

Developing Your App Concept

After conducting your user research and competitive analysis, you may be eager to start coding your app. While this approach may be effective in certain cases (if you are building a very basic Utility-style application, for example), most apps can benefit from sketching and prototyping *before* coding.

Sketching and prototyping give you an opportunity to think through some of your design choices before you implement them in Xcode or start laying out each element in Interface Builder. We'll discuss the pros and cons of various methods in the following chapters:

- Chapter 6, "Exploring App Concepts," introduces a variety of sketching approaches, such as storyboards and concept diagrams.
- Chapter 7, "Prototyping App Concepts," explains how to bring your sketches to life by prototyping the app on paper, electronically, or in video.
- Chapter 8, "Usability-Testing App Concepts," discusses how to user-test your app and how to incorporate your findings into your app before you submit it to the App Store for approval.

Although these topics are introduced in a linear fashion, the overall process is iterative, so you may find yourself going back and forth among these three activities as your application concept evolves.

Exploring App Concepts

ARMED WITH YOUR RESEARCH FINDINGS (user needs, scenarios, competitive analyses), you will be well equipped to start brainstorming and sketching app concepts. In fact, you probably started sketching concepts when you first thought about building an app. At this stage you'll want to expand upon these initial concepts and start exploring additional ones.

This chapter starts out by discussing how to create a design-friendly environment and how to hold effective brainstorming sessions. We'll then spend the remainder of the chapter discussing various ways to illustrate and communicate your early explorations.

Additionally, this chapter includes case studies on the Foodspotting, Not For Tourists, and MUSE apps. Here you'll find insights into how the application design teams used user experience methods to conceptualize their applications.

Creating a Design-Friendly Environment

Before getting started, spend some time creating a design-friendly work environment. If your office is anything like my previous ones, you're probably surrounded by a computer screen, some combination of half- or full-sized cubicle walls, and—for the lucky ones—a window. Although quarters may be tight, lobby for a dedicated physical space for your project, such as a conference room, one large wall (FIGURE 6.1), or a corner in a common room. In this space you can post personas, competitive analyses, and designs in progress. Having these artifacts in an open space will enable your team to step back and look at designs together. Ideas will flow more freely and collaboration will become more organic. Even colleagues not directly involved in design can see your work as it develops. If you have remote team members, you can send them photos when significant changes are made and follow up with electronic versions to keep everyone on the same page.



FIGURE 6.1 Designer sketching at the Good Design Faster workshop run by Adaptive Path in April 2009 (Courtesy of Sara Summers, photographer, www.uxarray.com)

Here is a list of some supplies you may want to purchase for brainstorming and day-to-day design:

- **Whiteboard and camera**

Consider getting a portable whiteboard for impromptu brainstorming. Having a portable whiteboard will give you more flexibility since it can be moved from room to room. Make sure you have your iPhone or other camera available for capturing whiteboard sketches.

- **Foam core**

Use this to tack or tape research findings and designs. Extra-large boards can be ordered from office supply or art stores.

- **Easel Post-its**

Easel Post-its (20 × 23) make it easier to rearrange items and save them for later during collaborative brainstorming and sketching.

- **Sketchbooks**

Experiment with different sizes and textures. I have about three different sizes: 9 × 12, 6 × 8, and tiny ones at 3 × 4 that I carry with me at all times. You never know when inspiration may strike! Be sure these don't have horizontal lines—they get in the way—though grids can work well for some purposes.

- **Pencils and markers**

Again, I recommend that you experiment with different point sizes and colors. If you're not up for experimentation, you might want to use Leah Buley's list¹ as a starting point; she's a designer at Adaptive Path.

- **Odds and ends**

Reusable tape, drafting dots, thumbtacks, magnets (for magnetic whiteboards), rulers, and lots of colorful Post-its in varying sizes are useful. Post-its can be used to organize concepts, develop information hierarchies, and more. If you want to get even more creative, I suggest you read about IDEO's famous Tech Box that contains everything from smart fabrics to clever toys.²

- **Snacks**

Sweet and savory snacks will come in handy during afternoon brainstorming sessions. For morning sessions, you may want to provide breakfast.

Effective Brainstorming

To kick off your app concept explorations, consider holding a group brainstorming session. While brainstorming seems easy enough on the surface, I've seen many attempts fail over the years. The reasons differ—bad timing, no structure, wrong people—but they all leave team members thinking the same thing: What a waste of time! If one session fails, teams will be reluctant to hold future sessions. To avoid this outcome, try some of the brainstorming advice that follows.

