Red Hat Optimal Learning Experiences

Study Materials for Round 2

ENP 120 – Human Factors Capstone Spring 2023

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Moderator Script

"Hello! Thank you for taking time out of your day to help us conduct research. Today, we will be showing you our high fidelity prototypes. We will be asking you to complete some tasks using our prototypes and share feedback regarding the design choices we made. This interview will last for approximately 30 minutes. Please let us know if you have a hard stop at a certain time. These interviews are purely for research so there is no right or wrong answer to any question, and please feel free to let us know if you feel uncomfortable answering any questions. May we record this interview for research purposes? The transcript and recording will not be shared with anyone outside of the research group working on this project."

Pre-session Questions
1. What company do you – or did you – work for as a developer?
2. Job Title
3. What specific job functions does/did your role entail?
4. Have you ever been formally educated in computer science?
5. How many years of experience have you had as a developer?
6. What, if any, product documentation have you used? Was it helpful? Please explain.

Usability Test

"We are working to improve Red Hat's documentation experience, so now we will be sharing a prototype with you. This prototype is a near–complete representation of the final product. However, before we finalize our designs, we need your valuable feedback to ensure that our designs are ready. We would like you to walk through the prototype and complete a few tasks. Please do not worry about making mistakes or getting stuck, as there are no wrong answers. We are trying to identify any issues with the prototype and would greatly appreciate your time and input. Thank you!"

Usability Study Tasks (After each question, ask for 1 to 7 rating of difficulty)
1. "From the initial landing page please navigate to the Red Hat OpenShift Service on AWS documentation page. Since we cannot implement the backend functionality of the page, please think out loud the steps you would take to get to

the Red Hat OpenShift Service on AWS page." *[After the task is complete, tell the subject to click on the first product in the list to navigate to ROSA.]*
Ask for 1 to 7 rating of difficulty:

2. "Suppose you are experienced with this product and do not want to watch the tutorial videos on this page. Please identify how you would minimize all video content. Hover over where you would go, but don't click anything yet. When you think you got it, let me know."
   a. [Before the subject clicks] "what do you expect to happen?"
   Ask for 1 to 7 rating of difficulty:
3. "Can you please access additional ROSA code samples?" [Give subject time to explore, there are multiple ways see if they can find them all]
   Ask for 1 to 7 rating of difficulty:

Post-test Follow Up Questions
1. "If you had a magic wand, what would you change and why?"
2. "Did you find any tasks more difficult than what you would expect?"
   a. [If yes] "On a scale of 1 to 7 (7 being most difficult), how would you rate the difficulty of that/those tasks?"
   b. [if yes] "What made it difficult for you?"
3. [Navigate to the *Right Sidebar* flow] For the sake of making our prototype interactive, we implemented option 3. That was what we had you interact with. However, we are still unsure about the implementation of hiding multimedia. Out of the three options presented before you, which one do you prefer? Why?
4. "Do you have any other comments, questions, ideas?"

Conclusion
"Thank you for your valuable feedback. Your time today will certainly help us improve our designs. This interview is compensated with Red Hat swag bags, and we will be in contact with you soon after the interview about this compensation. Once again, thank you for your participation in this session. If you have any concerns or questions in the future, feel free to reach out."

Updated Study Materials

Research to Date

For the most part, the Round 1 user feedback for our concepts and prototypes was extremely positive. Generally, our users liked the new features that we introduced, with the only feature receiving mixed feedback being the enhanced mode toggle. Additionally, our users felt that most key pieces of the website were easy to find. One goal that we had with our design concepts was to keep the feel of the documentation similar to how existing documentation is laid out, and our users felt that we accomplished that.

Goals

Test fixes to issues identified in Round 1:

- New dropdown menu to reveal videos and images
  - We previously had this feature as a toggle where users can turn on/off "enhanced mode" which would show different learning media options for users. After our first study, we found that this was not intuitive for users, and changed this feature to be a drop down similar to the existing Red Hat UI which allows users to select their preferred page display.
  - We are not 100% sure that a dropdown is the best implementation, so we will have participants vote on their favorite implementation: dropdown, checkbox, toggle.
- Updated code sample links from product landing page
  - In our earlier prototypes, we did not have many ways to reach the code samples page. Some users from our initial testing commented that there should be more ways to access code samples from our product documentation page, so we added more links to our high-fidelity prototypes.

We also incorporated some more features from the existing Red Hat website into our high-fidelity prototypes that were not present in our earlier renditions. Part of our Round 2 testing will ensure that the features we've added do not interfere with existing features.

Methodology

We will be conducting usability testing to verify the updates and fixes we made to the initial prototype. The first round of tests helped us choose which ideas to move forward with; the second round of testing will help us determine if we have the right implementation. We plan to pay particular attention to the implementation of the "enhanced mode". The prototype currently uses the drop down menu approach (option 1), but we will also have participants vote on other implementations (see below).

Figure 1: three implementation alternatives for the "text and code only"

Recruiting

To recruit for our study, our sponsor helped us contact some developers who work at Red Hat. While these users are Red Hat employees, we believe that their developer experience will provide us with some useful feedback about our prototype. We have recruited four participants to complete our round two usability study. These participants all have varying levels of developer experience. Due to study constraints, our round one usability study was with participants who all met our "intern/novice" developer persona. Thus, our Round 2 study will predominantly focus on our expert/experienced developers.

Study Setup

In our study, we will have the user navigate through our high-fidelity prototype of the ROSA product doc and complete the tasks in our script. At the end, we will have participants vote on their favorite implementation of the "text and code only" option. Refer to the image above for the 3 options we are having participants vote on. The study will be remote through Zoom and will last approximately 30 minutes. We will record the session with users' permission and will have each user 'think-aloud' as they

complete tasks so we can understand why they chose certain actions. A moderator will be present to direct the usability study, and a note taker will be there to write down relevant notes/observations.

[Link to Prototype](.).

Schedule & Timeline
1) Complete our study materials by 4/18.
2) Interviews scheduled for:
    a) 4/20, 10:30 am
    b) 4/20, 1:30 pm
    c) 4/25, 11:00 am
    d) 4/25, 2:00 pm
3) Iterate prototype and usability study script as needed after each interview
4) Complete writeup for results by 4/30.