- [ ] Initial questions, thoughts, to-dos, followups
    - [ ] How can you verify calls in curl?
        - [ ] Run commands with -v to see status codes
- [ ] Test Cases / AC
    - [ ] QUESTION: How long will the application wait for incoming connections?
    - [ ] QUESTION: Does the application ever timeout?
    - [ ] QUESTION: Can you update the timeout value, if available?
    - [ ] QUESTION: If it does timeout, how so?
        - [ ] Does it shutdown entirely?
        - [ ] Does it remain on, but reject all incoming requests?
    - [ ] ~~Application should respond to the specific port environment variable~~
    - [ ] ~~Application should not respond to the specific port environment variable if passing a different port value~~
    - [ ] ~~A Post to /hash in the correct format will return an identifier immediately~~
    - [ ] ~~A Post to /hash will wait 5 seconds to compute the hash in SHA512~~
        - [ ] ~~This should be a timed request to ensure that it takes a total of 5 for the request to complete~~
    - [ ] ~~What happens if you submit different forms of the password?~~
        - [ ] ~~Valid~~
        - [ ] ~~Invalid~~
        - [ ] ~~ALL CAPS of the same password~~
    - [ ] ~~What happens if you submit the same password?~~
    - [ ] ~~The hashing algorithm should be in SHA512~~
        - [ ] ~~How to verify this?!~~
    - [ ] ~~A Get to /hash should accept a valid identifier~~
    - [ ] ~~Submit a invalid identifier to GET /hash~~
    - [ ] ~~Verify it is base64 encoded from an original POST~~
    - [ ] ~~Get /stats~~
        - [ ] ~~Can you attempt to submit data in the request~~
        - [ ] ~~Total requests count~~
            - [ ] ~~Check manually by tracking requests made~~
            - [ ] ~~What requests are counted here?~~
        - [ ] ~~Average time?~~
            - [ ] ~~How to time requests?~~
            - [ ] ~~Log each command > total > calculate average > verify~~
        - [ ] ~~Should return valid JSON format~~
    - [ ] Processing multiple requests?
        - [ ] How can you send multiple request in curl?
    - [ ] No additional password requests should be allowed when shutdown is pending.
        - [ ] Send shutdown, send new password

- ☐ Or send timed shutdown? Then send requests to verify?
- ☐ Does any other action/command trigger a request count +1
- ☐ Is the total requests counting correctly
    - ☐ Any ways to manipulate that or try to break it?
        - ☐ Many simultaneous requests - does it count correctly? Are each requests successful
- ☐ Does it count bad requests?
- ☐ Can you update a password
- ☐ Can you delete a password at /hash/x
- ☐ Does sending the same password create a new identifier
    - ☐ Camelcasing password
    - ☐ All caps
- ☐ /1/2/3/4/5/6 in the url only returns the last indeifinter encoded password
    - ☐ This shouldn't work?
- ☐ Authentication on the application?
    - ☐ Can you bypass it?