Kapitel 4: Kara Sokoban (Lösungen)

Lösung für das fertige Spiel (von Aufgabe 26 bis 34):

import greenfoot.\*;

public class MyKara extends Kara

{

public static final String LEVEL\_FILE = "LEVELS.txt";

public static final boolean DEVELOPER\_MODE = false;

public static final boolean HIGHSCORE\_ENABLED = true;

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.

\*

\* Kara macht einen Schritt. Diese Methode schaut zuerst, ob sich Kara bewegen

\* kann oder ob er zuerst noch einen Pilz schieben muss.

\*/

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.

\*

\* Diese Methode behandelt das Speichern der Highscore.

\*/

public void saveHighscore()

{

// Test if it is in the top 3

if (isHighscoreTop3(counter))

{

// Is in top 3 --> add it

addHighscoreEntry(counter);

}

}

}