Learn to stand out

Hacking Hot Potatoes

The Cookbook

NEW BULGARIAN UNIVERSITY

Stan Bogdanov

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http://hotpot.ewbooks.info

(stanbogdanov@yahoo.com)

Credits

Author

Stan Bogdanov

Reviewers

Monica Varsakopoulos

Alexander Varsakopoulos

Martin Holmes

Stewart Arneil

Editor

Glenys Hanson

Graphics and Cover Work

Stan Bogdanov

About the Author

Stan Bogdanov has had a long-standing relationship with Hot Potatoes and is the proud inventor of the Audio Crossword. He has provided support and consultancy helping teachers make the most of opportunities for e-learning materials development. He also does ICT training as well as consultancy work for schools, universities, and organizations like the British Council and the Peace Corps, the Ministry of Education and teacher training centres.

As full-time Assistant professor at New Bulgarian University he teaches on Teacher training (PRESET and INSET) and Cambridge Certificate Exam preparation courses, and mentors student teachers. He also does web design and development for educators and businesses. You can reach him through his Hot Potatoes tutorials web site, http://hotpot.ewbooks.info, which he has been running since 2006. When he is not at the computer hanging around the Moodle forums or the Hot Potatoes support Yahoogroup, or when he is not teaching, you can find him swimming or reading stories with his younger daughter, Christina.

I would like to thank, in the first place, Martin Holmes and Stewart Arneil, for writing this wonderful software, Hot Potatoes. Without them, such a book would have never been written. I must also thank them for helping me learn so much about Hot Potatoes and the Web in general.

I would also like to thank my reviewers, Alex and Monica Varsakopoulos. Very special thanks to my editor Glenys Hanson for her devotion and time as well as for her constructive criticism on the book.

And finally, thanks must go to the great international Hot Potatoes community who've provided me with invaluable feedback and comments on my exercises and tutorials over the years: that encouraged me to put together this book and share some of my ideas and experience with Hot Potatoes so it can benefit old and new Hot Potatoes users.

About the Reviewers

Monica Varsakopoulos has been an educator for 30 years both in USA and Greece where she taught in Special, Regular and ESOL classrooms. She has extensive experience teaching language utilizing multimedia and computer technology. Her initial work began on Macintosh computers in the mid 1980's and the Voyage of the MIMI. She was selected to be a 'Model Technology Demonstration Classroom' in the State of Florida before moving to Greece where she opened her own foreign language school with her husband. Today, they provide language instruction in English, French, German, Italian and Spanish using Smart board technology, e-books as well as programs like 'Hot Potatoes' to create their own material for Moodle to teach language.

Monica believes that technology, being the disruptive interactive medium that it is, is absolutely necessary for any type of quality education program. Computer technology enables one to think critically, analytically, and creatively.

Monica lives in Giannitsa, Greece and spends her summers in Vermont in the USA. She can be contacted at imblst@msn.com

Alex Varsakopoulos has been an educator for 25 years as business education teacher in Jacksonville Florida and then as an ESOL teacher in his own schools in Giannitsa, Greece.

Because of their experience they adopted technology in their ESOL schools early on by providing a computer lab for each school with internet for all computers. Students email their compositions and teachers use Markin© to comment on them and grade them. The schools also use Google apps as VPN and each student is provided a free account including email. We have been using Hot Potatoes since 2010 and every teacher is expected to generate Hot Potatoes exercises and post them on our Moodle.

About the Editor

Originally from Wales, **Glenys Hanson** was a Silent Way teacher and a teacher-trainer of English as foreign language at the Centre de linguistique appliquée of the Université de Franche-Comté, France, from 1977 to 2010. There she created and maintained the site English On-Line France, a site of resources for teachers and learners of English, and ran several on-line distance courses at Bachelors and Masters levels. She has published a dozen practical articles on teaching with the Silent Way.

Glenys believes that modern technology can provide teachers with new ways of offering effective and challenging tasks for their students.

Since retirement, she has devoted her time to the association Une Education Pour Demain: creating web sites, doing teacher training both on line and face-to-face and developing interactive exercises, mainly with Hot Potatoes. She is also active in the Moodle community.

