

Thank you for participating in this study session! This session asks you to **work individually** to complete the paper-based tasks. The study that you are partaking, which is part of the research on “*Human Factors in Recommender Systems in Requirements Engineering*”, has been approved by the institutional review board at the UNIVERSITY NAME (IRB-#) led by the principal investigators (PIs), PROFESSOR NAMES. By typing and signing your name below, you agree to have the PIs use your anonymized responses in relevant research. If you opt to NOT take part in the study, then please return this paper copy back. Thank you!

Type your name: _____

Your signature: _____

RE task – reusing user interfaces (UIs) to inspire your own designs

Instructions:

You play the role of a **UI designer**. In each of the five scenarios below, a UI image is given which is referred to as *the original image*. Then, four different options (A, B, C, or D) are provided, each recommending a specific part of the original image and a corresponding requirements phrase. Here, “a requirements phrase” captures some important aspect of stakeholders’ needs and desires, but that phrase is often partial and does not necessarily capture all the important aspects of stakeholders’ needs and desires. From the four options (A, B, C, or D), you shall choose **one and only one** that inspires you the most to reuse the original image to design your own UI related to the corresponding requirements phrase. In addition to making the multiple-choice, you need to explain and/or draw your own UI image to highlight your revision(s). Keep in mind that **reuse** here means using an existing artifact (an original UI image in particular) to create something new. Therefore, your creations/revisions are as important as your reuse.

There are five original, to-be-reused UI images. These images are independent from each other. Hence, you shall complete the five UI reuse tasks independent from each other. You can perform the five reuse tasks in any order that you prefer.

You may use the back of the paper to document your responses. If so, explicitly document the scenario number (e.g., scenario 1, scenario 2, ..., scenario 5) so that your responses can be clearly linked. If you need extra papers, reach out to us. Thank you!

Pre-study survey

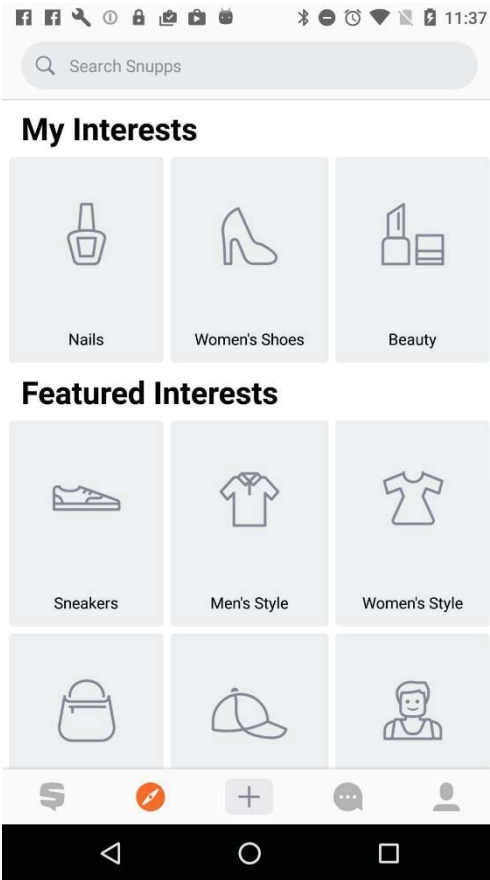
1. Have you had industrial/professional software development experience (including full-time job, part-time job, co-op, internship, consulting, and the like)? If so, what sectors/domains have you worked before (e.g., finance, technology [including big tech], entertainment, healthcare, etc.)?

2. In your own assessment, how much total software engineering experience do you have?
 - less than a year
 - 1-5 years
 - 5+ years

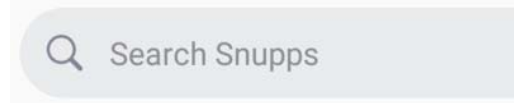
My situation is unique; please explain: _____

3. What software-related positions have you had [choose **ALL** that apply]?
 - programmer
 - tester and/or quality assurance (QA) engineer
 - database administrator (DBA)
 - user interface (UI) designer or user experience (UX) engineer
 - requirements engineer
 - business analyst
 - product owner
 - project manager
 - software architect
 - data scientist
 - others, then please specify: _____

Scenario 1's original UI image (given to the LEFT) and its four options (given to the RIGHT):



(A) reuse candidate (i.e., keyphrase) = **“search bar with shopping categories, discount advertisement and account maintenance”**

