# Assignment 1 Part C

## 100 pts

This assignment is the third part of a three-part assignment which will teach you about search engine abuse. For this assignment, you will play the role of someone who has compromises a Web site—your site from Assignments 1A & 1B—and wants to use the site's high page rank to make money. You would like to get anyone who searches for the celebrity Arthur Tuflaphas[1] to visit your site. When they do, you will then send them to the Tuflaphas Fan Merchandise Store (http://arthur-t.ece498kl-fa2018.org), which pays you a commission on every purchase.

## 1 Your Web Server

You will use the same VM that you used for the first part of this assignment. Check your site regularly to make sure it is still running.

## 2 Problem 5: Search Engine Optimization

As in Problem 0, your goal is to get indexed by major search engines and for your site to appear as the top result for any search for "Arthur Tuflaphas" on the major search engines. However, because you have compromised the site (your site from Assignments 1A & 1B), you will need to hide your presence.

Using the data you have collected for Problem 4 of Assignment 1B, modify your Web site so that when a search engine crawler visits your site, it sees the name of celebrity Arthur Tuflaphas (so your site gets indexed for that search term). Your site must *only* show a page about Arthur Tuflaphas when visited by a search engine. *This problem is worth 40 points.*

## 3 Problem 6: Redirecting Search Traffic

When users visit your site after searching for "Arthur Tuflaphas" your site must automatically redirect them to

$$\texttt{http://arthur-t.ece498kl-fa2018.org/?affid=}netid$$

where `netid` is your NetID. (This is how the store will know to whom it should credit the commission from any purchase.) Your site must *only* redirect users coming from a search results page. *This problem is worth 40 points.*

## 4 Problem 7: Hiding from Legitimate Site Owner

You will need to hide the fact that your site is compromised from its legitimate owner (you from Assignments 1A & 1B). Therefore, any visitors to your site that do not fit the profile in Problems 5 and 6 must see

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[1]To make the assignment easier, Arthur Tuflaphas is fictional.

the original site with the keywords from Assignment 1A. This behavior are summarized in Table 1 below. *This problem is worth 20 points.*

| Visitor | Behavior |
| --- | --- |
| Search engine Web crawler | Show page containing information about Arthur Tuflaphas (Problem 5). *Purpose:* Rank in the top results on searches for "Arthur Tuflaphas." |
| Visitor from search results | Automatically redirect to store via affiliate link (Problem 6). *Purpose:* Monetize Arthur Tuflaphas traffic. |
| All other visitors | Show original site (Problem 7). *Purpose:* Hide from original owner. |

Table 1: Required site behavior.

## 5  Extra Credit: SEO Mastery

The owners of the top search result for "Arthur Tuflaphas" will receive 15 points of extra credit. The second result will receive 10 points of extra credit. The third result will receive 5 points of extra credit.

## 6  Submitting Solutions

You do not need to submit anything for this assignment. You will be graded on the behavior of your site. If you would like to use one or more of your three 24-hour extensions, *you must email the instructor and the TA;* we will then check your site at the end of the extension. You may *not* discuss your solution with other students until three days after the assignment deadline.

## 7  Change History

Revision 2 added "?" to affiliate url:

$$\texttt{http://arthur-t.ece498kl-fa2018.org/?affid=}netid$$