

Course Abstract

Our society has been transformed by advancements in the capabilities of digital technology to organize, create, and share information and the pervasiveness of personal technology -- from GPS systems on our mobile phones that guide us to our exact destination to social media tools that help us receive, share and remix content from across the world. But it is not only our day-to-day activities that have been radically changed -- technology has also changed the way that institutions interact with and serve their constituents. From apps that collect critical health data through text messaging to websites that help you register to vote online, practitioners of public and nonprofit management are increasingly taking advantage technology's ability to make the world a better place.

Digital Innovation Lab will allow students to experience the process of bringing their own socially-conscious digital concept to life. This team-based, 6 session course will help students gain the practical skills necessary to develop and refine their concepts and build initial prototypes, and provide insights into getting a product built and securing funding. Students interested in this course are encouraged to have an interest in web + mobile technology and an initial idea for a concept they're interested in developing.

Introduction to the Course

Advances in the capabilities of digital technology to organize, create, and share information combined with the pervasiveness of personal technology devices has transformed our society in innumerable ways. From GPS systems on our mobile phones that guide us to our exact destination to social media tools that help us receive, share and remix content from across the world – our everyday lives have been radically changed by technology.

It is not only our personal everyday experiences that are changing. From apps that collect critical health data through text messaging to websites that help you register to vote online, practitioners of public and nonprofit management are increasingly taking advantage technology's ability to make the world a better place. Some examples include:

- **Peer to Patent:** a partnership between New York Law School and the U.S. Patent and Trademark Office to gather public input patent applications using social technology (<http://peertopatent.org>).
- **Code for America:** modeled after “teach for America,” CfA brings developers, designers and entrepreneurs into city government for 11 month fellowships where they develop tools that help make governments more open and efficient. In partnership with their cities they've created many innovative products including SnapFresh, an app to help find retailers who participate in the Federal Supplemental Nutrition Assistance Program (SNAP), DiscoverBPS – an app created for Boston Public Schools that makes it easier for parents to evaluate which school to send their child to, and ClassTalk, a tool that helps teachers easily communicate with their students through SMS and email (<http://codeforamerica.org>)

- **TurboVote:** a tool that is trying to make voting as easy as possible by using the web to streamline the absentee voter registration process (<http://turbovote.org>)
- **FrontLine SMS:** a mobile technology that allows people and organizations deliver services, and share and collect information via mobile phones.
- **Mass VetsAdvisor:** Mass VetsAdvisor is like a TurboTax for veteran's benefits, turning PDF versions of paper legislation into a database that can be easily searched and accessed by veterans and their family members through a simple and easy to use user interface. (<http://massvetsadvisor.org>)
- **TSA Blog:** Instead of just releasing white papers or press releases to explain policy, the Transportation Security Administration (TSA) started a blog to enable a dialog with the public about their methods and guidelines, potentially improving the relationship between travelers and the agency. (<http://blog.tsa.gov>)

This is a practical course that will help you gain the practical skills necessary to develop and refine a socially conscious digital innovation concept and bring it to fruition.

Learning Objectives

This course will:

- Introduce students to material that will help them develop and strengthen their Digital Innovation concepts
- Help students create a pitch and a prototype¹ to bring their concepts to fruition
- Deepen students' skills in developing and delivering presentations, refining concepts, understanding what it takes to bring a technology concept to fruition
- Give students practical skills for their future careers, including developing product concepts, financial models, staffing plans and wireframing techniques.

Prerequisites

There are no prerequisites for this course. However, in order to get the most out of the course students should have:

1. a basic understanding of web and mobile technology (i.e. students should be familiar with facebook and twitter and should be comfortable using or experimenting with mobile apps – see <http://www.gcflearnfree.org/socialmedia> for some primers on social media, if necessary)
2. an initial idea for the product they are interested in developing

Content

This course will cover the following aspects of developing a pitch for your product:

- Session 01 – Problems + Solutions
- Session 02 – User Experience
- Session 03 – Ecosystem Analysis
- Session 04 – Getting Funded
- Session 05 – Pitch Refinement
- Session 06 – Final Presentation + Critique

Format

Each class will include the following components:

- **Lectures**
The lecturers will provide most of the context for the workshop to follow. Their lectures will pick up where the readings left off, providing students with a practical understanding of the session topic. For example, during the Funding Models session we might hear from a Venture Capitalist and a Grant Officer from a foundation about the different elements they look for when funding socially-conscious technology startups.
- **Work Sessions**
The work sessions will give students an opportunity to refine their concepts in class with the support of the guest lecturers and classmates.
- **Critiques**
Students will present the concepts they developed during the work sessions and offer feedback on each other's work.
- **Assignments**
Students will have assignments due every day that the course is in session. These assignments build on and contribute to the work sessions and are an essential part of the course.