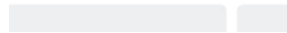


(B) reuse candidate (i.e., keyphrase) = **“UI for user profile”**

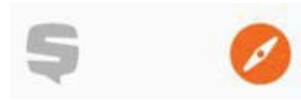


(C) reuse candidate (i.e., keyphrase) = **“Country code listing”**

My Interests



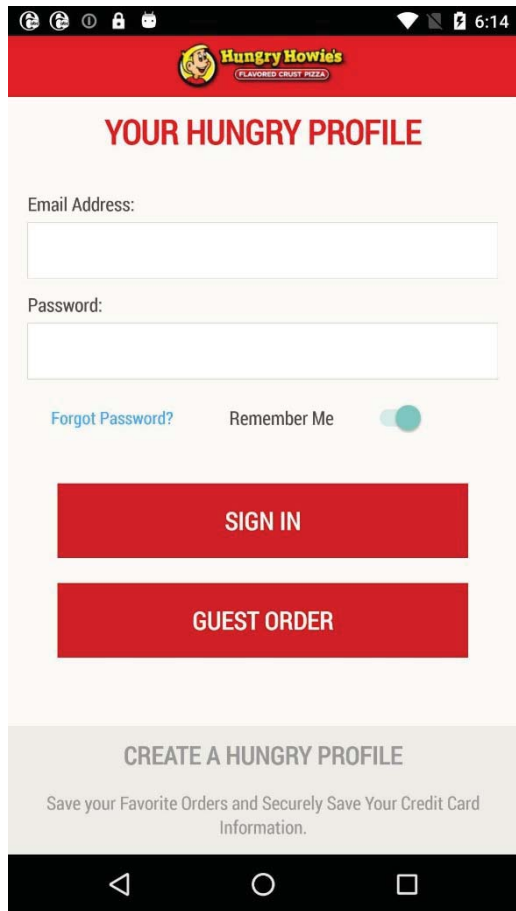
(D) reuse candidate (i.e., keyphrase) = **“Weekday digest for meal planning”**



Your reuse choice is (choose only ONE of A, B, C, or D):

Your own UI design inspired by your chosen reuse candidate (describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both):

Scenario 2's original UI image (given to the LEFT) and its four options (given to the RIGHT):



(A) reuse candidate (i.e., keyphrase) =
"Country code listing"

SIGN IN

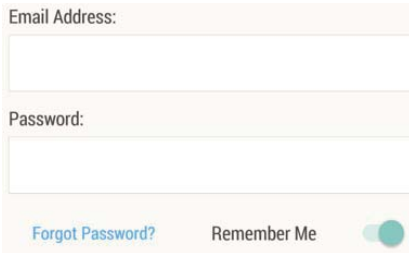
(B) reuse candidate (i.e., keyphrase) = "signup
with facebook login option"

SIGN IN

(C) reuse candidate (i.e., keyphrase) = "Body
care products"

CREATE A HUNGRY PROFILE

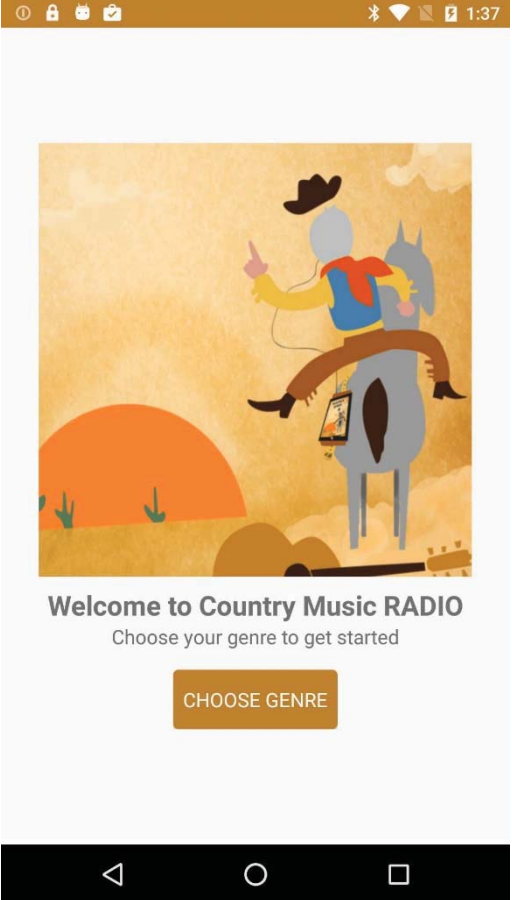


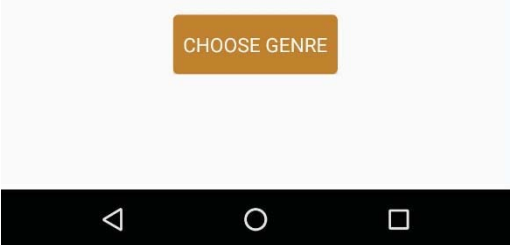
(D) reuse candidate (i.e., keyphrase) =
"information description with login button"



