**Preparing a JUX Manuscript: Guidelines for Authors**

The editors and staff of the Journal of User Experience (JUX) have created these guidelines to assist authors in preparing a manuscript for submittal. The guidelines are intended to be suggestions of good practice and should be used in conjunction with the [JUX template](https://uxpajournal.org/wp-content/uploads/sites/7/word/JUX-Template_May_2022_Final.docx). Manuscripts that adhere to these guidelines are likely to receive more favorable reviews.

# We start out with some guidelines that apply to the whole manuscript, then proceed section by section.

# General Guidelines

The following guidelines pertain to the manuscript as a whole:

* Use the [JUX template](https://uxpajournal.org/wp-content/uploads/sites/7/word/JUX-Template_May_2022_Final.docx) located on the [Call for Papers page](https://uxpajournal.org/call-for-papers/).
* Apply the formatting styles that are in the template. The styles are listed in the “Styles” section of the Home tab. In addition, if you press Ctrl + Shift + S, you will see the styles in a pop-up list.
* Do not change the styles or add a style in the template.
* Proof the manuscript before you send it to JUX. Be respectful to the reviewers. Make your manuscript free from typos, missing words, awkward phrasing, or poor grammar. While this may be the last step you take, it is one of the most important, especially if English is not your first language of communication. You will get a more attentive review with a clean manuscript.
* Guide readers through the entire manuscript following a logical progression.
* Avoid the passive voice. The passive voice often hides the subject of the sentence. For example:

It was determined that none of the usability problems were false alarms.

Notice that it is not clear who determined that the problems were not false alarms.

Better:

The authors determined that none of the usability problems were false alarms.

Or:

We determined that none of the usability problems were false alarms.

* Support your statements with citations, especially in the introduction and recommendation sections. Typically in the introduction you would include more than five sources and primarily cite research that was conducted over the last ten years. Fundamental or classic studies can be older.

Use the following American Psychological Association (APA) format for citing research. This can be found at: <http://www.apastyle.org/index.aspx>.

* + When the citation is within the sentence, use this format:

According to Jones (2005)… Smith and Jones (2005) believe that …

* + When citations are at the end of the sentence, use this format:

(Jones, 2005; Smith et al., 2008) … (Smith & Jones, 2005).

Use the following formats for quotes:

* + For short quotations (fewer than 40 words), incorporate them into the text, enclose by double quotation marks, and include the page where the reader can find the quote:

	According to Jones (2005), "Students often had difficulty using APA style, especially when it was their first time" (p. 199).
	+ For longer quotes (40 or more words), display them in an indented block of typewritten lines with no quotation marks:

	Jones's (1998) study found the following:

Students often had difficulty using APA style, especially when it was their first time citing sources. This difficulty could be attributed to the fact that many students failed to purchase a style manual or to ask their teacher for help (p. 199).

* + You may need to get permission to use very long quotes (e.g., 400 words or more) and to adapt or reuse figures or tables. See the following section.

## Permission to Use or Adapt Information from Another Source

Authors may need to obtain written permission when using or adapting the following information from another source:

* figures or graphics
* data that is used in a table
* text of more than 400 words (This is an APA standard of permission use that can vary from style guide to style guide.)

Copyright laws are complicated and vary from country to country. It is your responsibility as the author to obtain permission to use information from another source—**this may be a lengthy process so start it early**.

Many publishers have information on their websites detailing what information can be used freely and what information needs permission to use. For example, the following is the UXPA’s permission policy:

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. URL: http://www.upassoc.org.

Even if you are the author of a previous study, it is unacceptable to re-use your prior work in whole or in large part without referencing it so that readers know that it was published elsewhere. Likewise, the copyright for previously published works may be held by another organization or conference, so it could actually break copyright law to re-use your own work. If necessary, figures or diagrams may be used from previous studies, but only if you include the reference in the caption and if it is allowed under the copyright of the previous publication. You need to obtain permission from the publisher if you use a figure, table, or diagram from another study or source.

For a more complete description of what materials need permission to use, see the *Publication Manual of the American Psychological Association* or search their website for related information: [www.apa.org](http://www.apa.org).

If you are unsure about what information qualifies for seeking permission to use, please ask the editors. After you have obtained written permission, please provide it with JUX’s permission release form that the copyeditor will send to you during the copyediting phase of your document.

