Chapter 12: Getting started on my first client prototype

Learning Bluemix & Cognitive

Bob Dill, IBM Distinguished Engineer, CTO Global Technical Sales

Git Repository: https://github.com/rddill-IBM/ZeroToCognitive



Getting Started:

- 1. Essential Questions
- 2. Develop and understanding of the problem space
- 3. From Understanding to Ideation
- 4. Hills and Agile: First Steps
- 5. Principles, Code and Reuse



Essential Questions

- 1. Who is your business sponsor?
- 2. What core issues are they facing?
- 3. What are the symptoms they face on a daily or regular basis?
- 4. How might your business sponsor state the problem?

In items 2 & 3, we're trying to understand the difference between symptoms and root causes. Symptoms are what we see and frequently react to, Root Causes are the critical issue and what we must address in our solution.

In item 4 we're setting up for IBM Design Thinking. One of the critical actions at the front end of an IBM Design Thinking event is clarity on the problem to be addressed.



Developing an understanding of the problem space

1. Develop a stakeholder map.

Who is involved?
How are they involved?
How do these roles interact with each other?

2. People and Profiles

Persona creation:

who are the people who interact in the stakeholder map
What are their desires and objectives?



Creating a persona is more than just putting a name & a face in a circle. In this example, we've created a composite profile & demographics made up of likely users (or user's users) most impacted by the problem or who would benefit from the solution

What quesions do I need to anticipate?
Has experience in the field. Trusts her knowledge.
I've been with IBM uncer 5 years and still building network.

build this - it should be there."

From Understanding to Ideation

Develop an empathy map



Define the As-Is environment

What is the motivation to act and what's the desired outcome?

What are the steps in between?

What is our person Saying, Doing and Feeling while executing those steps?

Identify Pain Points and Big Ideas

What makes the current approach unpleasant for our person? What would make the process of achieving their desired outcome delightful?

Create a 6 cell storyboard from the Big Ideas





Hills and Agile: First Steps

1.KISS

"Everything should be made as simple as possible, but no simpler."

2. Model the User Experience

Fast and simple. Use a tool like InVision to validate Bring in graphic artists to do design work Validate with Sponsor Users.

Give the (InVision) UX to the developers

3. Define the 'happy path'

What's the User Story (6-cell from IBM Design Thinking)
Using that story, what's the primary path from login to success?
Build that first, stub everything else.
Iterate and enhance to address more user pain points.

4. Resources

IBM Agile Academy:

https://agileacademy.mybluemix.net/

Bluemix Garage:

https://www.ibm.com/cloud-computing/bluemix/garage
IBM Confidential

Principles, Code and Reuse

1. Core Principles

High Cohesion and Separation of Concerns

Loose Coupling and RESTful services

Reuse

Fail Fast

2. Design

Validate the UX quickly with Sponsor Users

- use a tool like InVision

Create basic Architecture artifacts - system context, high level architecture design Document your decisions while your designing and developing

3. Execution

KISS

Start with what's publicly available in your cloud instance

Keep the design simple

Iterate

4. Resources

Enterprise Github:

https://github.ibm.com

Structure of a good principle:

https://www.ibm.com/cloud-computing/bluemix/garage

Congratulations! You're ready to build demos for your client!

- From Design Thinking
 - What's the story you're going to tell?
 - Create a 6-cell storyboard
- Create your systems context diagram
- Create your high level architecture
- Define your Bluemix Environment
 - Keep it Simple!!!!, keep it supported
 - Understand the technology capabilities and limits of your environment
 - for example, if you can't get to core client web pages, don't make that part of your prototype. You can, however, get to public web pages from Bluemix, so that's easy to have as part of your prototype.
- Use the code you've already built and put in your own git repository
- Search DeveloperWorks and public github for other code samples
- Lay out your UX again, keep it simple
- Define what core RESTful services you need to make your UX work
- Go forth and Conquer!

