Intro to User Experience & UI Design

Georgia Tech Research Network Operations Center (RNOC)
cic.gatech.edu

Questions?
piazza.com/gatech/spring2015/cic
rnoc-lab-staff@lists.gatech.edu
What IS User Experience?

Broad field, usually broken into one of three:

- **UX Design**
  - prototyping, wireframes, graphic design
- **UX Research**
  - usability testing, a/b testing, statistical analysis, metrics
- **UX Development**
  - web development + coding in general

*UX is a highly iterative and collaborative process!*
Interaction + Interface Design

● Defining the way your product interacts with users in a linear, simple, and aesthetically pleasing manner.

● Usually the wireframe stage
User Research

- Understanding your users through observation, interviewing, and testing
- Generally analytics and metrics

Methods include:
- usability testing, Google analytics, mental models, video recording, polls, questionnaires, interviews
UX Development

Coding up the design

WHAT IS THE CHALLENGE HERE?
UX Myths

More choices and features result in higher satisfaction
UX Myths

Design is about making things look good

“Design is not just what it looks like and feels like. Design is how it works.” - Steve Jobs
UX Myths

Testing is for validating a final product, not discovering or prototyping.
UX Myths

UX is only for applications
For your app to work, you must balance simplicity and usability
○ Fitbit Flex
“User-experience is not like usability - it is about feelings. The aim here is to create happiness.”
Some examples

- Peek
- iOS 9
- Dark Sky
- Fitbit
- Misfit wearables
- Pinterest
Prototyping + Wireframing Tools

- Axure
- Balsamiq
- Invision
- Pixate
- Sketch
- Illustrator
- Photoshop
- And more: uxdesign.cc/ux-tools
Terminology

● Low-fidelity
  ○ paper, sticky notes, sketchy

● Wireframes
  ○ bare-bones

● High-fidelity
  ○ polished but not deployed

● Prototypes
  ○ interactive demo
Examples

Low-fi to high-fi is a spectrum from most sketchy to most polished, and used as an adjective to describe your deliverables (wireframes and prototypes)
Low Fidelity

Source: Andrew Nelson, IDEAID

Source: Ruben Santa, AppleWatch wires, Dribbble
High Fidelity

Source: Billy Kiely, Dribbble

Source: Anton Aheichank for Invision, Dribbble
Prototype

Source: Anton Aheichank for Invision, Dribbble
Prototype

What does it look like? What is the I/O? What are its affordances?

Do:
- Refine your last prototype
- Research your design decisions
- Make a few different versions

Don’t:
- Completely change something being implemented
- Be unprepared for critique

Tools, References, Search Terms:
- Axure
- invisionapp.com
- prototypingtools.co

Before you move on:
- Make sure you’ve addressed anything from the previous iteration
- Expect implementation issues
Learn from User Behavior

What did you do? What are you doing? What are you going to do?

Do:
- Try to use quantitative data - much more convincing
- Qualitative data is good for creating generalizations, such as personas
- Force them to experiment

Don’t:
- Tell them how to use something
- Don’t interfere

Tools, References, Search Terms:
- Design methods: personas, mental models, mind maps
- Analytics and Metrics tools

Before you move on:
- Compile results to design methods
- Reflect
Q&A

● Want to see more examples of things we covered?
● What are your experiences with UX in class or professionally?
● What methods/tools do you like/dislike?
Thanks y’all!

Email us: rnoc-lab-staff@lists.gatech.edu

This tutorial: cic.gatech.edu

Resources: gtjourney.gatech.edu
BACKUP SLIDES
What is Lean UX?

- **Background**
  - many UX designers fly solo on a team of many programmers
  - involving others at every step of the way to make sure voice is heard and change is implemented
  - thus, best with startups and small teams

- **Design with quick turnaround**
  - through constant, quick feedback from boss and clients

- **Keep deliverables light and editable**
  - i.e. choosing the type of button and placement
  - not “overhaul this entire page”
Lean UX in class projects

The value of UX in class projects:
- Points!
- Your own portfolio, shareable
- CIC
- Pick it up again in future classes
- Do it fer real!

The usual workflow in class projects:
1. Syllabus, general course outcomes
2. Rough deliverable schedule
3. Ideation, team formation
4. Teaching and homeworks involving project management
5. Doing the project
6. Might have “client” meetings with the professor or TA
Concept

What did you do? What are you doing? What are you going to do?

Do:
- Communicate with everyone
- Strategize
- Scope

Don’t:
- Work in a silo
- Lose your way
- Overreach

Tools, References, Search Terms:
- Design thinking toolkits
- UX organization tools

Before you move on:
- Did you meet your goals last iteration? What should change?
# RECIPE 3 Improvement

## Modes:
- exploring
- making sense
- proposing
- iterating

<table>
<thead>
<tr>
<th>Activity</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find out something unexpected, create storyworlds and storyboards, and segment by themes</td>
<td>Your are attuned to understanding and valuing participant and user experiences and resources and have learned where things go wrong and where they go right</td>
</tr>
<tr>
<td>Problem definition</td>
<td>You review and possibly reframe the service prompting you to consider what matters and why this is so</td>
</tr>
<tr>
<td>(Re)defining the proposition and creating an outcomes matrix</td>
<td>You identify and clarify what a service offers and compare the actual situation with what you think happens</td>
</tr>
<tr>
<td>Mapping the service ecology</td>
<td>You identify resources that might not have been obvious or viable before, and see opportunities to reconfigure resources in the service ecology to create value in new ways</td>
</tr>
<tr>
<td>Create blueprints for a future version of the service, that identify opportunities for change that are realistic to deliver to time, quality and budget</td>
<td>You understand where participant and organisational and resources are not well aligned or connected</td>
</tr>
<tr>
<td>Having reviewed these materials, you define and agree what next steps to take to implement your designs</td>
<td>You are ready to move towards gathering and costing resources and doing quick experiments to test your ideas</td>
</tr>
</tbody>
</table>
Validate Internally

How are you going to make your boss listen to you?

Do:
- Communicate with your boss
- Back up your design decisions
- Compromise together

Don’t:
- Think your way is best
- Be unprepared for critique

Tools, References, Search Terms:
- Presentation Tools
  ○ Keynote, Powerpoint
- Anything to help you make your point
  (Scholarly articles, prototypes, wireframes)

Before you move on:
- Did your boss explicitly agree or not? Get it in writing, if possible.
Test Externally

What did you do? What are you doing? What are you going to do?

Do:
- Establish a good relationship with your clients
- Test on every kind of customer
- Pick the appropriate kind of testing
- Set up and test in advance
- Record tests and results

Don’t:
- Test and then leave client out of the loop

Tools, References, Search Terms:
- Analytics and Metrics tools
- Usability Testing
- Google Analytics
- A/B testing

Before you move on:
- Compile results to present to rest of team
- Thank your testers, keep them in loop
Reiterate

What did you do? What are you doing? What are you going to do?

Do:
- Reflect on current progress vs. goals
- Prioritize changes
- Take time to refresh and get inspired
- Refine, branch, experiment

Don’t:
- Stop
- Start over/reinvent the wheel

Tools, References, Search Terms:
- Organize and document information

Before you move on:
- Prioritize changes and goals
Again, this is how you can integrate LeanUX in your class projects:
Resources

General Sources

● Smashing Magazine
● UX Pin
● UX Design Blogs to Follow Religiously

Design Inspiration

● dribbble
● awwwards
● behance
● Muz.li
Resources

Research

- Nielsen Norman Group
- Google Analytics
- oozled.com/resources/ux
- thestarterkit.info/group/ux