

Souvenirs: A Fantasy Exploration Game

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A simple text-based browser game created
using HTML, PHP, and MySQL code.

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Abstract

Souvenirs: A Fantasy Exploration Game provides users with an easily accessible source of entertainment. Souvenirs is a text-based browser game set in a fantasy world that allows players to create characters, explore different areas, and collect items. It uses PHP and MySQL code. Users can explore the game without a character, but to collect items the user must either create a character or select a previously created character. The top of each page has general navigation, to provide easy access to the main pages. Currently, the game provides users with several minutes of entertainment, much like many other browser games. More lore, areas, and items would increase the amount of game content, which would make the game more fun and immersive for users, as would additional features, like quests or ways to display or trade items.

Table of Contents

Title	1
Abstract	2
Table of Contents	3
Introduction	4
Code	5
Site Details: Main Diagram	6
Page Header	7
Character Display	8
Search Characters	9
Areas	10
Items	11
Inventory and Character Modification Page	12
Conclusion	14
References	15

Introduction

Text based games have been around for a long time, but that does not prevent a new one from being fun. With all the modern day technology, and plentiful internet access, there are a wide variety of games for users to play. Especially since COVID, everything has been transitioning more towards online, which further increases how widespread playing online is.

Souvenirs offers users another source of entertainment, although granted not for very long since the game does not have all that much content. The basic functions of Souvenirs are creating characters, exploring areas, and collecting items, and while all of those are currently rather limited, they could be expanded to include more options without much difficulty. (More items and areas would be easy, and more character customization would require either another table or a larger table, but that would still be fairly easy.) Collecting items has the most variety, because it makes use of random number generation to introduce some variability into the items. The more variety in characters, areas, and items, the longer it takes for players to exhaust the game content, and the more entertainment the game provides.

Code

Souvenirs is constructed using PHP and MySQL code of the type that the Zeus web server uses. It uses a PHP session to remember what (if any) character is selected. The logout page destroys the current session and leaves the user on a page that looks like the homepage, with all the associated links. Every page is constructed to either display the login link or the selected character, all general pages are visitable without a selected character, but items are only able to be collected when a character is selected. (Characters have inventories; users do not.)

