Level 1 Developer Evaluation Profile

AREA 1 – RESEARCH	
Grade	**Description**
Q	Research current technology to understand capabilities of required system or network.
Q-	Performed area task with minor error(s) and/or deviation(s). Result (s) did not significantly impede area requirement.
U	Performed area task with major error(s) and/or deviation(s). Result (s) significantly impeded area requirement. Showed little/no ability in area task. Did not attempt area requirement.

1.1. Research current technology to understand capabilities of required system or network.

1.1.1. Ability to filter search engine results using keywords (i.e., Google hacking)

AREA 2 – ALGORITHMS AND DATA STRUCTURES	
Grade	**Description**
Q	Identify strategies for software development based on operations or other mission requirements.
Q-	Performed area task with minor error(s) and/or deviation(s). Result (s) did not significantly impede area requirement.
U	Performed area task with major error(s) and/or deviation(s). Result (s) significantly impeded area requirement. Showed little/no ability in area task. Did not attempt area requirement.

2.1. Identify strategies for software development based on operations or other mission requirements.

2.1.1. Identify appropriate algorithms for given problems

2.1.2. Identify appropriate data structures for given problems

2.1.3. Showed consideration for algorithmic complexity and tradeoff

AREA 3 – CAPABILITY DEVELOPMENT	
Grade	**Description**
Q	Skill in reading, interpreting, writing, modifying, and executing simple scripts (e.g., those that perform tasks like parsing large data files, automating manual tasks, and fetching/processing remote data). Skill in utilizing network analysis tools to identify software communications vulnerabilities. Ability to apply network programming using client/server model. Ability to write programs in C programming language. Ability to apply secure coding techniques. Ability to write programs in ASM programming language.
Q-	Performed area tasks with minor error(s) and/or deviation(s). Result (s) did not significantly impede area requirements.
U	Performed area tasks with major error(s) and/or deviation(s). Result (s) significantly impeded area requirements. Showed little/no ability in area tasks. Did not attempt area requirements.

3.1. Skill in reading, interpreting, writing, modifying, and executing simple scripts (e.g., those that perform tasks like parsing large data files, automating manual tasks, and fetching/processing remote data).

3.1.1. Ability to create/use branching structures

3.1.2. Ability to create/use loops

3.1.3. Ability to appropriately decompose and solve stated problem

3.1.4. Ability to use *os, re*, and/or *struct* Python modules

3.2. Skill in utilizing network analysis tools to identify software communications vulnerabilities.

3.2.1. Ability to identify/validate network communications using Wireshark

3.3. Ability to apply network programming using client/server model.

3.3.1. Ability to appropriately decompose and solve stated problem with Python coding techniques

Ability to use *socket* Python module

3.4. Ability to write programs in C programming language.

3.4.1. Ability to create/use branching structures

3.4.2. Ability to create/use loops

3.4.3. Ability to manipulate, create, and use pointers

3.4.4. Ability to appropriately decompose and solve stated problem

3.5. Ability to apply secure coding techniques.

3.5.1. Appropriate application of preconditions, exit conditions, and post conditions

3.6. Ability to write programs in ASM programming language.

3.6.1. Ability to create/use branching instructions

3.6.2. Ability to create/use jump instructions

3.6.3. Ability to appropriately use immediate and indirect register addressing methods

3.6.4. Ability to appropriately decompose and solve stated problem

3.6.5. Ability to appropriately use calling conventions to enter/exit a function