1. Leah Buley, "Our Favorite Tools for Sketching," www.adaptivepath.com/ideas/essays/archives/001072.php (April 2009).

2. IDEO, "Tech Box for IDEO," www.ideo.com/work/item/tech-box/ (1999).

SET ASIDE ENOUGH TIME

One of the biggest mistakes is not allocating enough time for brainstorming. If you are focusing on one feature, an hour may be sufficient, but more time is needed when brainstorming concepts for an entire product. At the same time, participants can lose steam if the sessions are too long. Consider carving out two to three hours with two 10-minute breaks.

ESTABLISH GOALS

Establishing your brainstorming goals is critical: Are you brainstorming overall app concepts or focusing on a specific aspect of your app? Are you interested in developing completely new ideas, building upon previous ones, or both? Whatever you decide, communicating these goals will help set expectations and ensure that everyone is on the same page.

BE INCLUSIVE

You can (and should) brainstorm on your own, but collaborative sessions may generate new ideas and perspectives. If you work alone, consider bringing in former colleagues or tapping into your professional networks. Alternatively, if you work within a company, try to include three to eight team members with different expertise. In addition to engineering, design, and product management, you may want to invite individuals from teams such as sales and customer support.

HAVE AN AGENDA

When I think back to successful brainstorming sessions, images of my team members rapidly scribbling on whiteboards or large Post-its come to mind. They were energized by their colleagues' enthusiasm and the excitement in the room. But how did they get there? Successful brainstorming may look chaotic when in full swing, but most sessions start with some level of structure.

When conducting brainstorming after user research, I usually provide participants with copies of the personas and their needs. If we have a large group, we may break up into teams of three or four people and brainstorm ways to address these needs. For example, in the case of an app for finding art events, one team may brainstorm solutions for the local art enthusiast, while another team brainstorms solutions for the tourist art enthusiast. In addition to providing participants with a problem statement, it's important to articulate the desired outcome.

Some brainstorming organizers are simply looking for bullet points, whereas others may want sketches and storyboards. If you are seeking sketches—which I recommend—be sure to have the appropriate supplies on hand.

PROVIDE INSPIRATION

As mentioned earlier, you'll want to share findings from your up-front user and competitive research, including your refined Product Definition Statement. In addition, consider providing other app-related objects or experiences for inspiration. The possibilities are endless—you just need to decide what works well for your particular app.

For example, let's say you are developing a photo-editing app. You might ask brainstorming participants to bring their own snapshots. Having their own photos nearby will make the brainstorming more meaningful to them. Also, keep in mind that brainstorming doesn't have to start in a cramped conference room with a blank whiteboard. If you are developing an app to identify plants, you might take your team on a nature hike and schedule a session in a picnic area. Providing hands-on experience in the real world will enable everyone to think more like users.

LAY GROUND RULES

Consider laying ground rules before the brainstorming begins. Bob Sutton is well known for the ones listed here³ (IDEO has an expanded version⁴):

- **Don't allow criticism**

Criticism may be directed at the idea itself or its feasibility. For example, some team members may dismiss ideas that seem too challenging to implement.

- **Encourage wild ideas**

Although it may be clear to everyone that certain ideas are unlikely to happen, those same ideas might also inspire other creative directions, so keep an open mind!

- **Go for quantity**

Brainstorming should elicit as many ideas as possible (FIGURE 6.2). If you spend the entire time polishing one or two, many promising ideas will be left undiscovered. Also, try to aim for *divergent* ideas—you'll limit the possibilities if you merely reorder tabs or change labels.

- **Combine and/or improve on others' ideas**

It would be great if one person put forth a fully formed idea, but most ideas are nuggets that can benefit from further brainstorming. Additionally,

3. Robert Sutton, "Brainstorming in the *Wall Street Journal*," http://bobsutton.typepad.com/my_weblog/2006/06/brainstorming_i.html (June 2006).

4. Linda Tischler, "Seven Secrets to Good Brainstorming," *Fast Company* (March 2001), www.fastcompany.com/articles/2001/03/kelley.html.

rough ideas can be improved when combined with other ideas. Over the course of the brainstorming, it's helpful if an experienced facilitator looks for these connections and communicates them to the group.

CAPTURING IDEAS

TIP

If some team members can't attend, ask them to submit ideas in advance so the documenter can add them during brainstorming.

As brainstorming participants voice their ideas, a facilitator should manage the discussion while someone else writes the ideas on a whiteboard, easel Post-its, or roll paper. Remember, all ideas should be given consideration, so the documenter should not be discarding ideas along the way. Some ideas may not be feasible in the near term but could become viable down the road.