Class will meet for six 4-hour sessions from 2pm – 6pm between January 9th – January 25th 2013:

1. Wednesday January 9th
2. Friday January 11th
3. Monday January 14th
4. Wednesday January 16th
5. Friday January 18th
6. Wednesday January 23rd

Readings + Case Studies

The readings in this course are focused on helping students create pitches and prototypes for their technology concepts. Readings will be supplemented by ignite-style presentations and lectures about real-world case studies, giving students practical applications of the theories and models they are exploring. All readings will be posted on the course website.

Optional:

The following books are good additional resources but are not required for successful completion of the course:

Duarte, Nancy. *slide:ology The Art and Science of Creating Great Presentations*. Sebastapol, CA: O'Reilly.

Shirky, Clay. *Here Comes Everybody: The Power of Organizing Without Organizations*. New York, NY: Penguin, 2008.

Assignments + Grading Structure:

Students may work individually or in teams of 2-4.

The course consists of several activities that all lead to the development of a pitch deck and prototype for your product. Successful completion of the course requires students to:

1. Attend ALL class sessions (25%)

It will be extremely important that students attend all class sessions. It is nearly impossible to miss class sessions and still successfully complete the course.

2. Complete Readings & Assignments (25% of grade)

Students will be required to complete readings in advance of each class session. However, this material is difficult to learn through readings and lectures alone and students will be asked to complete assignments and provide feedback to other students related to each session topic. These assignments will form the basis of the work sessions and are a core component of developing your product pitch.

Failure to complete the required assignments will have a significant impact on student's ability to participate in this course. Several completed assignments will be shared on a class blog (wordpress) allowing for active communication and commenting on the design process.

3. Actively Participate in Course Work Sessions & Critiques (25% of grade)

Each class session will include work sessions and critiques where students will work on refining their concepts and pitch decks. These work sessions and critiques will be facilitated by the instructor and guest lecturers and are an essential part of the design process.

4. Final Presentation (25% of grade)

Each student will present their final pitch and demonstrate their prototype during the final class session. Students will be required to offer feedback on all other students' final presentations. Guest lecturers will be invited to the final session to provide feedback as well.

Session Schedule *See below for reading and homework schedule.

1	<p>Problems and Solutions (Wednesday January 9th) How have people and institutions solved public problems using digital technology? What problem are you trying to solve? How do you want to solve this problem using technology? How should you tell your story?</p> <p>In-class Activities</p> <ul style="list-style-type: none"> - Lecture: Course Overview, Using Technology to Make the World a Better Place (frameworks and case studies) - Guest Lecture: Priya Parker, Identifying Core Problems - Workshops: Problems & Solutions, Future State
2	<p>User Experience (Friday January 11th) In this class we will focus on the potential users of your product – unlocking their needs, motivations and desires as they relate to interacting with your product.</p> <p>In-class Activities</p> <ul style="list-style-type: none"> - Workshops: User Engagement, Personas
3	<p>Ecosystem Analysis + Pitch Intro (Monday January 14th) In this class students will analyze the ecosystem – understanding the market and its stakeholders.</p> <p>In-class Activities</p> <ul style="list-style-type: none"> • Guest Lecture: Seth Flaxman, TurboVote • Guest Lecture: Amanda Peyton, Grand St. • Workshops: Stakeholder Map, Pitch Session
4	<p>Getting Funded (Wednesday January 16th) In this class we'll discuss how to fund your startup and how to develop your pitch appropriately depending on the type of funding you seek. Including VC funding, startup incubators, foundation grants, government contracts, and bootstrapping.</p>

	<p>In-class Activities</p> <ul style="list-style-type: none">- Guest Lecture: Matthew Klein, Blue Ridge Foundation- Workshops: Structuring the Ask, Developing the Pitch
5	<p>Pitch Refinement (Friday January 18th)</p> <p>In this class we'll discuss how to refine your pitch for your specific audience. Do your potential funders want to see prototypes, social impact metrics or financial models? How do you give them what they want to see while staying true to your story?</p> <p>In-class Activities</p> <ul style="list-style-type: none">- Lecture: Class recap; benefits of prototyping; deciding what to put in your pitch deck- Workshop: Open Ideation Refinement
6	<p>Final Presentation + Critique (Wednesday January 23rd)</p> <p>In the last session each student will present their concept and receive critiques from fellow students and our panel of expert guests.</p> <p>Guest critics, including entrepreneurs, funders, technologists, past lecturers, city and nonprofit leaders, will be invited to provide feedback on final pitches and prototype demonstrations.</p>

