Code

-Sequence: pegs

+compare(Code c): boolean[]

+equals(Object c): boolean

+toString(): String

+getPegs(): pegs

GameConfiguration

Max turns: guessNumber

Colors: colors

Pegs in a Row: pegNumber

Computer

- Secret: secret

+ checkGuess(Code c):int[]

+ getSecret(): secret

Player

- State: ready

+ guess(): String

+ startGame(): ready

+ playAnother(): ready

+ showHistory(): null

Driver

Game

- Turns: History

- This turn: Round

- State: Playing +resetNew(): void +declareResult(): void +getHistory(): History +getState(): Playing +setState(): void +getRound(): Round

Message

- Messages: bank

- Instance message: myMsg

+ prompt(int msgNum): String

+ prompt(String msgName): myMsg

+ toString(): String

{intro, start, guess, invalid, history, win, lost, playAgain};

“Welcome to Mastermind. Here are the rules.%n%n”

+”   This is a text version of the classic board game Mastermind. The computer will think of a secret code. The code consists of %d colored pegs.%n”

+“The pegs MUST be one of %d colors: %s. A color may appear more than once in the code. You try to guess what colored pegs are in the code and what order they are in. After you make a valid guess the result (feedback) will be displayed.%n”

+”The result consists of a black peg for each peg you have guessed exactly correct (color and position) in your guess. For each peg in the guess that is the correct color, but is out of position, you get a white peg. For each peg that is fully incorrect, you get no feedback.%n”

+”Only the first letter of the color is displayed. B for Blue, R for Red, and so forth.%n”

+”When entering guesses you only need to enter the first character of each color as a capital letter.%n%n”

blue, green, orange, purple, red, or yellow

“You have %d guesses to figure out the secret code or you lose the game. Are you ready to play? (Y/N): ”

“Generating secret code ….”

“You have %d guesses left.%n”

“What is your next guess?%n”

+“Type in the characters for your guess and press enter.%n”

+“Enter guess: “

“ -> Result: “

“No pegs%n”

“ -> INVALID GUESS%n”

“1 black peg”

“%d black pegs”

“1 white peg”

“%d white pegs”

“ – You win!!%n%n”

“ – Sorry, you are out of guesses. You lose, boo-hoo.%n%n”

“Are you ready for another game (Y/N): “