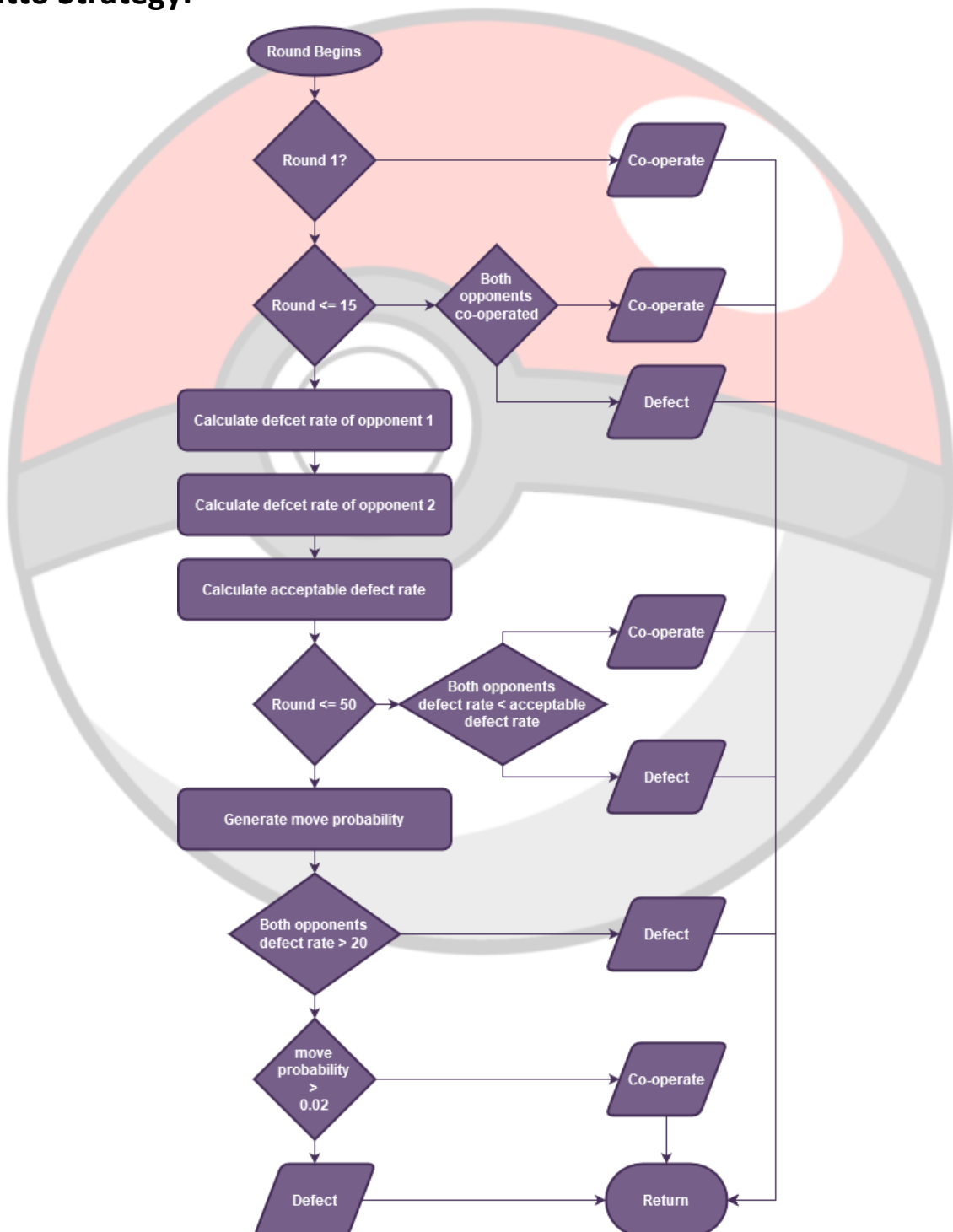# Game Facts:

1. You can't defeat win when playing against a mean player, you can only draw the match.
2. All players cooperating gives the best result.
3. Imperfect recall exists between players.

Ditto Strategy:

Strategy Reasoning:

Initial co-operation is for letting non-Mean Players know that the agent is willing to cooperate in future runs.

Tit-for-Tat Strategy till round 15 is to ensure that if other agents have a co-operation handshake going on to copy their message and strategy.

Then the agent calculates the defect rate for all future rounds and decides based on it.

Till round 50 the agent lets the opponents have a max defect rate of 3 considering the noise in communication channel. This is to get the cooperation bonus in case the agent detecting the correct strategy played by other agents (i.e. co-operation / collusion)

After round 50 the agent allows a defect rate of less than 2% and adds a 2% chance of defect in its moves.

Notes:

- A coordination can be created when a good chunk of people agree to co-operate.
- GitHub repository shows some more details of the test runs