ASSIGNMENT CHECK-LIST

<input checked="" type="checkbox"/>	#	Item	Type	Due
<input type="checkbox"/>	1	Complete Survey	---	7 th
<input type="checkbox"/>	2	Good Idea; Now What? Ch. 2: Ideas in the Midst (4 pages)	reading	9 th
<input type="checkbox"/>	3	The Elements of User Experience Ch. 2	reading	9 th
<input type="checkbox"/>	4	Paul Conneally, Digital Humanitarianism	video	9 th
<input type="checkbox"/>	5	Clay Shirky. How the Internet will (one day) Transform Government	video	9 th
<input type="checkbox"/>	6	Lisa Gansky, Reinventing Government in the Age of Zipcar	video	9 th
<input type="checkbox"/>	7	Todd Park, For the People, By the People: How Open Data Drives Innovation	video	9 th
<input type="checkbox"/>	8	Vinay Venkatraman, "Technology Crafts" for the digitally underserved	video	9 th
<input type="checkbox"/>	9	Seth Priebatsch, the Game Layer on top of the World	video	9 th
<input type="checkbox"/>	10	Eli Pariser, the Filter Bubble	video	9 th
<input type="checkbox"/>	11	Tumblr, Embedding Pitches & Prototyping	---	9 th
<input type="checkbox"/>	12	Future state	forum	10 th
<input type="checkbox"/>	13	List of users	forum	10 th
<input type="checkbox"/>	14	Digital Innovation concept v2	blog	10 th
<input type="checkbox"/>	15	Future state comment	forum	11 th
<input type="checkbox"/>	16	List of users comment	forum	11 th
<input type="checkbox"/>	17	Digital Innovation concept v2 - comment	blog	11 th
<input type="checkbox"/>	18	The Elements of User Experience Ch. 3	reading	11 th
<input type="checkbox"/>	19	Core User Personas	Forum	13 th
<input type="checkbox"/>	20	User Experience (UX) Strategy	Forum	13 th
<input type="checkbox"/>	21	Digital Innovation concept v3	Blog	13 th
<input type="checkbox"/>	22	List of functionality	Forum	13 th
<input type="checkbox"/>	23	Core User Personas - comment	Forum	14 th
<input type="checkbox"/>	24	User Experience (UX) Strategy - comment	forum	14 th
<input type="checkbox"/>	25	Digital Innovation concept v3 – comment	blog	14 th
<input type="checkbox"/>	26	List of functionality - comment	forum	14 th
<input type="checkbox"/>	27	Pitching Hacks – high concept, elevator pitch and decks (30 short pages)	reading	14 th
<input type="checkbox"/>	28	The Elements of User Experience Ch. 4	reading	14 th
<input type="checkbox"/>	29	Market analysis	forum	15 th
<input type="checkbox"/>	30	Stakeholder map	forum	15 th
<input type="checkbox"/>	31	Digital Innovation concept v4	blog	15 th
<input type="checkbox"/>	32	Funding Models: Group Presentation	--	16 th
<input type="checkbox"/>	33	Market analysis - comment	forum	16 th
<input type="checkbox"/>	34	Stakeholder map - comment	forum	16 th
<input type="checkbox"/>	35	Digital Innovation concept v4 – comment	blog	16 th
<input type="checkbox"/>	36	Funding Sources - comment	forum	16 th
<input type="checkbox"/>	37	Funders' (websites)	forum	16 th
<input type="checkbox"/>	38	Group Presentation: Funding a Startup	In-class	16 th
<input type="checkbox"/>	39	Digital Innovation concept v5	blog	17 th
<input type="checkbox"/>	40	Digital Innovation concept v5 - comment	blog	18 th
<input type="checkbox"/>	41	Good Idea; Now What? Part 8 (25 pages)	reading	18 th
<i>No homework! Practice your pitch and rest up.</i>				
<input type="checkbox"/>	42	Digital Innovation Concept – Final Presentation	blog	23 rd