## Figures and Accessibility

UXPA and JUX are committed to making both its website and journal articles accessible. Web accessibility is the practice of removing barriers that may prevent access to information and functionalities on websites. An online document or tool is accessible when it can be easily understood and used by everyone, regardless of the browser or adaptive equipment he or she is using.

Some of our audience use screen readers. A screen reader is a [software application](http://en.wikipedia.org/wiki/Application_software) that attempts to identify and interpret what is being displayed on the screen. This interpretation is then re-presented to the user with [text-to-speech](http://en.wikipedia.org/wiki/Text-to-speech), sound icons, or a [Braille output device](http://en.wikipedia.org/wiki/Refreshable_Braille_display). Screen readers assist people who are [blind](http://en.wikipedia.org/wiki/Blindness), [visually impaired](http://en.wikipedia.org/wiki/Visual_impairment), or [learning disabled](http://en.wikipedia.org/wiki/Learning_disability).

Authors have the responsibility to work with JUX editorial staff to ensure the accessibility of their article. In most cases, that responsibility involves adding alt-text to figures and images. Figures/images must have all graphical components embedded in one graphic for each figure. For example, all callouts and text should be embedded in the graphic.

Do not use tables to layout figures/images. For example, if two images are placed next to each other using a table to make one figure, combine the two to make it one graphic.

In JUX articles, images are often pictures of equipment or experimental setups, while figures visualize or summarize data. All figures and images must be accompanied by alt-text. See Figure 1 below in the **Results** section. When writing alt-text, consider what information the image adds to the article. The alt-text does not have to be a complete sentence: focus on keywords. Also, you do not have to say that it is an image in the alt-text, as the screen reader will announce this.

The alt-text is read out by screen readers just before the caption, so try to avoid having the same details in both. Alternative text should be short, such as "A basketball player" or "Tony Blair shakes hands with George W. Bush."

* Include all words in the image that are important to the meaning of the illustration in the alt-text. For example, if you have a bar graph, provide the values for each part of the graph in a logical order.
* Focus on describing what is meaningful about the image. If the image is sensory, that is evokes a mood, describe the impact of the image.
* Identify the image format, if that fact is meaningful. Use the following words for consistency: Photo, graph, diagram, screenshot, cartoon
* Keep it short: 5-7 words is best for a brief description and up to 25 words for a more detailed description.
* Describe screenshots functionally rather than being completely transcribed (unless the screenshot is showing important text). A screenshot with illegible text that is not important to the article does not have to be fully transcribed.

Some examples of captions and alt-text:

Example for a bar chart.

Figure 1. The graphs in this slide present user ratings for five different form layouts in a way that makes them easy to compare.

Alt-text: Graph. Callout points to the lowest ratings for each layout’s ease of use and visual appeal.

Example for a drawing showing patient medical instructions.

Figure 1. In hospitals, patients are sometimes asked to label the part of their body where the doctor will perform surgery, or, in this case, they are asked to label the part of their body where the doctor should not operate.

Alt-text: Drawing of legs. One has the words No surgery here No No No Not this one, hand-written in large red letters.

Example for a screen shot where the important features are described in the caption.

Figure 1. The homepage of mint.com is designed with simple aesthetic qualities. Promotional imagery highlights the colorful charts and graphic of the product as well as its mobility, while the page remains sophisticated, professional, and simple.

Alt-text: Screenshot of Mint.com home page

Also, please add alt-text to the authors’ pictures at the end of the article.

## Headings

The headings shown in this document would be used for an empirical study, that is, a study that reports data collected by you. If the paper is an analytical study, such as a literature review or a proposed new method, you may use more descriptive headings. You must, however, include the Tips for User Experience Practitioners.

# Abstract

The purpose of an abstract is to provide a brief but complete summary of the study including information on its purpose, methods, major findings, and conclusions. Remember that the abstract is the most read section of a manuscript; its objectives are to summarize the paper and to stimulate readers to want to read the full paper. Take advantage of the 250 words available to you. Like an executive summary, the abstract should contain important parts of the study, especially key findings and conclusions. Do not include citations to references in the abstract.

# Keywords

Provide a few keywords that represent the core ideas of your study. Keep in mind that these words will be indexed in the database, so choose the ones that are the most searchable. Think about which terms people will use to search for your paper. Avoid using proper names and unusual or rare words.