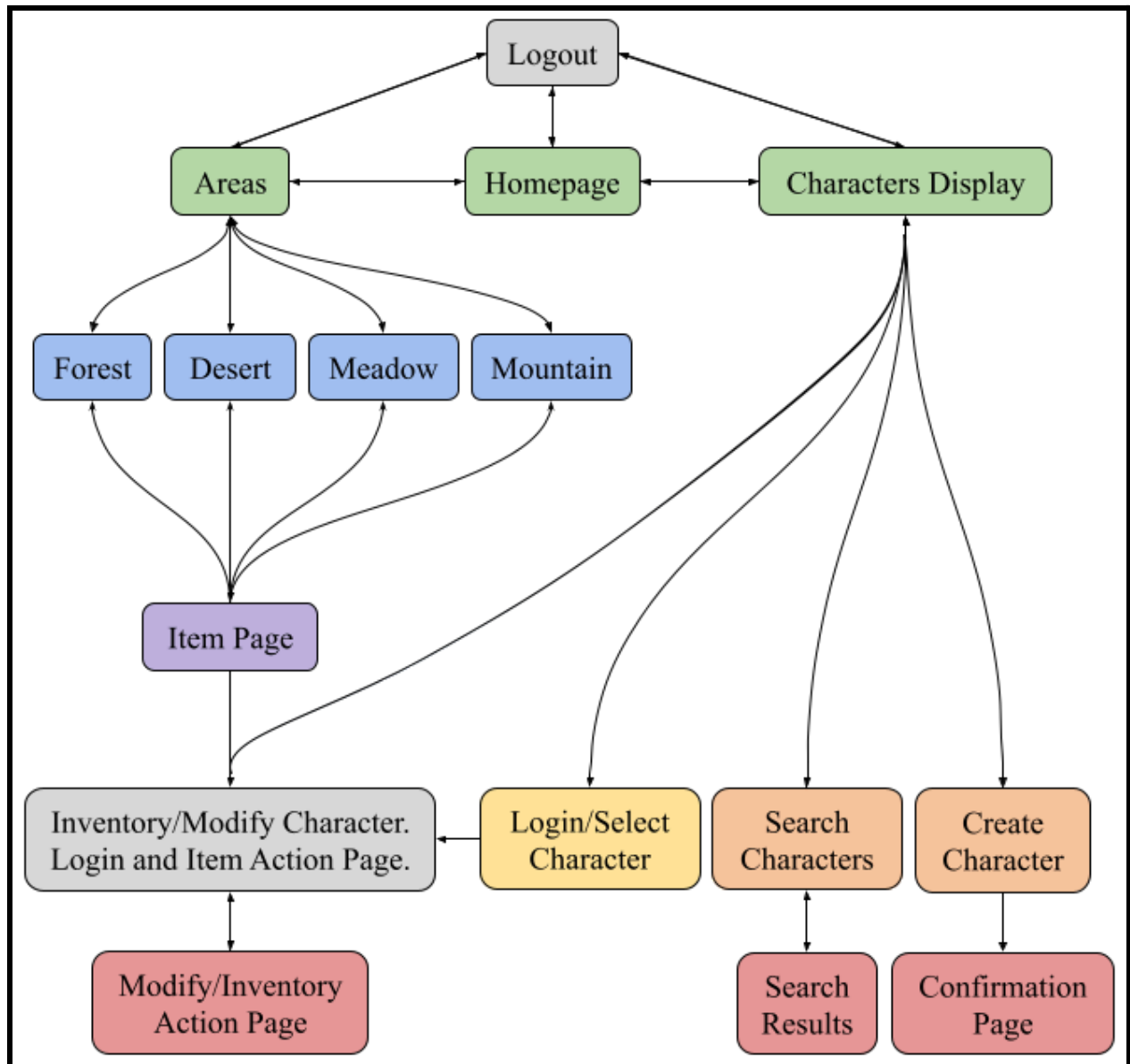
Many of the pages have HTML forms to let the user choose what option they want, from the input for character creation to page navigation to item interaction. Many of the pages also use PHP code to tailor the current page based on what was selected from the previous page (like displaying the correct blurb of item information based on what item was selected).

