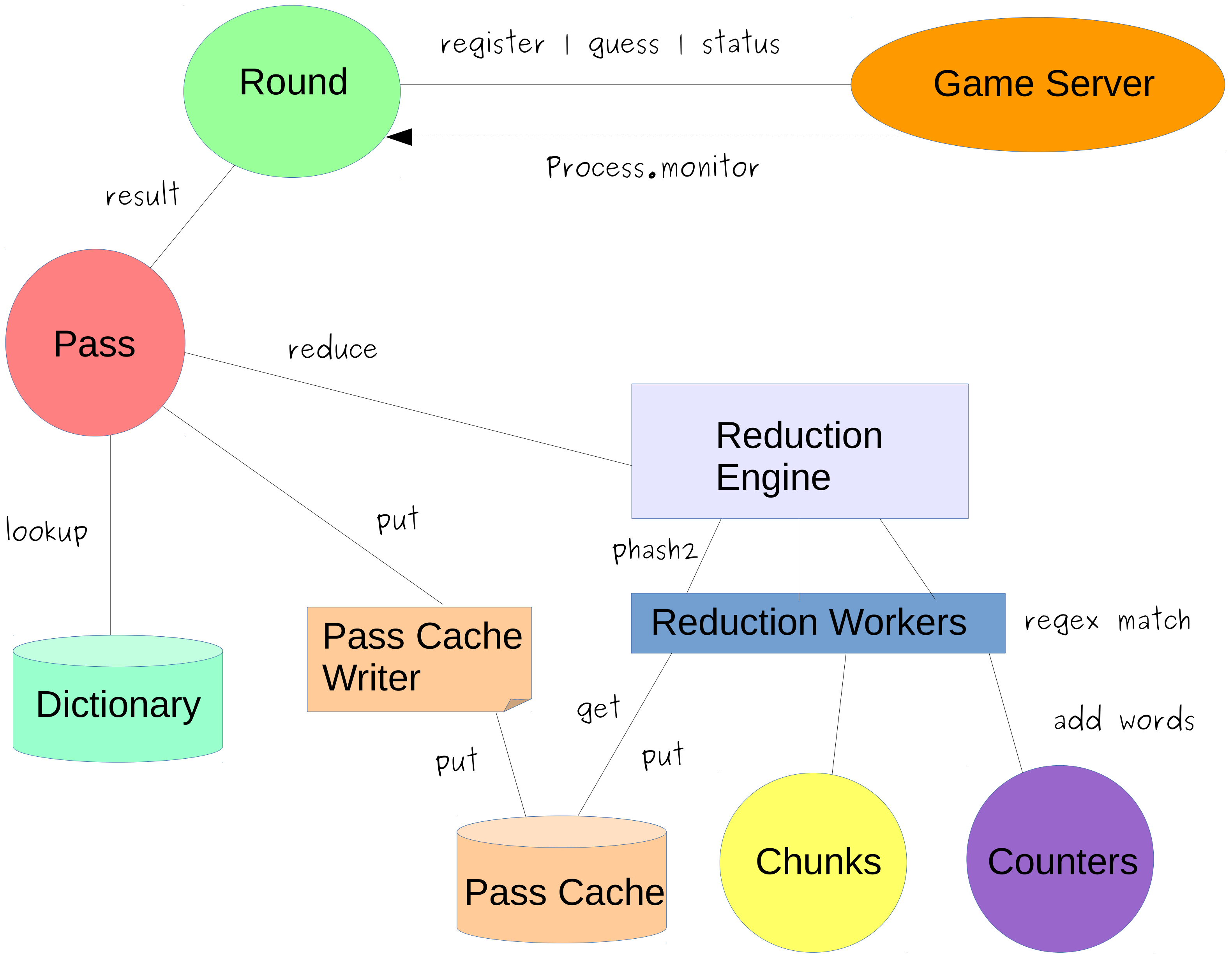
Game playing
mechanics

Player Abstraction Stack

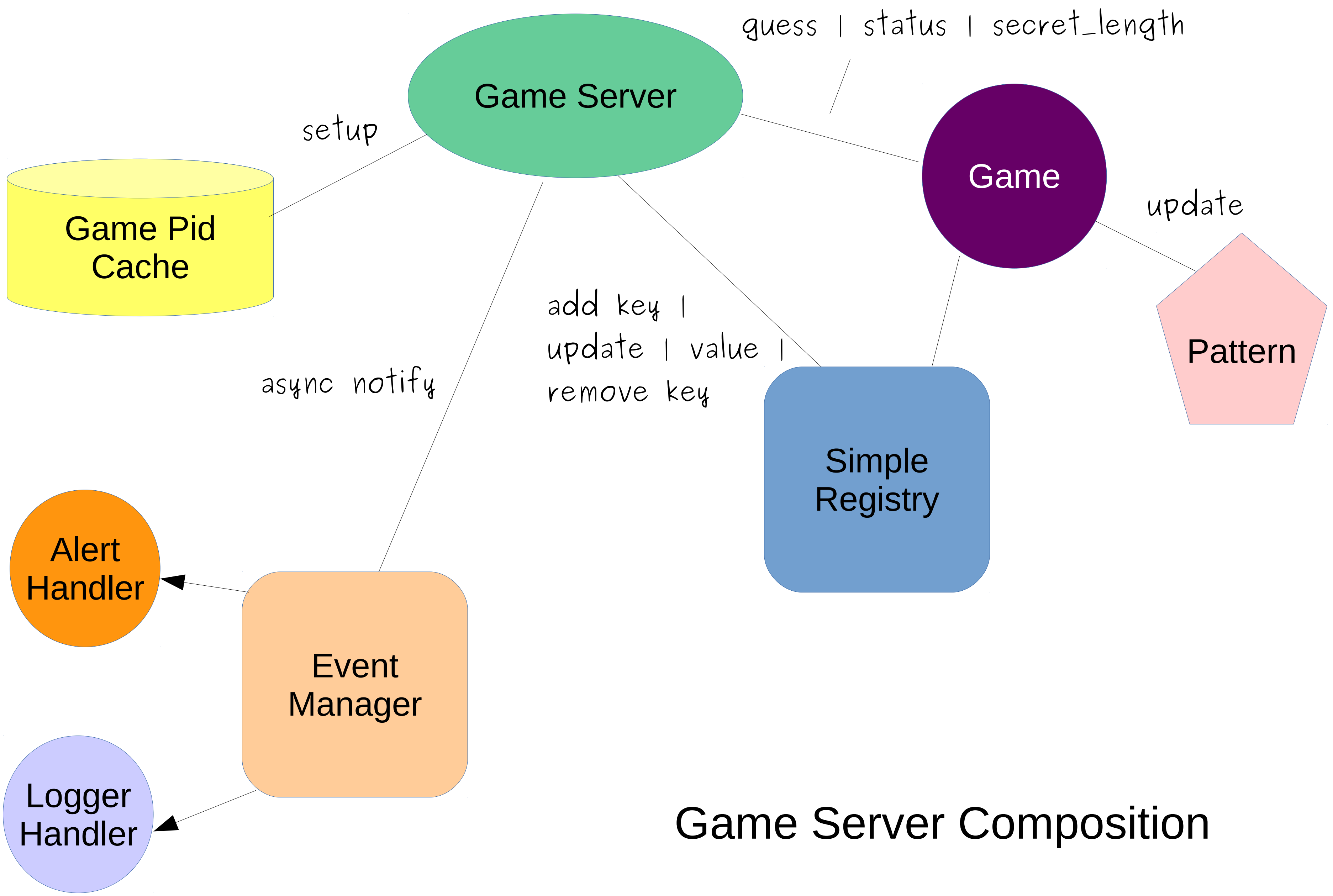
Player Fine State Machine Flow



:init - Start state
:begin - Start new game, if previous game is :abort and no games left → :exit
:setup - Setup round guess, if :human ask for letter input
:action - Perform guess, if more rounds left go back to :setup else :transit
:transit - Single game over, start new game or exit if all games finished
:exit - Games over!

