

## Consent

Dear Participant,

Our research group is currently performing a user study on the usefulness of UIScreens, a tool that uses a Deep Learning technique for the extraction of User Interface (UI) screens from mobile video programming tutorials for Android and iOS smartphones. We would be grateful if you could participate in our user study, which consists of a short background questionnaire, watching YouTube videos with the corresponding extracted UI screens, evaluating the set of extracted UI screens for videos, as well as evaluating the UIScreens tool itself.

The study should take no more than 20-30 minutes of your time. Your identity will not be recorded and your responses will be strictly anonymous.

Your decision to take part in this research study is entirely voluntary.

Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age.

If you have any questions about the research, please contact Esteban Parra at ep14f@my.fsu.edu, Mohammad Alahmadi at alahmadi@cs.fsu.edu, or the faculty advisor, Dr. Sonia Haiduc at shaiduc@cs.fsu.edu. If you have any questions regarding your rights as a participant in a research project, contact the FSU Institutional Review Board (IRB) at (850) 644-7900 or via email at humansubjects@fsu.edu.

Please feel free to print or save a copy of this page for your records.

\*I have read the above information and agree to participate in this research project.  
If you would like to participate, please access the survey by using the button below.

## Demographics

Which of the following best describes your primary occupation?

- ☐ Undergraduate Freshman/Sophomore
- ☐ Undergraduate Junior/Senior
- ☐ MS Student
- ☐ PhD student
- ☐ Faculty
- ☐ Professional Software Developer
- ☐ Other (Please specify)

How much Android programming experience do you have?

- ☐ No experience
- ☐ Less than 6 months
- ☐ 6 months to 1 year
- ☐ 1-2 years
- ☐ More than 2 years

How much iOS programming experience do you have?

- ☐ No experience
- ☐ Less than 6 months
- ☐ 6 months to 1 year
- ☐ 1-2 years
- ☐ More than 2 years

## Usefulness

**Please visit the website of our tool here: [UIScreens](#) and perform the following tasks:**

- 1.** Use the search bar and run several queries (some example topics could be: images, ListView, Google maps, onClickListener, camera, sensors, login, or you can write your own queries) and examine the results.
- 2.** Filter the results by using the "Search only videos that contain UI" feature.
- 3.** Try out the "Display UI in search results" feature.

4. Click on the "Filter" button on the right and try out the three filters (Language, OS, Duration).
5. Click on any video in the results and see the detailed view for a video, containing also a list of the extracted UI screens. Click on any extracted UI to directly navigate to where it appears in the video.
6. Feel free to try out the tool more if you wish so.

Indicate your level of agreement with the following statements:

**I think the following features are useful:**

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Displaying UIs below the video in the search results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Displaying UIs below the video in the detailed view of a video (when you click on the video in the results list)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filter results based on the presence of UI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filter results based on the spoken language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filter results based on the OS (iOS, Android, cross-platform)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filter results based on the duration of the video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Navigate to where the UI was displayed in the video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Extracting and displaying the UI screens below each video can help decide if a video is relevant to a search:**

- ☐ Strongly Agree  
☐ Agree  
☐ Neither Agree nor Disagree  
☐ Disagree

☐ Strongly Disagree

### Sufficient\_Unique

Please watch the following video

entirely: <http://serenelab.cs.fsu.edu/uiscreeens/watch?v=AfHPO9ccSaQ>

Then look at the extracted UI screens to answer the following questions:

**The list of UI screens extracted is sufficient to understand what are the main UI design elements discussed in the video**

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree

**The list of UI screens extracted does not present duplicate information (i.e., all UI screens presented are distinct)**

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree

### No\_UIs

Please watch the following video in its entirety and look for mobile UI screen designs: <http://serenelab.cs.fsu.edu/uiscreeens/watch?v=c3d7-tOGix8>

## Did you find any mobile UI screen design in the video?

- ☐ Yes
- ☐ No
- ☐ Not Sure

## Usability

Rate your level of agreement to the following statements about the UIScreens tool:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I would like to use UIScreens to identify potential UI screens useful to my tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found the various features in UIScreens well-integrated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I imagine that most people would learn how to use UIScreens quickly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UIScreens is unnecessarily complex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UIScreens is very cumbersome to use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I needed to learn a lot of new things to use UIScreens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Final thoughts

What other features would you like to see implemented in UIScreens?

What is your overall impression of the UIScreens tool:



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