

Cryptogram Project Report - Thomas Hunt, Georgi Markov, Dimitar Mihaylov

Classes

Game.java

loadPlayer()

Load a player account from a file or create a new account. When loading a player, the user chooses from a list of players from the save file.

playGame()

The cryptogram game itself. The user chooses from a list of options to choose letters to add or remove to a space in the cryptogram. They can also get a hint, save their progress, show the solution, reset their progress, view the scoreboard, start a new game and exit.

generateCryptogram()

Creates an instance of the cryptogram factory to load a random phrase from the file and turn it into a cryptogram.

enterLetter()

The user picks a space in the cryptogram to enter a letter into. The number must exist in the cryptogram. After each letter is chosen the program checks to see if the user has won.

undoLetter()

Remove a letter the user has already put into the cryptogram.

viewFrequencies()

View the frequency of each letter in the current cryptogram.

saveGame()

Save the state of the current cryptogram to return to it later.

loadGame()

Load a saved cryptogram.

viewScoreboard()

View the top 10 times for all of the players who have played the game.

getHint()

Show a hidden letter of the cryptogram that has not been revealed already.

displaySolution()

Show the solution. This does not count as completing a cryptogram for the player.

getPlayers()

Returns an ArrayList of all the player accounts that have been saved.

resetProgress()

Deletes all of the letters entered into the cryptogram, including hints. The cryptogram timer does not start again.

Cryptogram.java

getPhrase()

Get the sentence of the cryptogram.

getMapping();

Returns the mapping of the phrase to the encrypted phrase.

getEncryptedPhrase();

Get the encrypted version of the cryptogram.

getProgress();

Returns the user's progress on the current cryptogram.

updateProgress();

Update the user's progress when a letter is entered.

resetProgress();

Deletes all of the letters entered into the cryptogram, including hints.
The cryptogram timer does not start again.

undo();

Remove a letter the user has already put into the cryptogram

getOneHint();

Show a hidden letter of the cryptogram that has not been revealed already.

completeCheck();

Check if all letters have been guessed.

getProgressMap();

Returns the user's progress on the current cryptogram as a hashmap.

JUnit Tests

PlayerTest

playersExistTest()

Tests to see if a created player exists.

addPlayerTest()

Tests if playerCount is correct after adding.

removePlayerTest()

Tests if playerCount is correct after removing.

findPlayerTest()

Adds a player and asserts that it can be searched for and found.

GameTest

getPhraseTest()

Tests to see if the phrase from the method is correct.

incompleteCheckTest()

Tests to see if the complete check works when it's not complete.

progressTest()

Check to see if the progress is checked correctly.

completeCheckTest()

Tests to see if the complete check works when it is not complete.