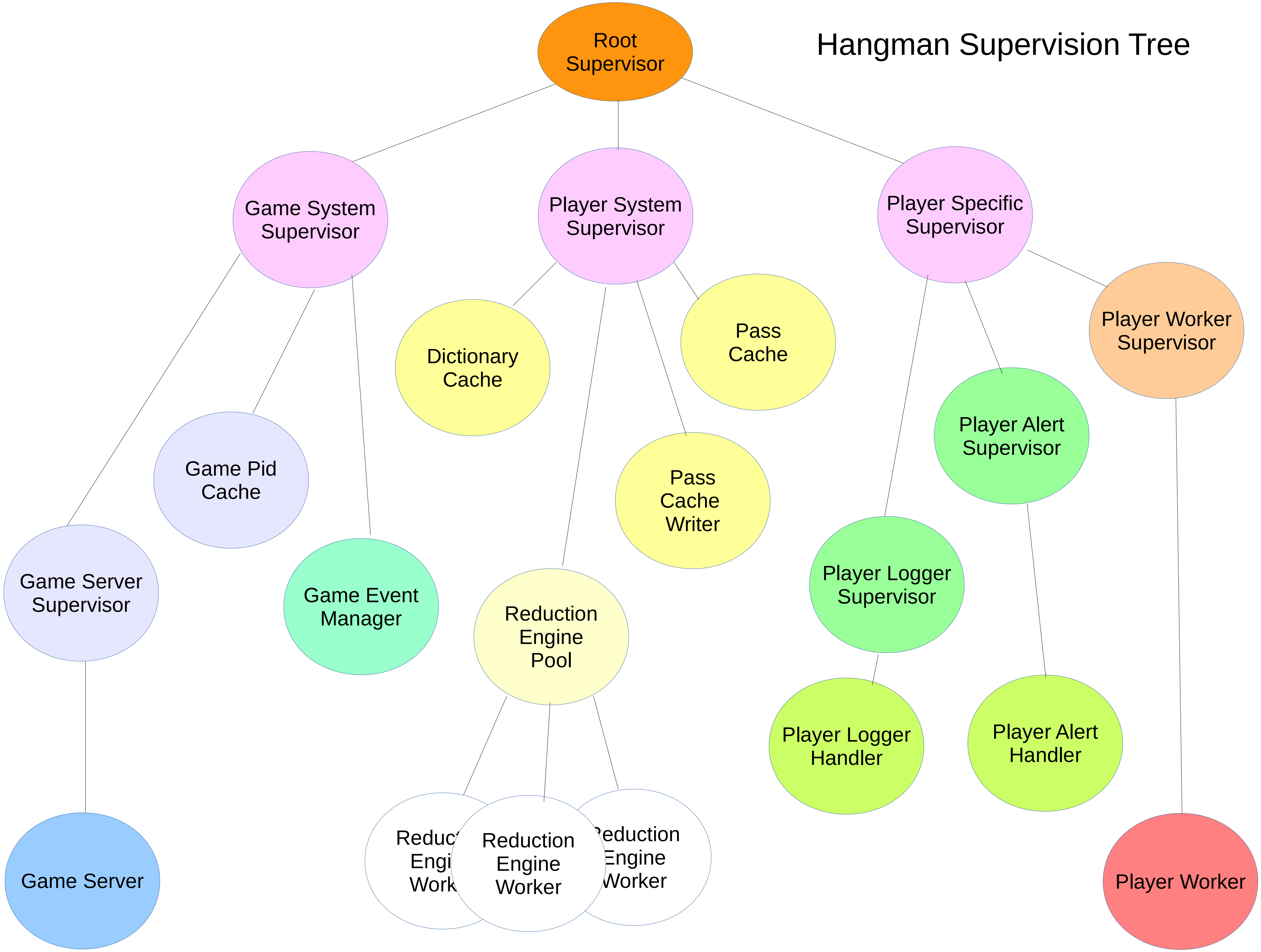


Player System Interaction



Game Server Composition

Hangman Supervision Tree


Root Supervisor
Game System Supervisor
Player System Supervisor
Player Specific Supervisor
Dictionary Cache
Pass Cache
Player Worker Supervisor
Player Alert Supervisor
Game Pid Cache
Pass Cache Writer
Game Server Supervisor
Game Event Manager
Reduction Engine Pool
Player Logger Supervisor
Player Logger Handler
Player Alert Handler
Game Server
Reduct Engi Work
Reduction Engine Worker
eduction Engine Worker
Player Worker