Your reuse choice is (choose only ONE of A, B, C, or D):

Your own UI design inspired by your chosen reuse candidate (describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both):

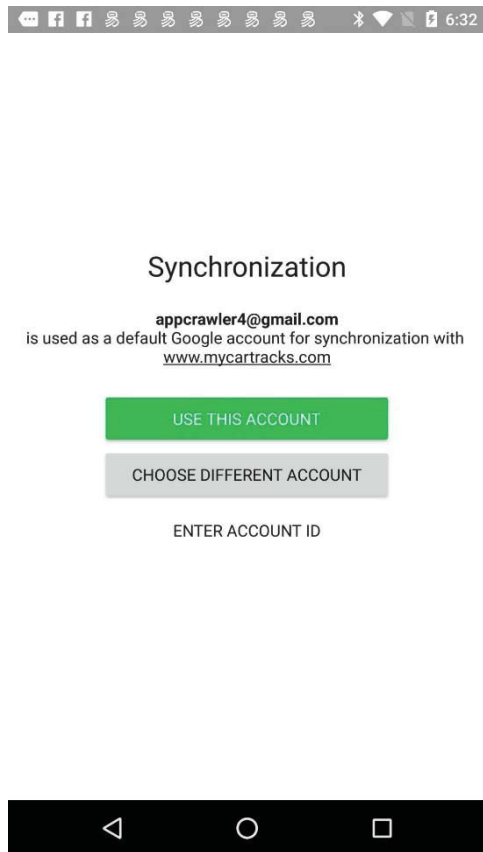
Scenario 3's original UI image (given to the LEFT) and its four options (given to the RIGHT):

	<p>(A) reuse candidate (i.e., keyphrase) = “choice of interest”</p> <p>Welcome to Country Music RADIO</p>
	<p>(B) reuse candidate (i.e., keyphrase) = “Country code listing”</p>
	<p>(C) reuse candidate (i.e., keyphrase) = “Filter settings for choosing price range, number of beds and baths”</p>
	<p>(D) reuse candidate (i.e., keyphrase) = “Country code listing”</p> <p>Choose your genre to get started</p> <p>CHOOSE GENRE</p>

Your reuse choice is (*choose only ONE of A, B, C, or D*):

Your own UI design inspired by your chosen reuse candidate (*describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both*):

Scenario 4's original UI image (given to the LEFT) and its four options (given to the RIGHT):

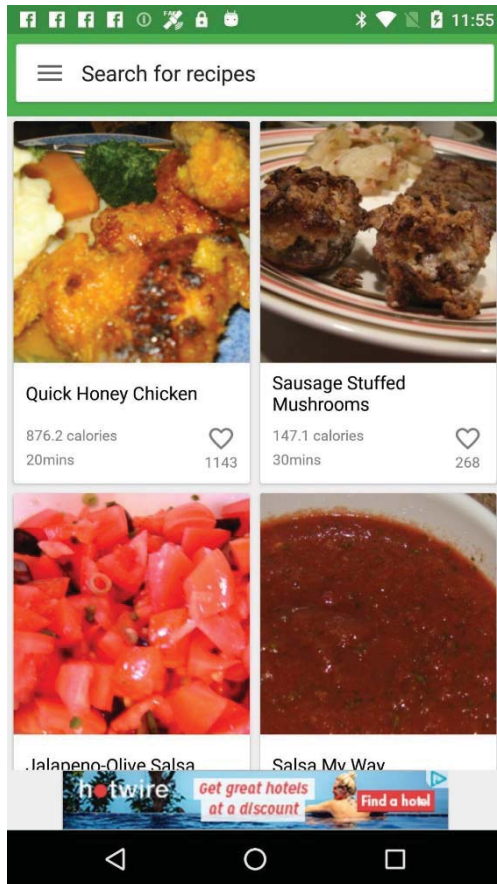


(A) reuse candidate (i.e., keyphrase) = “a news and an advertisement”
Synchronization
(B) reuse candidate (i.e., keyphrase) = “information description with login button”
appcrawler4@gmail.com is used as a default Google account for synchronization with www.mycartracks.com
(C) reuse candidate (i.e., keyphrase) = “information description with login button”
USE THIS ACCOUNT
(D) reuse candidate (i.e., keyphrase) = “near important places”
appcrawler4@gmail.com is used as a default Google account for synchronization with www.mycartracks.com

Your reuse choice is (*choose only ONE of A, B, C, or D*):

Your own UI design inspired by your chosen reuse candidate (*describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both*):

Scenario 5's original UI image (given to the LEFT) and its four options (given to the RIGHT):



(A) reuse candidate (i.e., keyphrase) = **“food recipes”**

Option A shows two recipe images side-by-side: "Quick Honey Chicken" on the left and "Sausage Stuffed Mushrooms" on the right. The text "(A) reuse candidate (i.e., keyphrase) = 'food recipes'" is positioned above the images.

