**DasCODE Research and Test Plan**

**Purpose**

This document describes the test plan for the Dascode project; in which the team will test and design the administration and usage of Dascode workflow from end-to-end.

**Overall Objectives of Testing**

We will gather baseline data about the overall workflows from users of development environments. In addition, we will gather preliminary thoughts on designs and future processes with the Dascode platform. The goals of testing are as follows

* Identify current user workflow and task sequences in development environments
* Create process diagrams
* Work flows: these will be used for testing and shown to users of Dascode. It will show the steps the user will take and the system function that supports each step. The task may be handed off between users, and may be supported by several systems operating together; the storyboard ensures the task remains coherent across these boundaries.
* Journey Maps: These will be a high-level analysis of the work flow which will highlight the most important tasks, sequences, and obstacles from end-to-end.
* Create designs that minimize current obstacles with platform development

**Research Questions**

* How closely does the current process reflect how the user thinks of the work flow?
* What are the pain points and obstacles with the current process?
* What current tools are utilized to complete these tasks? What are their thoughts on said tools? Are they open to utilizing or not utilizing certain tools in the workflow?
* What is the ideal development environment system look like for the user?
* How do users feel about the process from an end-to-end standpoint? What would they like to see improved/optimized?

**Who are we testing?**

Testing will be preformed on the four main personas of the platform service: the administrator, the engineer, the template writer, and the manager. Each persona has uniquely different tasks, workflows, and goals while using development environments. Thus, it is imperative to test each user set in order to create a holistic end-to-end process for the Dascode platform. The characteristics of each persona are listed below. The team will add information on the participants once it begins that round of testing.

* Administrator: main goals are to create, edit, and maintain environments for their team.
* Engineer: user of those development environments
* Template writer: writes template environments that team uses on a reoccurring basis.
* Manager:

Each testing iterative will have 4-5 participants who identify with one of the personas above, thus in total we will interview a minimum of 16 participants, but will push for more. When testing 4-5 participants per persona, we will be able to "expose about 80 percent of the usability deficiencies of a product for that audience, and that this 80 percent will represent most of the major problems."

Participants will be found through contacts of the Apps and Services Factory Team. The UX team will contact them and their responsibilities will be to provide thoughts and feedback based on the interview questions. Participants will also be asked to participate in multiple sessions throughout the research and design effort per the test design. Later iterations may add expansions upon the personas, e.g. Testing dev. tester as part of Engineer persona.

**Methodology**

User testing will be done in iterative successions on a per persona basis. The first iterations will initially be exploratory and will gather evidence on user preferences for a Dascode platform service. Participants will fall into one of the four persona groups and asked a series of questions about their usage and thoughts on the current process. Later iterations will include initial designs layouts and participants will be asked if designs identify with their needs and workflow. We will collect qualitative data from participants as there are no current designs to quantitatively measure

**We will use an iterative test design**

In these interviews, each participant will be asked to answer and possibly show their workflow with dev environments. Sessions will be one hour long, in-person or on WebEx, depending on location. The test will start with preliminary demographic questions about the participant and role with dev environments. The majority of the session will be dedicated to understanding their current workflow and identifying pain points. The last 15 minutes will be dedicated to looking at the process from an end-to-end POV and understanding what the ideal process would look like for that participant.

When the first iteration of testing is complete, our designer will create preliminary mockups of the DasCode platform and mockups of the workflow. We will then ask the participants back for another hour long session, setup the same as the first iteration. However this time, the majority of the session will be gathering thoughts and validation on the mockups. That test plan will be created upon a later date, simultaneously as the designs are being created.

This design, test, redesign, test, series of interviews will continue for several rounds until the UX team and the Apps and Services Factory team feel comfortable moving with development. Each time a new iteration is preformed, the test plan information will be added to this current document.

Below will be the test plan outline for the 1st Iteration of Interviews

**Interview Session and Outline**

The interview will be 60 minutes long. The first 10 minutes will be used for introductions and preliminary questioning. 25 minutes will be used for the main interview questions, and the last 10 minutes will be used for exit questions and debriefing. Testing will either be administered through WebEx and recorded, with in-location sessions at the Cisco San Jose Campus, if applicable.

**Introduction to the session** (2 minutes)

Discuss:

* Participant’s experience with usability studies and focus groups.
* Importance of their involvement in the study.
* Moderator’s role.
* Room configuration, recording systems, observers, etc.
* The protocol for the rest of the session.
* Thinking aloud.

