



# **Shaping the Future of Cyber Talent: Aligning Skills with Mission through Lighthouse and Agile Saber**

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“The approach is practical - unify efforts across DoD and partner with industry-leading software institutions to produce a portfolio of best-in-class software capabilities enabled by DoD processes.

- Dr. Kathleen H. Hicks, the deputy secretary of defense

“Our training programs must generate demonstrated tactical and technical competence, confidence, and initiative in our Soldiers and their leaders.

- James C. McConville General, United States Army Chief Of Staff

# The Challenge

The growth of programming languages, deployment methods, and operational requirements in cyber is outpacing the way we currently track Airmen's skills.

# Mission Qualification Training

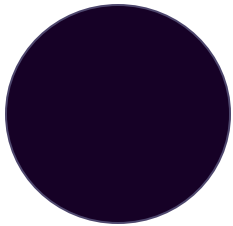
## Technical Training

- **Upskilling** our technical competency with specific tasks defined by **KSATs** aligning with the **DCWF**.

## BESPIN's Culture Code

- **Bringing** members of the organization into the BESPIN **Culture Code**.

Completion of **BOTH** Upgrade Assessments results in a promotion of patch level



Youngling



Padawan



Knight



Master

# Aligning Our Technical Training

AFSC 1D7XX/X

CYBER DEFENSE  
OPERATIONS



BASIC



SENIOR



MASTER



|                              |                                                                                                |  |  |  |
|------------------------------|------------------------------------------------------------------------------------------------|--|--|--|
| Web Development Fundamentals | Can create a basic HTML webpage including headers, paragraphs, links, and images               |  |  |  |
|                              | Proficient in creating structured data using proper heading levels, tables, lists              |  |  |  |
|                              | Familiar with HTML5 features such as audio, video, and enhanced input fields                   |  |  |  |
|                              | Can write simple CSS rules to style text color, font size, and background color                |  |  |  |
|                              | Uses class and ID selectors, attribute selectors, and pseudo-classes effectively               |  |  |  |
|                              | Understands different ways to include CSS and can advocate for best practices                  |  |  |  |
|                              | Can write simple JavaScript statements, expressions, and use variables effectively             |  |  |  |
|                              | Can select DOM elements and understand the DOM tree hierarchy                                  |  |  |  |
|                              | Can add event listeners and handle basic events (click, mouseover, keydown)                    |  |  |  |
|                              | Can apply media queries for responsive design and fluid layouts                                |  |  |  |
|                              | Understands web security basics (XSS, CSRF, SQL injection, OWASP Top 10)                       |  |  |  |
|                              | Can implement basic input validation and sanitization                                          |  |  |  |
|                              | Demonstrate the ability to install npm, yarn, webpack, etc. on a local development environment |  |  |  |
|                              | Use a package manager to install dependencies                                                  |  |  |  |

| Task                                               | CFETP Alignment                                |
|----------------------------------------------------|------------------------------------------------|
| Create basic HTML webpage (headers, links, images) | 15.1 HTML Code                                 |
| Structured data with heading levels, lists, tables | 15.1 HTML Code                                 |
| HTML5 media, forms, validations                    | 15.1 HTML Code, 15.2.4 JavaScript Fundamentals |
| Simple CSS (color, font size, background)          | 15.3 Cascading Style Sheets                    |
| Attribute selectors, pseudo-classes (.hover, etc.) | 15.3 Cascading Style Sheets                    |
| Different ways to include CSS                      | 15.3.4 Three Ways to Insert CSS                |