(B) reuse candidate (i.e., keyphrase) = **“Country code listing”**

Option B shows a single recipe image of "Quick Honey Chicken". The text "(B) reuse candidate (i.e., keyphrase) = 'Country code listing'" is positioned above the image.

(C) reuse candidate (i.e., keyphrase) = **“today storms updates”**

Option C shows an advertisement for "hotwire" with the text "Get great hotels at a discount" and "Find a hotel". The text "(C) reuse candidate (i.e., keyphrase) = 'today storms updates'" is positioned above the advertisement.

(D) reuse candidate (i.e., keyphrase) = **“search bar with shopping categories, discount advertisement and account maintenance”**

Option D shows the search bar from the original UI, "Search for recipes", with a green border around it. The text "(D) reuse candidate (i.e., keyphrase) = 'search bar with shopping categories, discount advertisement and account maintenance'" is positioned above the search bar.

Your reuse choice is (choose only ONE of A, B, C, or D):

Your own UI design inspired by your chosen reuse candidate (describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both):

Scenario 6's original UI image (given to the LEFT) and its four options (given to the RIGHT):



(A) reuse candidate (i.e., keyphrase) = **“choice of interest”**



(B) reuse candidate (i.e., keyphrase) = **“Country code listing”**



(C) reuse candidate (i.e., keyphrase) = **“Body care products”**



(D) reuse candidate (i.e., keyphrase) = **“Country code listing”**



Your reuse choice is (*choose only ONE of A, B, C, or D*):

Your own UI design inspired by your chosen reuse candidate (*describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both*):

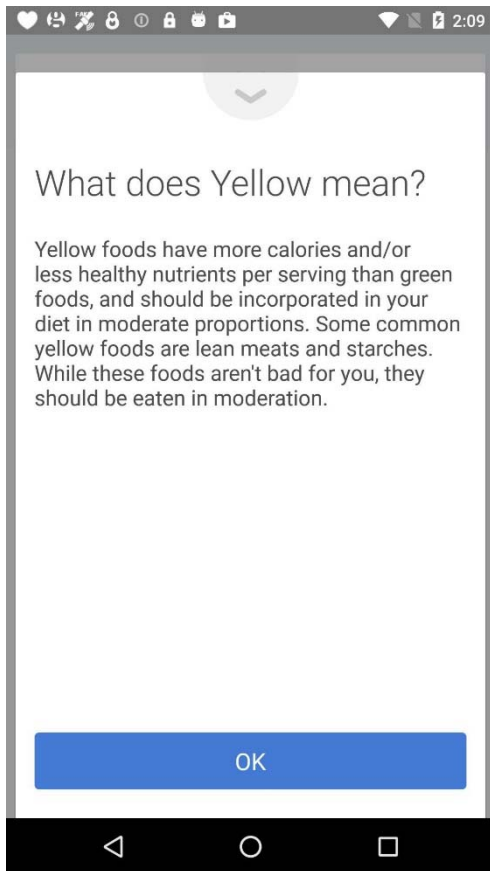
Scenario 7's original UI image (given to the LEFT) and its four options (given to the RIGHT):

	<p>(A) reuse candidate (i.e., keyphrase) = “search bar with shopping categories, discount advertisement and account maintenance”</p>
	<p>(B) reuse candidate (i.e., keyphrase) = “Delivery details input boxes for address and buttons for home, work or other”</p>
	<p>(C) reuse candidate (i.e., keyphrase) = “Country code listing”</p>
	<p>(D) reuse candidate (i.e., keyphrase) = “live breaking news video with another top stories article and video”</p>

Your reuse choice is (*choose only ONE of A, B, C, or D*):

Your own UI design inspired by your chosen reuse candidate (*describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both*):

Scenario 8's original UI image (given to the LEFT) and its four options (given to the RIGHT):



(A) reuse candidate (i.e., keyphrase) = **“food recipes”**

OK

(B) reuse candidate (i.e., keyphrase) = **“Country code listing”**

What does Yellow mean?

