Software Modules:

* app.py
  + Starts HTTP webserver with a CGI request handler on port 80. The file “index.html” acts as the webserver’s index page.
* index.html
  + The user interface of the webpage, with appropriate text input fields, buttons, and content boxes. Text fields and radio buttons pass variables onto CGI scripts. Scripts are invoked by selecting functions from the buttons. Results and messages are displayed in the content box.
* append.py
  + A CGI script that looks for .asc files in the webserver’s root directory, parses through them for tags and values, and adds file information to the TMSU database. At completion displays the number of newly added files in the content box.
* query.py
  + A CGI script that searches for the query typed into the search field. Depending on user selection from the radio buttons, it either displays the list of query results in the content box as filenames and directories, or copies the resulting files to a directory in the lab’s research drive.
* tags.py
  + A CGI script that displays in the content box all tags present in the database. This is useful for writing queries, as tags might be unknown to the user, and the user can simply copy and paste text from the content box rather than typing each tag.

Documentation:

This software system uses the TMSU project.

Website: [tmsu.org](https://tmsu.org/)

Project Page: [github.com/oniony/TMSU](https://github.com/oniony/TMSU)

Environment:

Architecture: x86\_64

Operating System: Microsoft Windows (7)

Networking: BU ENG research drive mounted with access to Roblyer lab's folder

Languages: Python, Command Prompt, HTML

Dependencies: Python 2.7, TMSU