

mkgzqdProjectDocumentation

For my final project, I created a two player game of Hangman. The first scene that loads is a main menu. When player 1 clicks “Begin Game”, they are prompted to enter a word or phrase for their opponent to guess. Player 1 must enter a letter as a guess to compare to Player 1’s input.

1. Object oriented elements that you write the code for:
 - a. Classes- The program has multiple classes including VictoryCount and CheckVictory
 - b. Subclasses- GameController is a subclass of the class CheckVictory
 - c. Abstract- CheckVictory is an abstract class that is extended by GameController. This class contains two abstract methods: checkPlayer1Victory() and checkPlayer2Victory() which are used on lines 225 and 261 of the GameController class
 - d. Interface – GameBoard is an interface containing the methods: void setGameBoard(int hold) and void changeGameBoard(int index) and implemented by the GameController class. The setGameBoard method is used on line 168 of GameController while changeGameBoard is used on line 198.
2. Code elements that you utilize
 - a. Collection classes- I implemented a character ArrayList on line 171 of GameController.
 - b. Exception Handling – On line 141 of GameController I implement a try catch to catch IOException and ClassNotFoundException
3. Clearly defined model
 - a. My checkVictory class contains fields: player1Victory and player2Victory that update from functions checkPlayer1Victory and checkPlayer2Victory from GameController
4. Multiple scenes
 - a. Hangman switches back and forth from the Player1 and Game scenes. This is done by the goToPage2 function on line 55 of Player1Controller and goBackToPage1 function on line 87 of GameController.
5. About
 - a. In the main menu, there is an about button that provides about information. This is implemented on line 86 of Player1Controller.
6. Save and load Data
 - a. In GameController, I save the total number of wins for Player 1 and Player 2. This information automatically loads each time the Game scene is started. The object is saved on lines 231 and 278 of GameController and loaded on line 141.