FIGURE 6.2 Brainstorming session held at the Interaction Design Pilot Year at the Danish Design School and Copenhagen Institute of Interaction Design, Fall 2008 (Courtesy of Ujjval Panchal, photographer)

SELECT PROMISING IDEAS

As you wind down your brainstorming session, start thinking about next steps: What ideas should we pursue? What should we defer for later? One popular way to simplify this process is to ask participants to identify the most promising solutions with “dot voting.”⁵ Give participants a handful of dots and ask them to place one next to each idea they think the company should pursue. Their recommendations should be based on the user needs identified in your up-front research as well as the company goals. Ideas with the most dots get prioritized for further development; the remaining ones can be documented for future reference.

Sketching Your Concepts

After your brainstorming session, you will have several potential directions for your app, along with partially completed sketches. Next, you should spend some time expanding upon these ideas. While you may be tempted to abandon your early sketches and reach for tools such as Adobe Fireworks or OmniGraffle (which will be useful later on), try to resist the temptation. This section discusses the benefits of starting with hand-drawn sketches (FIGURE 6.3) and introduces a variety of sketching techniques.



FIGURE 6.3 Developer sketching at iPhone Dev Camp, Silicon Valley, 2008
(Courtesy of George Chen)

5. Joyce Wykoff, “Group Brainstorming: Dot Voting with a Difference,” www.innovationtools.com/Articles/ArticleDetails.asp?a=141 (June 2004).

CHARACTERISTICS

The term *sketch* means different things to different people. In this book I refer to both the exercise that helps designers think through an idea and the resulting artifact that communicates the idea. Sketches in this context tend to have these qualities:⁶

- **Minimal detail**

They may exclude items that are not central to the design; for example, some app sketches may omit the battery and status indicators.

- **Limited refinement**

Screen contents may not be pixel perfect and may have a “rough” quality. Eschew visual treatment; focus on key tasks, features, and workflow.

- **Ambiguity**

Sketches do not have to include the entire user experience or be fully worked out. Ambiguous sketches invite others to contribute their vision and collaboratively work through designs.

BENEFITS

Some benefits of starting with hand-drawn sketches include the ability to think big, the ability to break down boundaries, and improved collaboration among your team members.

Thinking Big

The goal of most sketching software programs—with the exception of low-fidelity tools like Balsamiq⁷—is to help you achieve perfection. They contain rulers, guides, alignment widgets, and other gadgets to help in this effort. Regardless of your good intentions, you may get dragged into pixel-pushing mode when working with this type of software. In the early exploration stage, the last thing you want to do is spend unnecessary time polishing designs. Your time should be spent thinking holistically, cracking open the overall concepts.

No Boundaries

Nearly all of the popular sketching software programs have iPhone design templates. These templates are particularly helpful when creating screens that contain standard controls. In most cases, however, your app will contain both standard and custom controls. If you’re working with hand-drawn sketches, you can quickly add the custom items. With software templates, you may spend extra time hunting for the perfect icon or widget, or end up choosing something that’s less than ideal.

6. Bill Buxton, *Sketching User Experiences* (Morgan Kaufmann, 2007).

7. Balsamiq, www.balsamiq.com/.

Collaborative

Another benefit of hand-drawn sketches is their collaborative quality. As discussed in Bill Buxton's *Sketching User Experiences*, sketches are social objects. They invite others to comment on them since they appear less finished, more open to criticism. For example, if you approach a colleague with a notebook sketch, it will be obvious that the design is a work in progress. In contrast, a highly polished Adobe Photoshop sketch may appear ready for coding, even if you intend to iterate on the design for two more weeks. Colleagues may be reluctant to suggest significant changes since they may seem like a burden.

BUT I CAN'T DRAW

Getting into sketching may seem challenging given that many people are accustomed to drawing with software. And, yes, sketching can be intimidating when looking at the work of experienced designers—their sketches can technically be described as rough and ambiguous but they are still somehow beautiful. Aesthetically pleasing sketches are a nice bonus, but your sketches don't have to be works of art since they are primarily a thinking and collaboration tool. If you are still uneasy, consider taking a drawing class at your local college or reading up on the subject (and practicing!).⁸ Alternatively, you may want to start with tracing or stencils (FIGURE 6.4), then slowly add your own design elements. Once you figure out what works well for you, it will be hard to leave sketching out of your process. If you're still not comfortable with sketching, you may want to hire a sketch artist to help illustrate early design concepts.

