

## Activity: Human Computer Interface (Fa23 - Wk 3)

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used by 0 team(s)

### Activity Report

#### HCI

**Human Computer Interaction or HCI** is concerned primarily with the **interface** between the **user (a person)** and the **computer (a program)**. As an academic or research field, HCI sits at the intersection of Computer Science, Behavioral Science, Media Studies and Design.

A. What is it? (12 min)



If no image: [WikiMedia Image](#)

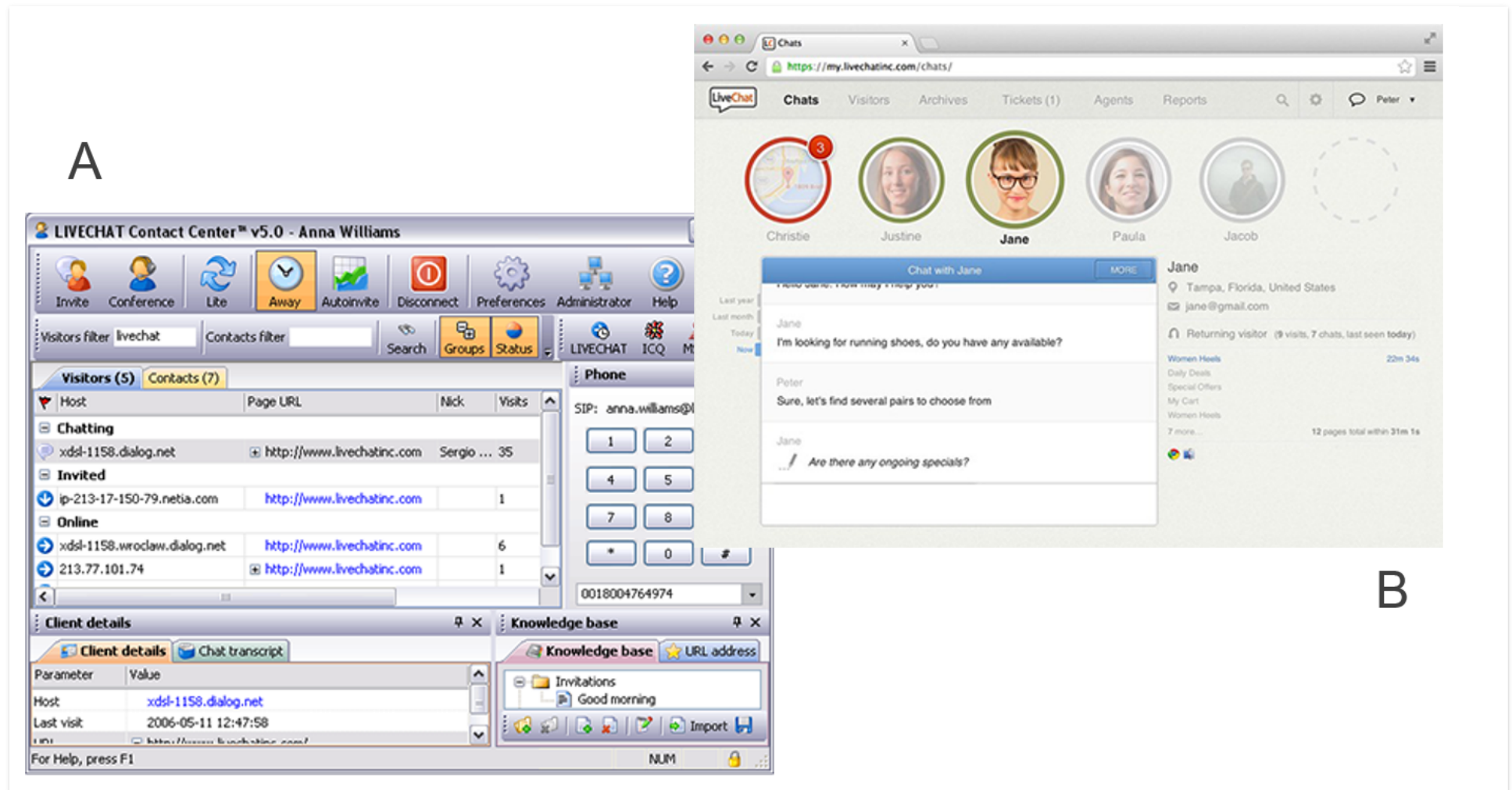
1. Describe what you see in this image that is the *user*.
2. Describe what you see in this image that is the *device*.
3. Describe what you see in this image that is the *interface*.
4. As a team think about the ways a user interacts with a device. List as many as you can in 100 seconds. (Ex. Remote control -> push a button) Your answers should be in the form of device -> user action.