Glenys lives in a village near Besançon, France. She can be contacted at: glenys.hanson@uneeducationpourdemain.org

A word from the authors of Hot Potatoes

Extensibility and sharing are core values in the design of Hot Potatoes. We can't imagine, let alone create, a user interface for all the possible ways users might want to modify the program's output, so we designed Hot Potatoes so that the output is based on modifiable templates. This system of 'source files' allows users to customize virtually any aspect of their web pages. Stan is expert with the program and those source files. In this cookbook, Stan shares that expertise in a way that demonstrates his sensitivity to the perspective of Hot Potatoes users, and his skills as a presenter and teacher. We have learned a lot from his work.

As the authors of Hot Potatoes, we are heartened to see this publication because it is such a good example of the core values embodied in Hot Potatoes, and such a natural companion to the software and its community of users.

Martin Holmes and Stewart Arneil
University of Victoria
Humanities Computing and Media Centre
Victoria
British Columbia
Canada

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Preface

This book is dedicated to extending the capabilities of a powerful suite of Web authoring tools – Hot Potatoes[1], by Half-Baked Software Inc. and the University of Victoria Humanities Computing and Media Centre. It is intended to help you make the best use of the Hot Potatoes suite so that you maximize the learning opportunities for your students.

Hot Potatoes has been popular with teachers for years. Exercises created with Hot Potatoes are intended as self-exploratory learning activities where learners get feedback on wrong answers, and they can have multiple attempts at finding the right answer to each question.

The *recipes* you will find in this book are both simple tricks and more complex code implementations to bring more interactivity into the exercises created with Hot Potatoes as well as using Hot Potatoes in Moodle.

Introduction

What this book covers

Chapter 1, *Tweaking the interface* deals with modifications to the layout of the exercises so that presentation features are used to enhance learning.

Chapter 2, *Embedding multimedia* shows various ways of adding value through using audio and video in the exercises.

Chapter 3, *Pedagogical recipes* presents pedagogically motivated modifications based on theories of learning and cognition.

Chapter 4, *Resources* features a *Taxonomy of over 90 exercise types with Hot Potatoes* enhanced with links to a support site http://hotpot.ewbooks.info where you can view demo files, working examples from the Taxonomy. The last section in this chapter also provides references to the software and internet resources mentioned in the book.

[1] HotPotatoes - http://hotpot.uvic.ca

What you need to have already done

To follow this book you need to have, in the first place, Hot Potatoes installed on your computer, as well as an HTML Editor.

You will be required to work with code: xHTML, CSS and sometimes JavaScript. This means that you have familiarized yourself with the "Hacking workshops" and know what and which files we are referring to.

So check these out:

- Hacking Hot Potatoes: A detailed workshop with ten examples (http://hotpot.uvic.ca/howto/hacking_workshop/index.htm)
- How to edit the source files (http://hotpot.uvic.ca/howto/editsource.htm)
- Documentation of source files and placeholders (http://hotpot.uvic.ca/howto/sourcefiles.xml)

The tutorials at http://hotpot.uvic.ca/tutorials6.php are a good starting point for your own modifications. As you work your way through this book, though, you will find out how easy it is to customize your exercises.

The modifications of the exercises in most cases require that you work directly with code, so you will need an HTML Editor. My recommendations are Notepad++[2] for Windows and TextWrangler[3] for Mac.

Conventions

In this book different styles of text and colours have been used to distinguish between different kinds of information.

Code and markup words inline the text are shown as follows: `lang="en"`, while whole chunks of sample code are shown in boxes and sometimes differing colour like this:

```
<?xml version="1.0" encoding="utf-8"?>
```

Important words are emphasized in bold and in a different colour.

Notes and warnings appear with a warning sign like this.

Warning: *Run this code as a single line!*

[2] Notepad++ is a free opens source editor. Download it from http://notepad-plus-plus.org

[3] TextWrangler - http://www.barebones.com/products/textwrangler

Types of files

When talking about Hot Potatoes there are three kinds of files we refer to:

source file - the `.ht_`, `.cs_`, and `.js_` files found in the installation folder called `'source'`.

data file - the `.jmt`, `.jqz`, and other files holding the data for the exercises, are referred to with their respective name, e.g. JMix, or JQuiz, etc.

