**I – The Checkers Game**

For this exercise, implement the following steps:

1. Navigate to https://www.gamesforthebrain.com/game/checkers/
2. Confirm that the site is up
3. Make five legal moves as orange:
   1. Include taking a blue piece
   2. Use “Make a move” as confirmation that you can take the next step
   3. Restart the game after five moves
   4. Confirm that the restarting had been successful

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.support.ui.ExpectedConditions;

import org.openqa.selenium.support.ui.WebDriverWait;

public class CheckersGame {

public static void main(String[] args) {

// Set the path to the ChromeDriver executable

System.setProperty("webdriver.chrome.driver", "pathtochromedriver.exe");

String url = "https://www.gamesforthebrain.com/game/checkers/";

// Create a new instance of the ChromeDriver

WebDriver driver = new ChromeDriver();

// Step1- Navigate to the site

driver.get(url);

driver.manage().window().maximize();

// Step2- Confirm that the site is up

WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(60));

wait.until(ExpectedConditions.urlContains("/game/checkers/"));

if (driver.getTitle().contains("Checkers")) {

System.out.println("site is up!");

} else {

System.out.println("site is not reachable.");

driver.quit();

return;

}

List<WebElement> initialStep = new ArrayList<WebElement>();

initialStep.add(driver.findElement(By.name("space22")));

initialStep.add(driver.findElement(By.name("space42")));

initialStep.add(driver.findElement(By.name("space31")));

initialStep.add(driver.findElement(By.name("space11")));

initialStep.add(driver.findElement(By.name("space51")));

List<WebElement> targetStep = new ArrayList<WebElement>();

targetStep.add(driver.findElement(By.name("space13")));

targetStep.add(driver.findElement(By.name("space33")));

targetStep.add(driver.findElement(By.name("space53")));

targetStep.add(driver.findElement(By.name("space22")));

targetStep.add(driver.findElement(By.name("space33")));

// Step3.Make five legal moves as orange

// a. Include taking a blue piece

// b. Use “Make a move” as confirmation that you can take the next step

for (int i = 0; i <= initialStep.size(); i++)

{

initialStep.get(i).click();

targetStep.get(i).click();

wait.until(ExpectedConditions.visibilityOfElementLocated(

By.xpath("//p[@id='message'][text()='Make a move.']")));

}

// c. Restart the game

WebElement restartGame =

driver.findElement(By.xpath("//a[text()='Restart...']"));

restartGame.click();

// d. Confirm that restarting was successful

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(

"//p[@id='message'][text()='Select an orange piece to move.']")));

if (driver.findElement(By.id("message"))

.getText()

.contains("Select an orange piece to move")) {

System.out.println("Game successfully restarted.");

} else {

System.out.println("Failed to restart the game.");

}

// Close the browser

driver.quit();

}