## Scattergories Report Out

When the 100 seconds are up, the Spokesperson from each team will go to the nearest whiteboard and write down your top 5 responses to question 4 that are NOT ALREADY on the board. Review the other teams contributions and report back to the team.

If all went well, these are the components, or building blocks, of user interfaces. Graphical User Interface is shortened to GUI and pronounced "gooey". User Interface design is a discipline and is often shortened to UI. A UI designer may also be referred to as front-end designer.

### User Interface



5. Which interface is "better" and why? Discuss with your team and record a consensus answer.

6. How can a user help decide if an interface is *good*?

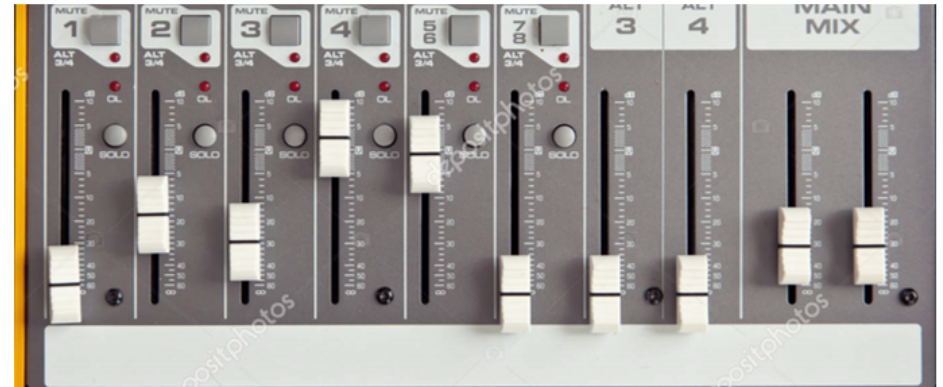
## Information

It turns out that interfaces are not artifacts that can be evaluated in isolation. People are key. How people use an interface, how they perceive the elements of an interface, matter. UI is short for User Interface and UX is short for User Experience. You may see UI and UX used together (UI/UX) or separately. HCI is the academic field and UI/UX is the commercial field.

7. Take 2 minutes *individually* to think of a positive and a negative user experience. The interface does not have to be digital, it could be physical. As a *team*, share your experiences. Once all members have shared, craft a sentence or statement about good UX that fits all of your positive experiences and excludes all of your negative ones.