# Introduction

The purpose of an introduction to an empirical study is to demonstrate where and how your study fits into the existing research. It provides the context for the study and the rationale for why it was conducted. Describe what has been done in the area, where the gaps are, and how your study is intended to add to the literature. Sometimes this section contains a subsection with the literature review and sometimes they are combined into one section.

There are always previous studies that are relevant to the one you are presenting in your paper. Often studies are done to fill a gap in the literature or to investigate a deficiency. Occasionally studies are done to substantiate or refute some aspect of a theory. Your introduction should cite the key aspects of previous studies that are relevant to yours and what yours contributes. In a journal introduction to an empirical study, the literature review should not be exhaustive. It provides context but is not meant to summarize an entire research area, that is, unless the paper is a review article on research in a particular area. Readers of the journal need to know that you are familiar with the relevant studies; our readers are not looking for a tutorial about that literature.

It is often helpful to state the hypothesis you are testing or the purpose of your study at the end of the introduction. Doing so prepares readers for your method section.

# Method

A JUX Method section uses subheadings to organize the content. The subsections for an empirical study typically include: Study Design, Participants, Materials, and Procedure. Other types of studies may have different sub-headings.

These four subsections describe how the study was conducted. Together, they provide detailed information on the study design, participants, equipment, materials, and actions taken by the researchers and the participants. These sections should provide enough information to allow other researchers to replicate the study. The validity and reliability of an empirical study are a function of which variables you manipulated and how you collected and analyzed the data. You need to describe the method clearly and logically.

There are two common flaws that a poor method section exhibits: (1) lack of detail and (2) mixing in information that belongs in other sections. The method section is not the place to present results or additional background information that belongs in the introduction.

## Study Design

Describe the type of design used in the study. Specify the variables as well as their levels. For example:

The study employed a within-subjects design. The independent variable was the type of device (conventional mouse vs. touch-less mouse). The dependent variables were task completion time, the number of errors, and participants’ satisfaction ratings for each of the devices.

If necessary, you may want to explain why you chose the type of design, especially if there is a clear alternative. For example:

Because the sessions were two hours long, we decided not to use a within-subjects design.

## Participants

Do not refer to the people who were in your study as “subjects.” Instead, use the term “participants.”

The proper selection of participants determines the generalizability of the study. Consequently, it is critical to describe their selection and relevant characteristics. Describe how the participants were recruited and selected, their number, their key characteristics, and, when appropriate, how they were assigned to conditions. If you are going to discuss some of the characteristics of participants later in the results or discussion section, describe them here. Also, when you have compensated participants of your study, mention it here.

Often, it is efficient to present the characteristics of participants in a table with each participant in a row and each characteristic in a column.

## Materials

Here is where you describe any equipment, software, measuring instruments, and ratings or questionnaires used in the study. If the study was an update of previous work in which the materials were described, you may refer to that study and just briefly describe the materials.

When the equipment or software is an independent variable in the study, it is important to describe it in detail including how the levels of the variable differ, such as having the navigation links on the left-hand side or the right-hand side of the page. Often, figures illustrating the materials or screen shots are an efficient way to make similarities and differences clear.

If your study included rating forms or questionnaires that are not published in easily accessed sources, describe them in detail. Saying that “a post-test questionnaire was used to assess participants’ level of satisfaction” is not detailed enough. Provide the questionnaire in this section unless it is lengthy, in which case you should include them in an appendix, especially if subjective measures are described in the results section.

In many empirical usability studies, participants or usability experts are asked to perform tasks. Readers need to know what those tasks were. If the number of tasks is small, quote them in the section. Otherwise describe them in enough detail so that readers have a sense of what their nature is. A good practice is to make the tasks and task scenarios available to readers on request or include them in an appendix.

## Procedure

This section describes each step in the execution of the study. It is where you describe the sequence of steps you performed: how you set up and conducted the study and how you analyzed the data. If a usability specialist decided to repeat your study, this section would be key to following the same steps as you did. Typically, it is the most detailed section in the paper.

This subsection is where you describe how you interacted with the participants and what they did. Examples of details to include are whether and how you asked participants to think aloud, when you administered ratings or questionnaires, how you took time or accuracy measures, what you considered an error, and whether you provided participants with assistance.

It helps the reader to understand your results section when you describe how you tabulated and treated the data. For example, did you compute task times only for successful tasks, did you have a time limit for tasks, and did you tabulate only unique usability problems or did you include repeat problems?

