

Overview

Responsive Web Design

Unlike printed material, web content must be designed without the designer knowing the size or orientation of the screen on which the content will be viewed. Laptops, tablets, phones, and more recently watches are chosen based on the end users' context and other factors. With responsive web design, designers make decisions about how content will be automatically resized, hidden, or moved on these different devices.

To reduce development efforts and optimize the user experience across multiple devices, designers create a single design that adapts to the user's device. This is known as responsive web design (RWD), where a single code base is adapted to display optimally on devices with varying physical sizes, resolution, and capabilities.

Peer Economy

A peer economy (or sharing economy) is a decentralized business model whereby two individuals interact to buy or sell goods and services directly with each other, without intermediation by a third-party. In recent years this model has achieved a competitive advantage around the world and is growing rapidly. It has challenged the economic models of our societies and destabilized traditional businesses.

These initiatives cater to the needs of individuals, and their swift rise is due in large part to the rapid adoption of mobile devices. Peer-economy based services are significantly easier to design, deploy, use, and maintain than traditional businesses. Some well known examples include Uber (ride sharing), Airbnb (hoteling), Etsy (craft goods), Mechanical Turk, (labor market), Rover (pet sitting), Medium (journalism), BorrowCars (car rental) and Kickstarter (funding).

Domain Selection

In this assignment teams will choose a business domain from the list provided below. Students will develop personas for both customers and service providers. They will then create a responsive web design (RWD) for their new peer economy that both end users (customers and service providers) can experience on 2 devices: mobile and laptop.

Business domains:

- Emergency response at a municipal, regional, state, national or global scale
- Furniture exchange
- Neighborhood crime watch

Design Process

Working in teams, students will perform the following steps:

- conduct guerrilla research to better understand customer and provider needs
- create personas from the findings they collect
- generate scenarios describing context, triggers, interaction methods, touchpoints, and value being exchanged
- storyboard selected scenario(s) using the problem, context, solution, resolution model to explore value exchanges
- speed date storyboards for concept validation and revise as needed
- create screen maps for customer and provider views on BOTH devices
- create low-fidelity wireframes for both customer and provider on their targeted devices (laptop and mobile)
- from the above, select the most critical touchpoints needed to capture the value exchange between customer and provider
- design high-fidelity screens of the above, needed to create a demo
- create a high-fidelity prototype with appropriate interactivity between screens and at the UI element level within screens
- create a pitch describing value exchanges and use the high-fidelity prototype to demonstrate the user experience(s)
- conclude the pitch with suggested ways that your design could be applied to impact related scenarios within the selected business domain

Learning Outcomes

Design Thinking

- Reframe problems by changing prevailing assumptions about asset ownership
- Challenge current social mores and interaction patterns
- Create value by applying the human-centered design process from research to prototype development and validation

Design Methods

- Conduct guerilla research
- Develop personas and use them to inform responsive web design
- Use scenarios to rapidly generate a wide variety of concepts
- Make storyboards to make user experience of selected scenario(s) visible
- Conduct speed dating session

Design Skills

- Design low-fidelity wireframes to explore and resolve interaction details
- Prototype using a design and hosting tool like Sketch, InVision, Marvel, Framer, etc.

- Prepare deliverables at a professional quality level
- Present (or “pitch”) a case that compels investments by demonstrating how a responsive web design for the peer economy creates value

Deliverables

- Presentation (pitch) to investors in which team uses knowledge of peer economy and responsive web design to compel investment. All team members must participate.
- File used to support the presentation. (PDF)
- Demo showing how customers and providers exchange value (hosted in InVision or other prototype hosting application.)
- A process book in which the team documents design activity, artifacts, design rationale, decisions and methods. Content is organized in a narrative. Book is saved in a PDF file format and uploaded to Box.

Grading Criteria

Students will be graded based on the team meeting the learning objectives for this assignment (listed above). Since this is a team project, students will submit peer reviews to make sure the team work was evenly distributed and that collaboration was successful. Negative peer reviews will impact a student’s individual grade accordingly.