## sCTF Problem Design Guide

- Problems should be written with the following in mind:
  - o Problem Name
  - o Description
  - o Hint (not necessary)
  - o Flag
  - o Points
  - o Problem Type
  - o Required Files (not necessary)
- File structure should be sent in the following form within a compressed file:
  - O problem\_name.zip
    - description.txt
    - hint.txt (optional)
    - flag.txt
    - point\_value\_number
    - problem\_type\_number
    - author\_name
    - files.zip (optional)
  - O description.txt should contain the description of the problem.
  - O hint.txt should contain the problem hint, if there is one. If not, do not include a hint.txt file.
  - O *flag.txt* should contain the flag to the problem.
  - O *files.zip* should be a compressed file containing any files/folders necessary to complete the problem. If there are none, do not include a *files.zip* file.
  - O *point\_value\_number* should simply be an empty file without an extension named like so, in which *30* is the point value for the problem: **point\_value\_30** 
    - Point values are to be done in increments of 5 or 10, with the introduction problem or survey being worth 5 points. This is an estimated point value, and problems will be reassessed after all are turned in to determine the actual point values based on the comparative difficulty to other problems.
  - O *problem\_type\_number* should simply be an empty file without an extension named like so, in which 5 is the problem type of the problem: **problem\_type\_5** 
    - Reference of problem type numbers:
      - 1 Web
      - 2 Cryptography
      - 3 Forensics
      - 4 − Pwning
      - 5 − Recon
      - 6 Reversing
      - 7 − Game
      - 8 Algorithmic
  - O *author\_name* should simply be an empty file without an extension named like so, in which *arun\_dunna* is the author of the problem: **arun\_dunna**
- We are in need of all problem types, except for *game*, which will be done solely by Arun. When a problem is completed, email it to **adunna@sctf.io** with the subject line "sCTF Problem" with the compressed file attached.