## **Kalah Mancala Configuration**

# How to configure the BaseX server

### **WEB FILES:**

The standard web files (CSS, JavaScript, HTML) must be found under the path:

C:\Program Files (x86)\BaseX\webapp\static\kalahMancala

HTML files referenced by XQuery methods must be found under the path:

C:\Program Files (x86)\BaseX\webapp\WEB-INF\kalahMancala

All the HTML files must be configured as XHTML files. This means the file needs to have the following structure:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"

"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">...CONTENT... </html>
```

### **XQUERY FILES:**

The XQuery files must be found under the path:

C:\Program Files (x86)\BaseX\webapp\WEB-INF\kalahMancala

#### **DATABASE:**

The Kalah Mancala database must be named: "Kalah Mancala" and it must contain the file "GameInstanceCollection.xml".

### **SAXON 9.x REQUIRED:**

To be able to use XSLT 2.0 transformators, the server must have a Saxon processor with the version 9.x (saxon9he.jar, saxon9pe.jar or saxon9ee.jar) on the classpath. The processor can be downloaded from <a href="http://www.saxonica.com/download/SaxonPE9-7-0-14J.zip">http://www.saxonica.com/download/SaxonPE9-7-0-14J.zip</a> and the JAR file saxon9pe.jar must be found under the path:

C:\Program Files (x86)\BaseX\lib\saxon9pe.jar

# **URL** links for the game

### **START SCREEN:**

The start screen must be displayed when entering the link: <a href="http://localhost:8984/gxf/kalahMancala">http://localhost:8984/gxf/kalahMancala</a>
When clicking on the button "PLAY GAME", the triggered link is: <a href="http://localhost:8984/gxf/newGame">http://localhost:8984/gxf/newGame</a>
After creating a new game, transform it with the link: <a href="http://localhost:8984/gxf/transform/{\$gameId}">http://localhost:8984/gxf/transform/{\$gameId}</a>

#### **GAME SESSION SCREEN:**

When clicking on a house, trigger the link: <a href="http://localhost:8984/gxf/move/{\$gameId}/{\$houseId}">http://localhost:8984/gxf/move/{\$gameId}/{\$houseId}</a>

After distributing the seeds with the "moveSeeds" method, create a web:redirect to the link: http://localhost:8984/gxf/specialCases/{\$gameId}/{\$startingPit}/{\$numOfStepsToMove}/{\$player}

After checking the special cases, create a web:redirect to the link: http://localhost:8984/gxf/checkGameOver/{\$gameId}

After checking if the game is over, transform it with the link: <a href="http://localhost:8984/gxf/transform/{\$gameId}">http://localhost:8984/gxf/transform/{\$gameId}</a>

When clicking on the button "NEW GAME", the triggered link is: http://localhost:8984/gxf/newGame

### **GAME OVER SCREEN:**

When clicking on the button "PLAY AGAIN", the triggered link is: <a href="http://localhost:8984/gxf/newGame">http://localhost:8984/gxf/newGame</a>

# **Current directory structure on the server**

```
BaseX -> webapp ->

WEB-INF -> kalahMancala ->

controller.xq

common.xq

moveSeeds.xquery

MancalaTransformator.xsl

startScreen.html

static -> kalahMancala ->

startScreenStyle.css
```