Have the participant review and sign permission form

**Introduction Questions** (5 minutes)

Ask:

* Years at Cisco/in admin role
* Familiarity with Dascode
* Department
* Job Role
* Location

**Understanding Role Questions** (25 minutes)

Ask and gather qualitative data on:

* How tasks are currently preformed in role
* Tools used per task
* Task frequency
* Task duration
* Task variability
* Task sequence
* Obstacles and pain points
* Preferences on method of completion

**Process Overview** (20 minutes)

Ask and gather qualitative data on:

* Opinions on process from an end-to-end standpoint
* Obstacles and pain points when going from one tasks to another
* Ideal way workflow

**Closing** (10 minutes)

Wrap up session and ask

* Participants thoughts on the interview and questions
* If there is a particular thought they would like to add or point to expand on
* If participant is open to further testing

**Test environment**

We’ll use a controlled setting to conduct the sessions. The study will take place in a WebEx meeting or in-person in an APR at Cisco's San Jose Campus. Participants will be asked to bring their own laptop, in order to show the moderator how they perform tasks. Participants will login into WebEx meeting and share their screen which will also be recorded with audio. The moderator will have their preference of laptop to ensure that WebEx recording is properly recording and to type notes.

**Moderator role**

The moderator will sit in the room with the participant while conducting the session. They will introduce the session, conduct a short background interview, and then introduce the questions as appropriate.  Because this study is somewhat exploratory, there may be unscripted follow-up questions to clarify participants’ behavior and expectations. The moderator will also take detailed notes and record the participants’ behavior and comments.

After each session the moderator will debrief with observers. The moderator will ask observers to contribute their observations about surprises ,issues, and key behaviors and we will continue to identify and tally those throughout the sessions. Observers will also be asked for any critiques on the session itself to help the moderator ensure testing is answering objective and research questions successfully.

**Designer role**

The designer will create layout designs and work flow designs after Iteration 1. After the UX team analyzes the data, it will be the designer's responsibility to translate those user's wants and needs into the mockups. The designer will collaborate with UX team in addition to the Dascode project team to ensure designs align with business requirements.

In later iterations, the designer may join the moderator in the room to question participants on the workflow and design mockups. The moderator and designer will debrief with observers to review designs and potential improvements to be made before the next session. Observers will have same role as they did in the Moderator section of this test plan. The designer will work closely with the UX team to ensure understanding of user needs and tasks.

At the end of testing, the designer will have a series of mockups to share for the new Dascode platform that will have data supporting the design claims.

**Evaluation Measures**

To answer research questions, Iteration 1 will be mainly gathering qualitative data in the form of quotes, opinions, and actions recorded in the sessions. UX team will transcribe sessions to analyze qualitative data further. In addition, UX team will have notes from Moderator, Designer, and others listening during sessions. Common methods, behaviors, obstacles, and patterns will be noted and used to create workflow outputs in addition to design mockup.  Potentially, quantitative data may be gathered in the form of Likert Scales.

Measures of further iterations will be added once UX team finishes Iteration 1.

**Project schedule**

Iteration 1: Understanding the Role, Tasks, and Workflow

* Planning meeting / kickoff
* Create test plan, session scripts, and materials
* Schedule first group of interviews
* Test
* Analyze data, make necessary changes to test for future iterations, begin creating mockups and workflows
* Schedule for next persona group

Iteration 2: Reviewing workflow and design mockups

* Planning meeting
* Add to test plan, and make new session scripts, and materials
* Create design mockups and workflows
* Schedule first group of interviews
* Test
* Analyze data, make necessary changes to test for future iterations, begin creating mockups and workflows
* Schedule for next persona group

Iterations 3+: TBD at a later date

**Deliverables**

* Research: personas
* A test plan (this document) describing the general approach and schedule for the study
* Draft and final copies of the session checklist (a script that moderator also use for note taking during the sessions and observers can use to follow along)
* 16+ interview sessions, 60 minutes each for Iteration 1
* Transcriptions, recording, and notes of each sessions
* Draft and final copies of user workflows
* Draft and final copies of journey maps
* Visual designs for new Dascode platform
* A final written report of complete findings
* A presentation of findings and recommendations

lvs (lab virtualization) tool

CITIES

Scripts to puppet manifests

\*Be prepared for no conistant answers\*