| Learning Objective                                                                                                                       | KSATs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JavaScript variable<br>DOM methods (get, set, etc.)<br>Add event listener<br>events<br>JavaScript role in web development                | Writes clean, self-documenting code that is well organized and consistent with organizational standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Basic GET/POST w<br>Understand HTTP<br>Understand HTTP<br>Basic understandi<br>Write queries and<br>Media queries for<br>Change backgrou | <p>Good reference:<br/><a href="https://github.com/ryanmcdermott/clean-code-javascript">https://github.com/ryanmcdermott/clean-code-javascript</a></p> <p>Able to leverage data structures and algorithms to produce performant code</p> <p>Understands and implements components, modules, and design patterns to create efficient and useful applications and platforms.</p> <p>Leverages Integrated Developer Environments (IDEs) to optimize their workflow and enhance the developer experience</p> <p>Comprehend package managers (pub).</p> <p>Know Git and GitLab workflows (branches, pull requests, merges).</p> <p>Understand basic concepts of Agile methodology</p> <p>Testing and Debugging: Understand the basics of testing frameworks (package:test, package:mockito).</p> <p>Comprehend the basics of web protocols (HTTP/HTTPS) and RESTful APIs.</p> |
|                                                                                                                                          | 102, 185A, 417, 446, 543, 634, 904A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                          | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                          | 23, 174, 6935, 6938                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                          | 117, 118A, 119, 408, 414, 417                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                          | 116, 168, 459A, 477                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                          | 149                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## JavaScript Skills: CFETP → Skills → KSATs

### CFETP Task

2.1.2. Solutions Design, Development, Testing, and Deployment

2.4.2. Collaboration Tools and Environments

3.3. Reporting and Presentation

4.2.8.1. Create Hierarchy

5.2.2. Create Problem Solution Statements

9.2.2.3. System / Regression Testing

### Skill

Can write simple JavaScript statements, expressions, and use variables effectively

Can select DOM elements and understand the DOM tree hierarchy

Can add event listeners and handle basic events (click, mouseover, keydown)

### KSAT

144

220

3642

571

5955

6936

6938

7090

938A

94

KSATS 34

# The Solution

Lighthouse is a web-based application designed for tracking and managing software development skill levels. This platform empowers users to identify their skill mastery areas and enables leadership to monitor skill mastery levels, organize team assignments, and gain insights through detailed analytics, all with an intuitive user interface.

# LIGHTHOUSE

 Steel Markert

 View Profile

 Dashboard

 My Assessments

 View Teams

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## Welcome, Steel Markert



Design

Youngling

0%



DevSecOps

Youngling

0%



Mobile  
Development

Youngling

0%



Web Development

Youngling

0%

N

## Design Assessment

### Interviewing:

How good are you at Interviewing?

#### Youngling

I am beginning to familiarize myself with user interviews and understand their purpose, but I have no hands-on experience yet.

#### Padawan

I am starting to understand the process and value of user interviews but I require guidance and support to effectively participate.

#### Knight

I am comfortable with the interview process, able to contribute meaningfully, and can independently participate in most user interviews.

#### Master

I participate effectively, guide and mentor others in the user interview process, and ensure the interviews are impactful.

### Comparative Analysis:

How good are you at Comparative Analysis?

#### Youngling

I am starting to grasp the basics of comparative analysis, but I have no hands-on experience yet.

#### Padawan

I understand the process and purpose of comparative analysis but still need support to conduct evaluations and derive insights effectively.

#### Knight

I can conduct comparative analysis independently, evaluate options, and identify actionable insights to inform decisions.

#### Master

I can lead and mentor others in comparative analysis, guiding teams to uncover impactful insights that drive strategic decisions.

### Empathy Mapping:

How good are you at Empathy Mapping?

#### Youngling

I am starting to learn about empathy maps and their purpose, but I have no hands-on experience yet.

#### Padawan

I understand the structure of empathy maps, but I need support to create them and connect them to user needs.

#### Knight

I can create detailed empathy maps that effectively organize user insights, helping teams align on user needs and pain points.

#### Master

I can lead and mentor others in empathy mapping, ensuring maps are insightful and integrated into the design process.

