

Mastermind API

Introduction



Mastermind is a code-breaking game for two players. One player becomes the *codemaker*, the other the *codebreaker*. The *codemaker* chooses a pattern of four color code pegs (duplicates allowed) and the *codebreaker* tries to guess it, in both order and color.

Each guess is made by placing a row of color code pegs on the decoding board. Once placed, the *codemaker* provides feedback by placing from zero to four key pegs in the small holes of the row with the guess. A black key peg (small red in the image) is placed for each code peg from the guess which is correct in both color and position. A white key peg indicates the existence of a correct color code peg placed in the wrong position.

Example: Given a code [RED, BLUE, GREEN, RED] when the codebreaker gives a code with [RED, GREEN, RED, YELLOW] the feedback will be: 1 black, 2 whites.

For more information about the game: [https://en.wikipedia.org/wiki/Mastermind_\(board_game\)](https://en.wikipedia.org/wiki/Mastermind_(board_game))

Project requirements

We want a Rest API that simulates the role of the Masterminds *codemaker*, its main features are:

- Create game (given a user request)
- Return feedback given a code guess
- Check game historic (optional, actually is a role of the board not the *codemaker*)
- The code should be production ready
- Use git for versioning (commits and documentation will be valued)
- The code can be written in any language or framework (but python is preferred)
- Once finished send us a link to the remote git repository where it's stored (*Github*, *bitbucket*, *gitlab* etc.)
- This project should take between 6-8h