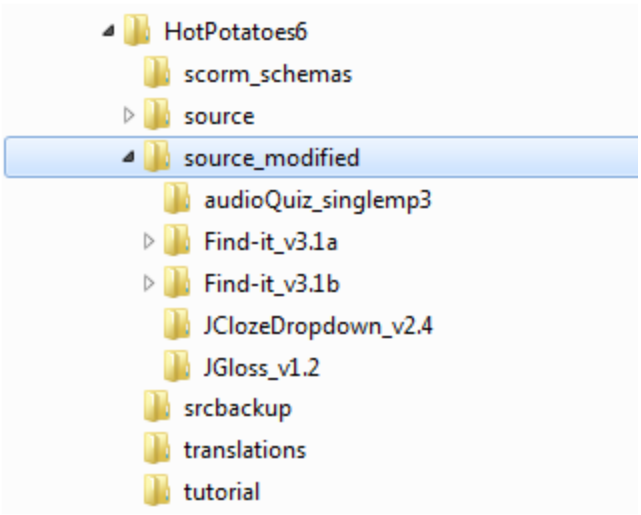
output file - `.htm` files, the actual web pages containing the exercises.

Be aware that changes and modifications to the **source files** are **permanent** and affect all subsequent output files generated with the program, while changes to the **output files** affect only the web page that is being modified. Most modifications in the recipes can be applied to either the source or the output files.

Modified source files

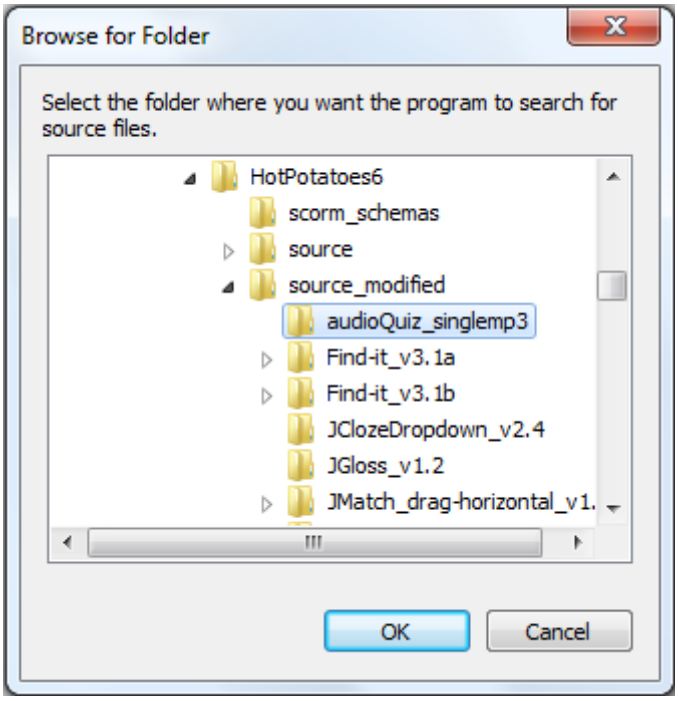
With time, you will most probably create a lot of modified files. It will become hard to remember what modifications you've made so make comments in the code of what you have modified.

It will be also good to keep your modifications in one place so it'll be much easier to find them when you need them. **Never modify the original source files**. Make a new folder and call it **`modified_source`**; keep all you modifications in there in separate folders. Here's my modified source files structure:



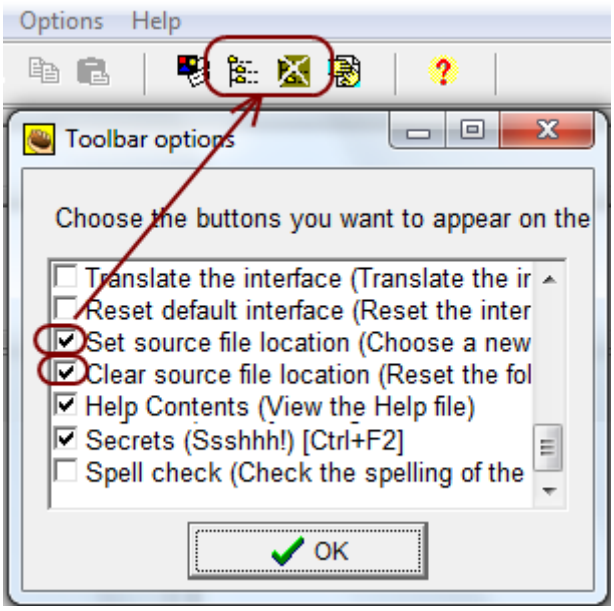
Every folder has the files that are necessary for the modified exercise. Copy the necessary files from the original **`source`** folder, put them in the respective folder and then make the customizations to the copied file(s).

To use the modified files, click on **`Options`** and select **`Set source file location`** (or press **Ctrl+Shift+Alt+S** simultaneously**)**, browse to the folder with the modification and select it, and press OK, like in this screenshot:



Press Ctrl+Shift+Alt+T to return to the default source folder.

If you want this functionality more easily available, you can enable the two buttons in the Toolbar. Go to **Options->Toolbar options** and tick the two boxes **Set source file location** and **Clear source file location**. Two new icons will appear on the Toolbar.



Absolute and relative paths

We often refer to **absolute** and **relative paths** in the recipes.

Absolute paths are called that because they refer to the very specific location, including the domain name. The absolute path to a Web element is also often referred to as the URL. For example, the absolute path to an mp3 file may look like this:
`http://www.domain-name.com/folder/sub-folder/file-name.mp3`

Relative paths change depending upon what page the links are located on. There are several rules to creating a link using the relative path:

- links in the same folder as the file have no path: `file-name.mp3`
- sub-folders are listed without any preceding slashes: `sub-folder/file-name.mp3`
- links up one folder are listed as: `../file-name.mp3`

Use **relative** paths for your media in the exercises because you'll be able to move them from one course to another and from one Moodle to another retaining their integrity.

Use **absolute** paths **only** if necessary or if you're linking to external files, for example Youtube.

If things are not working as expected

These are things to check if your exercise isn't working:

- Do you have the latest Hot Potatoes version (v6.3 at the time of publication)?
- Have you checked the exercise at W3C Validator http://validator.w3.org for errors in the code?
- Are there **no spaces** in the file names and folder names?
- Have you changed the names of media files **after** you created the exercise?
- Have you moved the media files from one folder to another **after** you created the exercise?
- Have you uploaded all media files that are necessary?
- Are the media files in the correct folder?
- Are the URLs to the media files pointing to the correct location?
- Have you followed the recipe exactly?
- If on Moodle, have you got the latest HotPot and/or QuizPort and/or taskChain Modules?

If all the above is OK and your exercise is still not working, post to the Hot Potatoes support group on Yahoo http://tech.groups.yahoo.com/group/hotpotatoesusers or the HotPot Moodle forum http://moodle.org/mod/forum/view.php?id=1599.

Errata

Although every care has been taken to ensure the accuracy of the content of this book, mistakes do happen. If you find a mistake in the book – maybe a mistake in the text or in the code – the author would be grateful if you would report this. By doing so, you can save other readers from frustration and help to improve subsequent versions of this book. Please report errata by writing an email to support@ewbooks.info, entering 'errata' as the subject line, and the details of the errata as the message. Once your errata are verified, your submission will be accepted and the errata added to the list.

Chapter 1

Tweaking the interface

This chapter deals with changes in the interface of the exercises generated by Hot Potatoes.

The interface of the web page is what we interact with on screen and these are the elements: the layout, the navigation, the buttons, the colour scheme, white space, different sizes (of font, images, etc.) and anything that is associated with the visual design of the exercise.

Since the changes to the interface are made in most cases through CSS, you will need an HTML Editor.

In this chapter we will be tweaking the interface features of the exercises to enhance the design and functionality of the exercises.

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