# LIGHTHOUSE

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|                                                                                     |                                |           |           |      |             |
|-------------------------------------------------------------------------------------|--------------------------------|-----------|-----------|------|-------------|
|      | Design Handbook                | Design    | Youngling | 0%   | <div></div> |
|    | Design Quality Assurance       | Design    | Youngling | 0%   | <div></div> |
|    | Responsive Design              | Design    | Youngling | 0%   | <div></div> |
|    | Security Architecture          | DevSecOps | Knight    | 66%  | <div></div> |
|    | AWS Services                   | DevSecOps | Knight    | 66%  | <div></div> |
|    | AWS CLI                        | DevSecOps | Knight    | 66%  | <div></div> |
|    | Pipeline Basics                | DevSecOps | Master    | 100% | <div></div> |
|    | Pipeline Scanning              | DevSecOps | Master    | 100% | <div></div> |
|    | Software Development Lifecycle | DevSecOps | Master    | 100% | <div></div> |
|    | Containers                     | DevSecOps | Master    | 100% | <div></div> |
|    | Collaboration                  | DevSecOps | Master    | 100% | <div></div> |
|    | Git CLI                        | DevSecOps | Master    | 100% | <div></div> |
|    | Gitlab Code Management         | DevSecOps | Master    | 100% | <div></div> |
|    | Terraform                      | DevSecOps | Master    | 100% | <div></div> |
|    | Linux Commands                 | DevSecOps | Knight    | 66%  | <div></div> |
|    | Linux Administration           | DevSecOps | Master    | 100% | <div></div> |
|    | Scanning and Mitigation        | DevSecOps | Master    | 100% | <div></div> |
|  | Risk Management                | DevSecOps | Master    | 100% | <div></div> |

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## View Members

This central hub provides you with a comprehensive view of everyone in the organization. Featuring an interactive data table, you can easily access key information about each team member, including names, skills, and teams.

View Ecosystem Members



| Name            | Team(s) | Skill Mastery ⓘ                                                                                                                                             | Certs |
|-----------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Andrew Clouse   |         | Linux Administration<br>Scanning and Mitigation<br>Application Security<br>AWS CLI<br>AWS Services<br>+ 12 more                                             |       |
| Anthony Diede   |         | Comparative Analysis<br>Design Quality Assurance<br>Empathy Mapping<br>Flutter Basics<br>Heuristic Evaluation<br>+ 34 more                                  |       |
| Jackson Engle   |         | Application Security<br>Incident Response<br>Linux Administration<br>Programming Languages<br>Scanning and Mitigation<br>+ 17 more                          |       |
| Christian Masse |         | Agile SDLC and Collaboration<br>Performance Testing and Optimization<br>Program Construction<br>Systems Design<br>Widgets and Widget Lifecycle<br>+ 40 more |       |

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## View Teams

Explore the various teams that drive our organization forward. Each team is made up of diverse talents and skills, working collaboratively to achieve specific goals and projects.

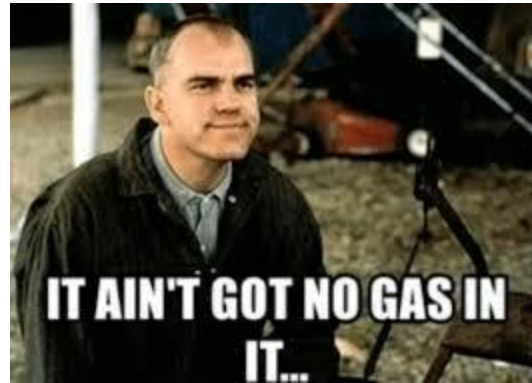
Create a team

Search your teams

| Info | Team Name  | Skill Areas                                                               | Required Certs | Team Members  |
|------|------------|---------------------------------------------------------------------------|----------------|---------------|
|      | Lighthouse | CSS<br>Data Structures<br>Interaction Design<br>Prototyping<br>Containers |                | CP<br>CH<br>S |



# How do we know it's working??



# Tactical Software Engineering Exercise

**EXERCISE**  
**AGILE SABER**

**DATE**  
**April 7th-11th**

**UODs**  
OCPs/Military Equivalent

**Social Outings**  
Business Casual

## **ABOUT**

BESPIN will provide an opportunity for our partners to participate in a Tactical Software Engineering Exercise from April 7-11, 2025, in Montgomery, Alabama.

This high-profile exercise gathers innovators from across the Department of Defense and Government to drive collaboration in software development, innovation, and national security.

Additionally, there will be a leadership track at AUix in the Kress Building April 7-9.

# Agile Saber in Action



# Questions?