(C) reuse candidate (i.e., keyphrase) = **“today storms updates”**



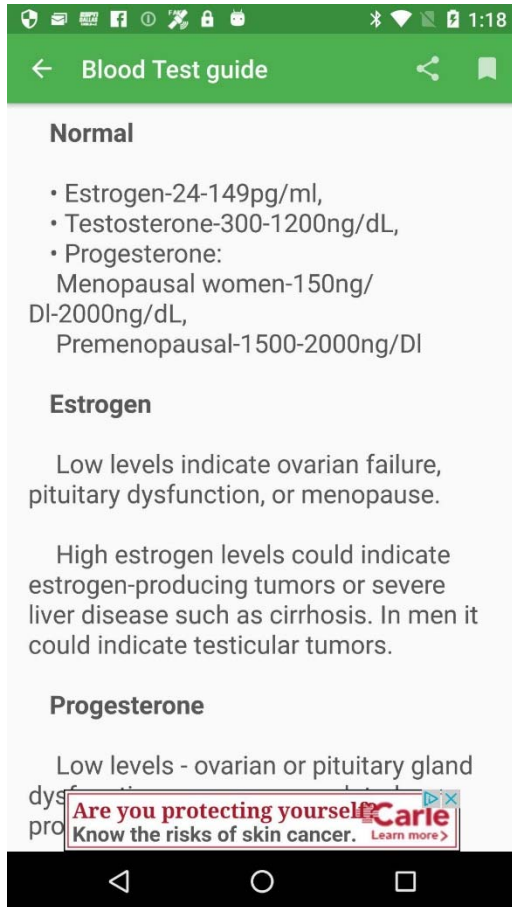
(D) reuse candidate (i.e., keyphrase) = **“weekday digest for meal planning”**

yellow foods are lean meats and starches.

Your reuse choice is (*choose only ONE of A, B, C, or D*):

Your own UI design inspired by your chosen reuse candidate (*describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both*):

Scenario 9's original UI image (given to the LEFT) and its four options (given to the RIGHT):



(A) reuse candidate (i.e., keyphrase) = **“Country code listing”**

Estrogen

Low levels indicate ovarian failure,

(B) reuse candidate (i.e., keyphrase) = **“blood test with data entry and unit selection”**

Blood Test guide

(C) reuse candidate (i.e., keyphrase) = **“information description with login button”**

Normal

• Estrogen-24-149pg/ml,

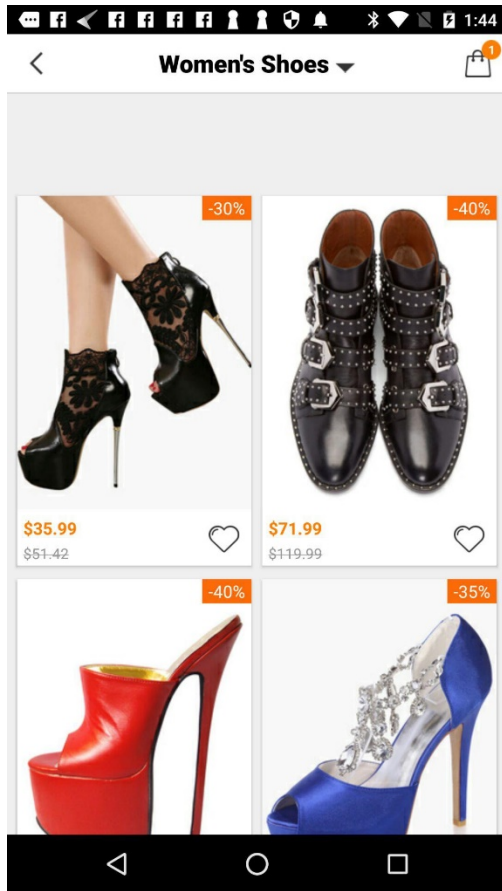
(D) reuse candidate (i.e., keyphrase) = **“privacy policy with types of collected information”**

Are you protecting yourself? Know the risks of skin cancer. Learn more >

Your reuse choice is (choose only ONE of A, B, C, or D):

Your own UI design inspired by your chosen reuse candidate (describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both):

Scenario 10's original UI image (given to the LEFT) and its four options (given to the RIGHT):



(A) reuse candidate (i.e., keyphrase) = **“settings and options in a Gym App”**



(B) reuse candidate (i.e., keyphrase) = **“buy request”**



(C) reuse candidate (i.e., keyphrase) = **“gallery of shopping or gaming items”**



(D) reuse candidate (i.e., keyphrase) = **“Country code listing”**



Your reuse choice is (choose only ONE of A, B, C, or D):

Your own UI design inspired by your chosen reuse candidate (describe and/or draw – make sure to highlight the revisions; the revisions can be on the UI itself, the requirements phrase, or both):