

## **Interaction Activity Three**

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### **Part 1 – Explore Survey Design Tools**

JotForm is the better tool for this assignment's goal and requirements. Sharp et al. (2019) hypothesize that the gulf of execution is reduced by designing usable interfaces "by the user learning to create goals, plans, and action sequences that fit with how the interface works" (p.125). Jotform's interface is simple and easy to use. Users are given a choice of a template and do not have to generate a form from scratch which helps to decrease the cognitive load. Additionally, an interface metaphor in the form of cards with "short snippets of useful information" enables users to determine if a template suits their needs (Sharp et al. p.79). If the users choose to create a form from scratch, they can interact with the form easily by dragging and dropping an item from the menu to the form. JotForm promotes recognition rather than recall, which minimizes the "user's memory load" (Nielson, 2014), through the clickable tabs with menu options (Sharp et al., 2019, p. 551). These tabs and menus are especially helpful to novice users who may be unaware of the capabilities of each form element.

Qualtrics seems better suited for gathering data for a research project via questionnaire. Qualtrics provides no way "to know where I've been and predict where I should go next" (Lynch & Horton, 2016, p. 214). The text-based interface makes finding information difficult, especially determining the types of questions (drop down menu, multiple choice, signature block) available to create a form to meet the requirements of the assignment.

### **Part II – Design and Create Form**

#### **Interaction and/or Interface Design Guidelines and Principles**

The interface design guidelines are providing interactive components and guiding interaction. Buttons, menus, and inputs were selected based on the information needed. Buttons enable the "navigation among pages and execute an action" which is to submit (Lynch & Horton, p. 236). Drop down menus provide state choices, radio buttons and checkboxes enable users to select one or multiple items. Inputs allow users to enter the city and their name. Interaction is guided through help and instruction and feedback which are especially important considering the limitations of JotForm. Lynch & Horton suggest "the best way to handle errors is to keep them from happening" (p. 243) and implicit error prevention stops the critical error of submission by mistake. The implicit protection is a page that lets the user know they are finished and allows them to review the information before submission.

#### **Additional Design Decisions**

Because there are two types of users, multiple pages were created and there are different options for both user types to submit. Users receive a completion signal and have the option to review or change information. Because there is no way to review

responses on the form, users are directed to click the back button to review or change their responses. Placing each question on a separate page would require too much clicking for users to review or change their responses.

Required questions should include: name, email, month of report, intent to travel, departure date, return date, destination city, state, or country, if outside the U.S., and additional trips.

Instructions need to be provided to let users know who needs to fill out the form and when. JotForm instructions include an asterisk to indicate mandatory fields. Users need to know if they have to select one response (radio buttons) or all applicable responses (checkbox) and leave checkboxes blank if there are no additional expenses. Users need to know they could add more trips. Feedback needs to be provided to ensure that users know what to do next. Once the user completes the form, they need to know how to review and submit the form. Finally, once a user completes a form, they need an email confirmation with all responses for their records.

Error prevention should occur when a user enters an incorrectly formatted email address and when required information fields are blank. These prevention measures should occur before the user moves to the next page or submits the form. JotForm has these prevention measures. However, Jotform cannot provide a message to prevent users from selecting a return date that is earlier than the departure date or from having overlapping dates for multiple trips. There is an option to block out past trip dates which reduces errors.

Data is limited using drop-down menus, radio buttons, and checkboxes and Jarrett and Gaffney (2008) suggest initial values for these methods; however, the suggestion was not followed. The conditional formatting in JotForm necessitates that some radio buttons remained unchecked so fields can be hidden until conditions met. For consistency, reduction of confusion, and to prevent accidental submission, all the initial values in the form remain unset.

### **Form Link**

<https://form.jotform.com/203166257323047>

### **Resources**

Jarrett, C. & Gaffney, C. (2008). *Forms that work: Designing web forms for usability*. Morgan Kaufmann.

Lynch, P., & Horton, S. (2016). *Web style guide: Foundations of user experience design* (4th ed.). Yale University Press.

Sharp, H., Rogers, Y., & Pierce, J. (2019). *Interaction design: Beyond human-computer interaction* (5th ed.). Wiley.