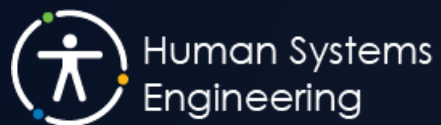


GENERAL DYNAMICS

Mission Systems

Scenario Based User Engagement Plan

Shari Benko



Goals of User Engagements

Capture actionable user feedback to inform feature prioritization and UI designs through

USER GENERAL USER UNDERSTANDING

Goal: **Capture a user's current role and expectations for the Data Lake Query Tool.**

SCEN SCENARIO DEVELOPMENT

Goal: **Refine/define operational scenarios for the Data Lake Query Tool.**

TEST UI USER TESTING

Goal: **Capture UI specific feedback on how to improve the existing user interface to meet the various operational scenarios identified.**

Intro and Role Based Questions

USER

GOAL: Capture user's role and expectations.

Introduction

- What is your title?
- What is your current role (or former role) as it relates to this program?
- How many years of experience do you (or did you) have in this role?

Role Based Questions

- Will you personally work with mission data?

TARGET DELIVERABLES:

- Participant Personas
- Experience Level of Participants



Intro and Role Based Questions

USER

GOAL: Capture user's role and expectations.

User Persona Matching

- Which of the following descriptions most closely reflects your expectation of users who would need the Data Lake Query Tool?

PERSONA 1

The Analyst focuses on tracking system performance and quality monitoring, performance testing and analysis, test execution collection planning, External Analyst support, and test event analysis.

PERSONA 2

The Operator focuses on message validity checking, real-time performance monitoring, test event collection planning, external operator support, and monitoring.

PERSONA 3

The Admin focuses on system maintenance, bug reporting, bug analysis and diagnosis and system performance monitoring.

TARGET DELIVERABLES:

- Participant Personas
- Understanding Roles



Scenario Frequency

SCEN

GOAL: Refine/define operational scenarios for the Data Lake Query Tool.

Rank the following statements in terms of how often do you/or your team expect to encounter the scenario with 1 being never, and 5 being always (*moderator to follow up each ranking with a question to expand their answer beyond the ranking*):

1. My team needs to access historical data.
2. My team needs to access data from different environments (example 1, example 2).
3. My team needs to access data they don't normally have access to.
4. My team needs to communicate data to others.
5. My team needs to access data in ways I don't already have available to me.
 - My team needs to be able to compare data in chart visualizations.
 - My team needs to be able to compare data in geospatial visualizations.
 - My team needs to be able to compare data in grid views.

TARGET DELIVERABLES:

- ❑ Frequency of Need by Role



User Testing – General Impressions

TEST

GOAL: Capture UI specific feedback

On a scale from 1 to 5, how familiar are you with the concept of a Data Lake or Data Lake Query Tool, with 1 being not familiar at all, and 5 being very familiar?

What do you think the Data Lake Query Tool is meant to be used for in relation to your current or previous role as it relates to this program?

<MODERATOR PROVIDES THE USER INTERFACE TO THE PARTICIPANT>

What are your first impressions of the user interface?

Has seeing the user interface changed your thoughts on what the tool is meant to be used for?

TARGET DELIVERABLES:

- Participant familiarity with the tool prior to testing
- User expectations prior to testing
- Interface first impressions



From the landing page, where do you expect to find information on what data products are available to you?

Expected Answer:

Indicates the Data Catalog

What do you think we mean by data product based on what you see here?

Which data products would you expect or want to have access to in this tool?

What information is the most useful to you regarding the data products you see here?

What information do you think is missing from this display regarding data products?

TARGET DELIVERABLES:

- Task Completion Rate for question 1
- Qualitative feedback for the data catalog feature
- Expectations for data product access by role
- Prioritization of information by role

User Testing – Querying

TEST

GOAL: Capture UI specific feedback

How would you go about conducting a query on a data product that you have available to you here?

Expected answer:

User would indicate using the Tab 1 or the Advanced Query Tab

What kinds of queries might you conduct based on the query functionality you see here?

How would you use a query in support of the mission goals?

TARGET DELIVERABLES:

- ❑ Qualitative feedback on query features

User Testing – Data Viz

TEST

GOAL: Capture UI specific feedback

Now that you have seen a query on data using this interface how would you view the results in a different way other than the table view you currently see here?

Expected answer:

Indicates Charts and/or Geospatial

TARGET DELIVERABLES:

- Task Completion Rates
- Task Completion Times



<MODERATOR SHOWS CHARTS VIEW AND GEOSPATIAL VIEW>

What value do you think this view is providing you?

What steps might you take in this view to dig deeper into the data?

TARGET DELIVERABLES:

- ❑ Qualitative feedback on the data viz section of the UI

Scenario – Query

SCEN

GOAL: Refine/define operational scenarios for the Data Lake Query Tool.

Rank the following statements in terms of how useful the Data Lake Query Tool will be in addressing the following scenarios, 1 being not useful at all, 5 being highly useful:

1. My team needs to access historical data the team didn't otherwise retain.
2. My team needs to access data from different environments (example 1, example 2).
3. My team needs to access data they wouldn't otherwise have.
4. My team needs to communicate data to others.
5. My team needs to access data in ways I don't already have available to me.
 - My team needs to be able to compare data in chart visualizations.
 - My team needs to be able to compare data in geospatial visualizations.
 - My team needs to be able to compare data in grid views.

Why did you give the rankings that you did?

TARGET DELIVERABLES:

- ❑ Effectiveness of the UI in addressing these scenarios