Souvenirs uses one MySQL table, Characters, to store character information. Some of the pages access that table, either to create new characters or to display or modify existing characters.

```
mysql> desc Characters;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name  | varchar(20)   | YES  |     | NULL    |       |
| Race  | varchar(20)   | YES  |     | NULL    |       |
| item1 | varchar(20)   | YES  |     | NULL    |       |
| item2 | varchar(20)   | YES  |     | NULL    |       |
| item3 | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

Site Details: Main Diagram

This diagram shows connections between pages, although every page links to the green ones and to either the yellow (without a selected character) or gray (with a selected character) page(s).



The search results page links to everything that the characters display page does, but those links are not shown in an attempt to prevent crossing and confusing lines.

Page Header

The top of every page matches, with links to the homepage, the areas page, and the character display page (green in the diagram). Every page also has, depending on whether a character is currently selected or not, either a link to the login/select character page (yellow in the diagram) or links to the character inventory page and the logout page (gray in the diagram).

[Log In](#)

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

Above: the page header when no character is selected.

Below: the page header when a character named “Character” is selected.

[Character](#) | [Logout](#)

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

Character Display

The character display page is the central characters page (accessed from the “Characters” link), with a display of all the current characters and links to all the character related pages.

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

Name	Race	Item 1	Item 2	Item 3
Elfie	Elf	mushroom	pinecone	grass seeds
Daisy	Human	snow	ice	rose
Roar	Dragon	squirrel	squirrel	squirrel
Tom	Human	dandelion	grass	water
Lily	Elf	rock	cactus	gold ring
Grr	Dragon	eagle	cloud	lizard

[Select Character](#) | [Create Character](#) | [Modify Character](#) | [Search Characters](#)

Search Characters

The search page lets the user search by any of the five categories, and then displays only the characters that match the desired result. The main purpose of the search page is in case a user only wants to see characters that match a certain criteria (for example, human). With only a few characters, searching is in practice mostly useless because it is easy to manually check all the characters, but with more characters then searching would be of more practical use.

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

Search Characters by:

Search for:

An example of the search page (above) and the search results page (below).

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

Name	Race	Item 1	Item 2	Item 3
Daisy	Human	snow	ice	rose
Tom	Human	dandelion	grass	water

[Select Character](#) | [Create Character](#) | [Modify Character](#) | [Search Again](#)

Areas

There is a central areas page that provides access to all the individual area pages.

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

The central teleportation hub has a number of glowing portal, each leading to a different area.

A dark green portal leads into a forest.

A tan portal leads into a sandy desert.

A grey portal leads onto a mountain.

A pink portal leads into a flowery meadow.

Each area page has a description (which is currently rather limited, but could be expanded), the option to examine any of the items located in the area, and a return to the central areas page.

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

This forest is comprised mostly of large trees.

There are lots of leaves on the ground, occasional scattered rocks,
about three pinecones, (despite this forest only having deciduous trees),
a few mushrooms, and a squirrel.

Examine a souvenir?

A dark green portal back to the teleporter hub.

Items

Examining an item takes the user to the items page. That page has a lot of different scenarios based on what (if any) item was selected, the result of a random number generator for more variety, and when logged in, the option to take the item (and choose which inventory slot it goes into). There is also a return link to the area the item came from.

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

A shiny black rock.

Back to the [mountain](#).

Without a selected character (above) and with selected a character (below).

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

A boring grey (or should it be gray?) rock.

Would you like to take the item? If so, select an inventory slot.

Item 1 Item 2 Item 3

Back to the [mountain](#).

Inventory and Character Modification Page

The character inventory and modification page serves several purposes. When no character is selected, it simply displays a large link to log in (a character cannot be modified unless it is the selected character).

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

[Log In](#)

With a selected character, the page shows information for that character, and options to modify it.

All of the selected options are executed by the action page, which means that the user can change anywhere from just one category (race, or just one item) to all four of them.

This page is also the action/landing page for selecting a character (logging in).

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

Name	Race	Item 1	Item 2	Item 3
Daisy	Human	snow	ice	rose

Change Race to: Human Elf Dragon

Item 1: Empty Slot

Item 2: Empty Slot

Item 3: Empty Slot

The inventory and character modification page also serves as the action page for taking items. When an item is taken, there is a notice about what the change to the character's inventory was above a table displaying the character in its current state.

[Homepage](#) | [Areas](#) | [Characters](#)

Souvenirs: A Fantasy Exploration Game

Item1 set to lizard.

Name	Race	Item 1	Item 2	Item 3
Daisy	Human	lizard	ice	rose

Change Race to: Human Elf Dragon

Item 1: Empty Slot

Item 2: Empty Slot

Item 3: Empty Slot

Conclusion

Overall, Souvenirs is currently a rather limited game with basic functions, but it could be expanded quite a bit with more content to distinctly increase the possible entertainment.

Additions to this game could include a password to prevent players from using other players' characters, more lore and better described areas, even more items, more character customization details (gender, age, profession, etc.), quests, and a page (and associated table) to display items. The last one, an item display, might have an option to write a note associated with the item. The notes could be used by players either to provide some description of the item, or to communicate with other players.

References

Wang, Zizhong John, “Web Programming with PHP/MySQL.” Virginia Wesleyan University, 2023.