When the procedures are complex or lengthy, figures and tables often help to make them clear. Screen shots with callouts often illustrate issues that are part of the method.

# Results

In theory, this is the easiest section to write, because it is a commentary of exactly what you observed and found. In reality, it can be a challenge, because it is not always clear how much information to include and what to say about it.

Think about your results in the context of the goals of your study. What was the primary reason for conducting it? For example, if you tested two groups of participants to see whether they would perform differently with a product, the readers will look in the results section to see if there were differences.

There are strategies for organizing results. First, if the results are complex and are spread over several pages, it helps to have a paragraph at the beginning of the section telling readers how the section is organized. For example,

We have organized the results around the following questions:

* Do the applications differ in their task times?
* Are the participants’ post-test ratings consistent with their performance?
* Do the post-task ratings correlate with the other commonly used usability measures?

Second, use tables and figures. Tables are an effective way to summarize data. Here is an example following the table format in the JUX template.

**Table 1.** Average Time for Version 1 and 2 Tasks and their Difference

|  |  |  |  |
| --- | --- | --- | --- |
| Task | Version 1(Secs.) | Version 2(Secs.) | Difference(Secs.) |
| Create Meeting Report | 156 | 98 | 58 |
| Update a Saved Report | 82 | 46 | 38 |
| Edit User Preferences | 60 | 35 | 25 |
| Find a Report | 43 | 26 | 17 |
| Create Customer Visit Report | 111 | 55 | 56 |
| **Average** | 90 | 52 | 38 |

Figures often illustrate issues that would otherwise require lengthy explanation. Screen shots with callouts are particularly effective. The JUX submittal procedure requires that you send a separate file or files containing any graphics you have in the manuscript.

The following are general guidelines to use when developing and using images/figures in your document:

* Use the alt-text feature in Word to describe the image/figure for our low and no vision users. To do this (in most versions of Word), select the image and right-click, select Format Picture. Under Layout & Properties, select Alt Text. Type a description of the image in the Description text box. For Figure 1 the alt-text might say, “Photo of prototype.” See Figures and Accessibility in the General Guidelines section above for more information
* Embed all image/figure components into each image/figure. For example, all callouts and text should be embedded in the figure.
* Do not use tables to layout images/figures. For example, if two images are placed next to each other in a table to make one figure, combine the two into one image file so that it is one figure.

****

**Figure 1.** Prototype of chair design.

Whenever you are reporting the results of an inferential statistic, there is a standard format:

Name or symbol for test (degrees of freedom) = test value, p < .probability.

For example:

There was a significant effect for product experience, t(27) = 4.63, p < .001, with more experienced participants receiving higher scores than less experienced ones.

Or:

The task times and ease of use ratings were significantly correlated, r(18) = .39, p < .01, meaning that tasks with slower times tended to be rated as more difficult.

One of the decisions you may face is how much interpretation to add to the description of the data. The traditional approach is only to describe findings with no interpretation added. That tradition is changing, however, to one in which you not only describe the data but also provide commentary that puts it into the context of the purpose of the study. If you conducted a study to see if participants performed more effectively and efficiently with Web page Design A or Web page Design B, you will want to focus on the difference in performance and subjective data with the designs. In addition, you should indicate which design was more usable and why. If some of the data support Design A and some Design B, you should indicate how you interpret those differences.

If your findings speak to the literature you included in the introduction, mention that briefly here. “Johnson and Johnson (2012) found comparable results when investigating menu items…” or “This study runs counter to the findings of Johnson and Johnson (2012). One potential reason is that….” If the discussion of the relationship to previous literature is lengthy you can say more about it in the conclusion section.

# Conclusion

The conclusion is likely the second most-read section of any paper. It is both a summary of the main points of your study and your interpretation of how it relates to the literature in your introduction. Make sure that your summary follows from the actual results of your study. It should link back to the literature cited in the introduction by stating whether or not the findings of your study are supported by or contradict the cited literature.

A conclusion may also include

* limitations, that is, how far the results can be generalized given the design of the study;
* opportunities for future research; or
* lessons learned, for example, what would you do differently the next time, or if you could conduct this study over again?

Avoid over-generalizing the findings by making them broader than your specific study warrants. For example, a study looking at some of the usability issues with three electronic book readers might make a statement that goes beyond the data that was actually collected:

Readers prefer paper books to E-readers.