B. What can I do? (13 min)

# What can you do with each of these?



1. For each device in the image, **how** does the user 'know' what they can do with it?

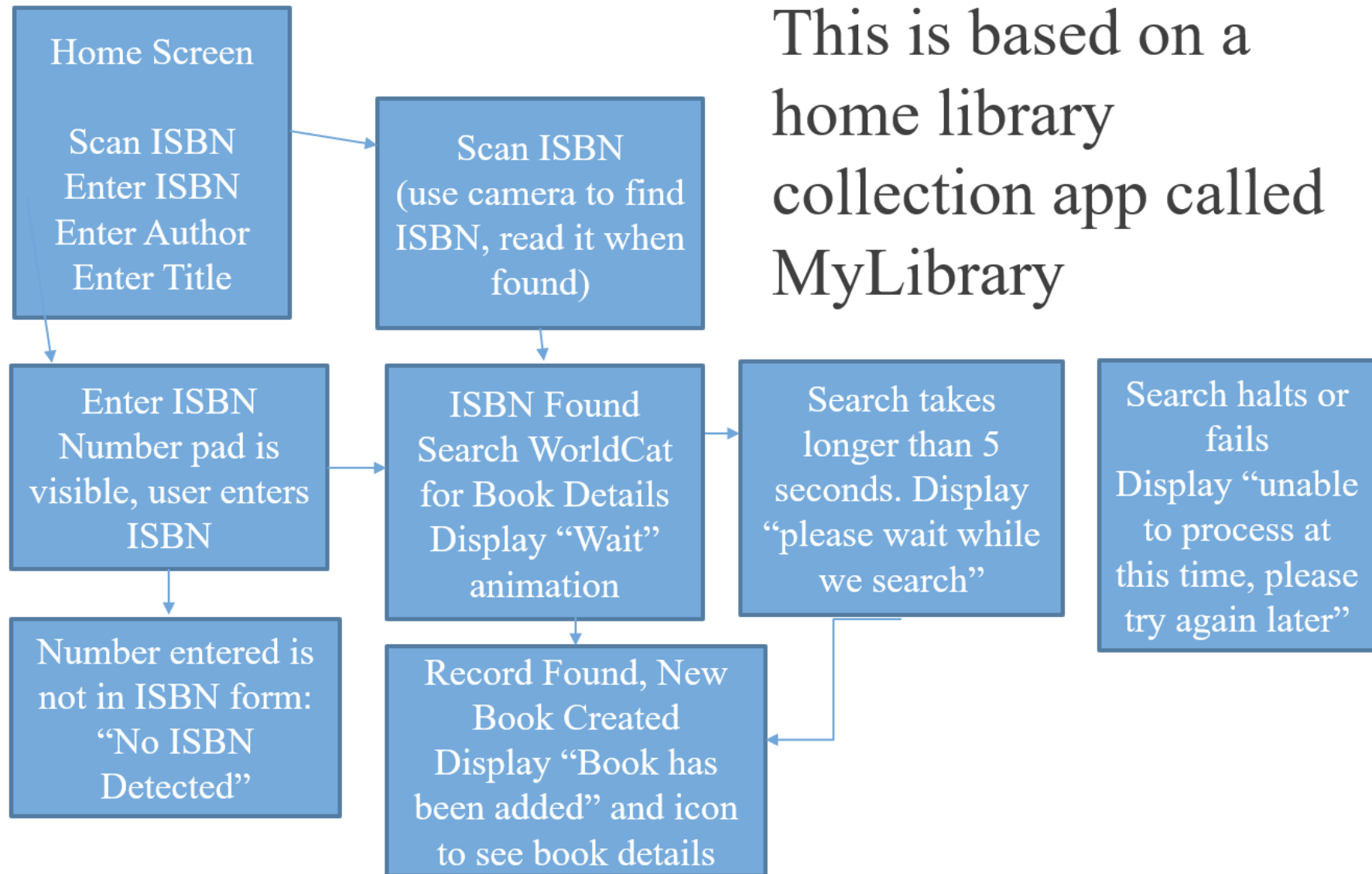
## Affordance

The term "affordance" was coined by James Gibson of Princeton University in the late 70's. People perceive possible actions they can take with an object or interface element. These may be because of links to experiences with physical objects, such as knobs; or with past experiences with programs, such as clicking underlined text on a webpage.

2. As a team, choose an interface element (physical or digital) that could be improved. How could you improve it? (Examples include but are not limited to: handles, buttons, icons, pointing devices, cursors, etc.)

C. What happened? (20 min)

Sometimes, a person learns what affordances a system or element has by trying it out. If you have ever tried swiping on an image because in one app, that does something, then you have engaged in this type of exploration. Let's look at a simple app from the designers perspective



1. Which *interface* elements would be most appropriate for the two choices: Scan ISBN and Enter ISBN? (International Standard Book Number)

- 2. How does the user know if the number they typed is NOT a valid ISBN?
- 3. When does the user see the Wait Animation?
- 4. Are Wait Animations useful? Why or why not?
- 5. How does the user know when the ISBN was found and the book added to the collection?
- 6. As a team, agree on a definition/explanation of the importance of the dialog between user and program.

Feedback

In HCI, **feedback** is defined as an ongoing dialog between the user and the program, providing sensory clues to the success or failure of a user action. When you are filling out a form online, the focus going to the next field is a clue that the previous field is complete. A confirmation page after submitting is a clue that the form is complete. Error messages should provide clues as to what went wrong.

Team Activities for Activity: Human Computer Interface (Fa23 - Wk 3)

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