Software is and will continue to be a part of every major defense program. Per the updated DoDI 5000.02, software acquisition even has its own pathway guidance. Its purpose: "to facilitate rapid and iterative delivery of software capability to the user." To help the cost community better understand the impact of this development shift, this survey was created to help characterize a program's agile software development process. Your participation in this effort will help us shape future data collection and allow for improved analysis. Please answer these next few questions to the best of your knowledge at an individual program level.

Part I: Program Identification and Description

1) Please provide the following survey respondent details:
    a. Name:
    b. Position:
    c. Email address:
2) What is the name of your program?
3) Please provide the following Prime Contract details
    a. Prime Contractor:
    b. Contract Number:
    c. Contract Value:
    d. Contract Period of Performance:
4) What is the phase of your program?
    a. New System Development
    b. System Modifications Development
    c. System Sustainment
5) Provide a brief description of your program.
6) For your *Program*, select all Acquisition Frameworks that that apply (www.dau.edu/aaf):
    a. Urgent Capability Acquisition
    b. Middle Tier of Acquisition
        i. Rapid Prototyping
        ii. Rapid Fielding
    c. Major Capability Acquisition
        i. ACAT I
        ii. ACAT II
        iii. ACAT III
        iv. Other
    d. Software Acquisition
    e. Defense Business Systems
    f. Acquisition of Services
7) What is your primary software process? Select from the following:
    a. Agile: Allows for refinement of ideas over time and delivery in small chunks. Development my stop at "good enough". (Please identify specific agile framework employed in the g. Notes section)
    b. Hybrid Agile (Please identify specific agile framework employed and elements not agile in the g. Notes section)
    c. Iterative or Evolutionary: Software goes from rough to polished, ideas refined over time.

d. Incremental: Requirements are known and software is built in pieces
e. Waterfall: Requirements are known and software is built all-at-once.
f. Other (Please describe)
g. Notes (please provide any additional info that elaborates your selection)

8) How would you describe your system functionality? Select from the following:
   a. Real Time: The most constrained type of software. Specific solutions limited by system characteristics such as memory size, performance, or battery life.
   b. Engineering: Operates under less severe constraints than Real Time. This software may take the output of real time software and further process them to provide human consumable information or automated control of a device. Or the software may perform transformation and aggregation/distribution of data.
   c. Automated Information System: This software has few constraints. Software provide information processing service to humans or software applications.
   d. Support: This software has few constraints. Software assist with operator training and software testing.

Part II: Please select/provide the answer that best describes your software development and acquisition processes.

9) How would you categorize your program's <u>pace of software delivery</u>? Select from the following for both internal and external/operational releases:

   Internal Releases/Demonstration (A release that is ready for internal use outside of the development team. It may be used for integration, testing, or demonstration):

   a. <= 2 weeks
   b. >2 weeks to < 1 month
   c. 1 – 4 months
   d. 4 – 12 months
   e. > 12 months

   External/Operational Releases/Demonstration (A release that has been through the pipeline and system test and is ready for transition to the user or been approved for operational use):

   a. <= 2 weeks
   b. >2 to < 1 month
   c. 1 – 4 months
   d. 4 – 12 months
   e. > 12 months

10) How would you categorize your program's <u>feedback, collaboration and involvement</u> throughout the planning and development process? Choose a frequency option listed below for the party identified where party members are defined as follows:

Frequency Options

a. Daily/Continuous
b. Weekly
c. Monthly
d. Quarterly
e. Annually
f. Not Applicable
g. Unknown

Party Members:
Sponsor: Person or group that provides direction and/or resources (Government Side)
Operator: End-user(s) utilizing the software
Developers: Person or group responsible for building deliverables/software that meets the needs of the technical requirements
Testers: Those who ensure that the software solution meets the business requirements and that it is free of bugs, errors and defects.
Management: Person or group that is responsible for knowing the "who, what, where, when and why" of the software project to include creating and managing the project budget and schedule as well as processes including scope management, issues management and risk management. (Development Side)

Frequency	Sponsor	Operator	Developer	Testers (Development side)	Testers (Government side)	Management
Sponsor						
Operator						
Developers						
Testers (Development side)						
Testers (Government side)						
Management						

11) How would you categorize your program's contracting? Select from the following:

a. Contracts allow for requirements refinement throughout the development process without Contract Modification
b. Informal written/verbal agreement between Government and Contractor

c. Requirements are locked up front; changes require an official approval process followed by a Contract Modification

12) How would you categorize your program's test environment? Select from the following for both testing automation and parallel testing:

Automated Testing:

a. Automated testing is utilized > 90% for all tests.
b. Automated testing is utilized > 75% for all tests.
c. Automated testing is utilized > 50% for all tests.
d. Automated testing is utilized < 50% for all tests.
e. Automated testing is not utilized.

Parallel Testing:

a. Parallel testing is conducted.
b. Parallel testing is possible.
c. Limited parallel testing is possible
d. Some testing is completed manually and serially following development
e. Testing is completed manually and serially following development.

13) How does your program define, measure and track value?

14) How would you categorize your program's metrics utilization? For the following primary metrics, identify frequency of utilization , and phase of utilization:

	Frequency of Utilization						**Phase of Utilization**		
	Event Driven (Specify Event)	Daily/ Continuous	Weekly	Monthly	Quarterly	Annually	Proposal Building	Contract Execution & Evaluation	Both
Size Metrics									
1. Source Lines of Code									
2. Function Points									
3. RICE (Reports, Interfaces, Conversions, Extensions) Counts									
4. Requirements Count									
Process Metrics									
1. Story Points									
2. Velocity									

3. Story Completion Rate									
4. Sprint Burndown Chart									
5. Release Burn Up									
Quality Metrics									
1. First-Time Pass Rate									
2. Defect Count									
3. Number of Blockers									
Product Metrics									
1. Delivered Features									
2. Delivered Value Points									
3. Level of User Satisfaction									
DevSecOps Metrics									
1. Mean Time to Restore									
2. Deployment Frequency									
3. Change Fail Rate									
Cost Metrics									
1. Total Cost Estimate									
2. Burn Rate									

Part III: To help improve this survey, please share your thoughts on content and effort expended.

15) Would you recommend any additional questions to help characterize a program's agile software development process?

16) Would you recommend deleting any questions in this survey as being non-discriminators to characterizing a program's agile software development process?

17) Which questions if any were difficult to answer and could prohibit future respondents from answering?