Chapter 4: Kara Sokoban (Solutions)

Solution for the finished game (Task 26 to 34):

public class MyKara extends KaraSokoban {

 int counter = 0;

 public void act() {

 String key = getKey();

 if (key.equals("right")) {

 setDirectionRight();

 tryToMove();

 }

 if (key.equals("down")) {

 setDirectionDown();

 tryToMove();

 }

 if (key.equals("left")) {

 setDirectionLeft();

 tryToMove();

 }

 if (key.equals("up")) {

 setDirectionUp();

 tryToMove();

 }

 }

 /\*\*

 \* Kara makes one step. This method first tests if Kara can move or if he

 \* has to move a mushroom first.

 \*/

 public void tryToMove() {

 if (!treeFront()) {

 if (mushroomFront()) {

 if (canPushMushroom()) {

 move();

 counter++;

 setNumberOfMoves(counter);

 }

 } else {

 move();

 counter++;

 setNumberOfMoves(counter);

 }

 if (testLevelComplete()) {

 saveHighscore();

 levelComplete();

 }

 }

 }

 /\*\*

 \* Handles the saving of the highscore.

 \*/

 public void saveHighscore() {

 // Test if it is in the top 3

 if (isHighscoreTop3(counter)) {

 // Is in top 3 --> add it

 addHighscoreEntry(counter);

 }

 }

}