Should instead be written as:

Participants in this study preferred paper books to E-readers.

# Tips for User Experience Practitioners

This required section is one of the unique features of the Journal of User Experience. The objective is to extract ideas from your manuscript that usability practitioners can apply in their current work. Three to five tips is a reasonable target number. The tips should come from the article you are preparing, typically from the method, findings, or conclusions.

Some examples of effective tips:

* In planning for tests with blind participants, estimate how long the sessions may take and tell candidate participants about the session length.
* Take the initiative to set an expectation from the beginning that there will be iterative tests and that all of the key stakeholders will be part of the process.

The Tips section is not for summarizing the study or listing its findings.

The Tips section is not for presenting new findings that have not been presented previously in your paper. For example:

The following table (Table 5) gives a summary of the advantages and disadvantages of each usability evaluation method used in this research study.

Do not cite general tips that the reader would not be able to find in the text of your study. For example:

Understand the context in which your application will be used.

The audience for tips is user experience practitioners who are not researchers. Tips are not for people in other fields, such as web designers, software designers, etc. The following is an example of a tip that pertains to web design:

Design all web pages (including introduction pages) in an accessible manner.

Tips are your way to emphasize a practice or finding that practitioners might be able to apply in their work.

Some additional tips on writing tips:

* Make sure that all of the items in the list of tips are grammatically and syntactically parallel. For example, begin each item with an action verb.
* Use complete sentences.
* Use numbers only if sequence matters.

# References

References list the sources you used to back up and support your research. Every citation in the text needs a reference in this section. Do not include references that you did not cite in the text.

References require attention to detail. You can write each of them manually or you can use a citation manager (e.g., EndNote, Zotero) that will automatically generate the format for each source, be it a web site, a journal article, or a conference presentation.

If you create a list of references manually, list the references alphabetically by author. If referencing multiple works by the same author, list the earliest ones first. Below are some examples following APA format, and the same examples are in the JUX template.

## Conference proceedings

Author, A. A., & Author, B. B. (Year of publication, month). Title of paper. *Proceedings of the < Name of the conference>* (pp. xx-xx). Place: Publisher.

Santa Maria, L., & Dyson, M. C. (2008, September 22-24). The effect of violating visual conventions of a Web site on user performance and disorientation. How bad can it be? *Proceedings of SIGDOC’08* (pp. 47-54). Lisbon, Portugal: ACM.

## Journals

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical, volume number*(issue number), pages.

Sodnik, J., Dicke, C., Tomazic, S., & Billinghurst, M. (2008). A user study of auditory versus visual interfaces for use while driving. *International Journal of Human-Computer Studies, 66*(5), 318-332.

## Books

Author, A. A. (Year of publication). *Title of work: Initial capital letter also for subtitle*. Location: Publisher.

Bias, R. G., & Mayhew, D. J. (1994). *Cost-justifying usability*. San Francisco, CA: Morgan Kaufmann.

## Chapters in a book

Author, A. A., & Author, B. B. (Year of publication). Title of chapter. In A. Editor & B. Editor (Eds.), *Title of book* (pages of chapter). Location: Publisher.

Dumas, J., & Salzman, M. (2006). Usability assessment techniques. In R. Williges (Ed.), *Reviews of human factors and ergonomics* (Vol. 2, pp. 109-140). Santa Monica, CA: HFES.

## Online sources

**Online magazine article:**

Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of Online Periodical, volume number* (issue number if available), page number. Retrieved from http://www.someaddress.com/full/url/

Castorina, C. (1994, March). Project EASI. *Change, 26*(2), 45-47. Retrieved from <http://www.jstor.org/stable/40177758>

**Web article:**

Author, A. A., & Author, B. B. (Date of publication). *Title of article*. Retrieved <date necessary if material may change/updated over time> from <web site>

Sauro, J. (2011, January 19). *Does prior experience affect perceptions of usability?* Retrieved December 2011 from <http://www.measuringusability.com/blog/prior-exposure.php>

# Acknowledgements

Thank the people who’ve helped you get where you are.

# About the Authors

The paper ends with pictures of the authors and a brief biography of each. Note the picture size and file type in the JUX template. The bio should be no longer than 50 words. Add the following alternative text to each of the author’s pictures for our low/no vision users: picture of author.