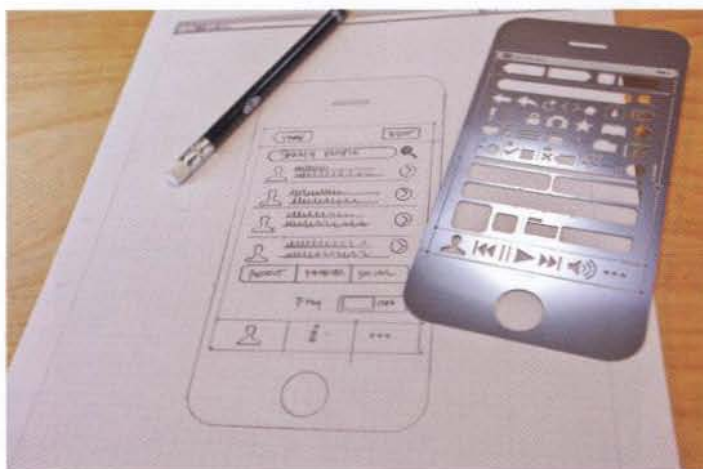


FIGURE 6.4 iPhone Stencil Kit by Design Commission
(Courtesy of Design Commission, www.designcommission.com)⁹

8. Dan Roam, *Back of the Napkin* (Portfolio Hardcover, 2008).

9. iPhone Stencil Kit, www.designcommission.com/shop/iphone-stencil-kit/.

SKETCHING TIPS

Regardless of your skill level, consider these tips as you delve into your app sketches:

- **Start simple**

Having too many drawing tools at your disposal may overcomplicate your solutions as well as your process. When you begin sketching, consider limiting your toolkit to black Sharpies and unlined white paper (FIGURE 6.5). As you get comfortable with sketching, start to bring in additional tools for highlighting and shading.

- **Draw *almost* to scale**

Fluidity and openness are important, but creating iPhone sketches at 8×10 may be challenging to scale back later. Having said that, trying to precisely fit the contents into the actual iPhone dimensions of 320×480 pixels (640×960 for iPhone 4) is not necessary in the early stages. Thus, I recommend drawing *almost* to scale—index cards are a good starting point. If you want to draw closer to scale, consider trying some of the iPhone notepads on the market.¹⁰



FIGURE 6.5 Designer working on iPhone app sketches at the Good Design Faster workshop run by Adaptive Path in April 2009 (Courtesy of Sara Summers, photographer, www.uxarray.com)

10. See, for example, Notepod, <http://notepod.net/>, and App Sketchbook, <http://apps sketchbook.com/>.

- **Consider all of the senses**

In contrast to other platforms, iPhone apps have a wide range of senses at the designer's disposal: sight, sound, touch. While it's tricky to make your paper sketches buzz and vibrate, you can start off by indicating swipe motions with arrows and sounds with annotations. Don't wait to think about these things until later.

TYPES OF SKETCHES

There are countless ways to sketch your app concepts. The approach you choose will largely depend on the app and your design goals. Be sure to tie these diagrams into your app personas and scenarios, as discussed in Chapter 4, "Analyzing User Research." Sketching approaches discussed in this section include

- Diagrams
- Posters
- App screens
- Storyboards
- Comics

Concept Diagrams

Starting with screen sketches may seem like the natural first step, but certain apps may warrant a more abstract approach—concept diagrams. In some cases the complexity of the app requires an abstract representation to distill the idea. Other times, screen sketches may simply be too limited—they won't capture all of the people, objects, devices, and so on. This section introduces you to concept diagrams for apps that are part of a larger system, apps with multiple objects, and apps with multiple users.

Part of a larger system. Many apps are part of a larger system that provides similar content or services via the web, desktop, or even print. When designing an app for one of these services, it's important to consider the entire system and the relationships between its various components. Concept diagrams can provide a holistic view of such systems and may include

- Connections between the components
- Paths users will take between components
- Notable differences between components

Multiple objects. Apps are increasingly interacting with real-world objects such as televisions, printers, and speakers. Some apps "push" content to the object, while others offer fine-grained control over the objects. For example, Sonos

created an iPhone app to enable users to control speakers throughout their home, and the Zipcar app allows users to reserve, locate, and unlock cars. Given that a large part of these experiences take place outside the device, your sketches will fall short if they rely exclusively on iPhone screens. Consider including the following in these diagrams:

- Physical proximity of objects
- Orientation of objects
- Data exchanged
- Gestures and feedback mechanisms

Multiple users. A large number of iPhone apps for messaging, social networking, and gaming involve multiple users. Side-by-side screen designs (e.g., User A sitting next to User B) can illustrate basic interactions between users. However, when the app is relatively complex, it may help to start with a concept diagram. Consider including the following in your diagram:

- Roles of users
- Physical proximity of users
- Orientation of users in relation to each other and their iPhones
- Data exchanged (e.g., messages)
- Experience evoked (e.g., flirting)
- Gestures and feedback mechanisms

Concept Posters

Concept posters are a powerful way to illustrate your app vision without getting into the design details. As you formulate your app concept, they can be an effective tool for gathering feedback from stakeholders and prospective users. In the later design phases, the poster can be displayed in your war room and used to guide design decisions. Alexa Andrzejewski, the founder of Foodspotting, developed a concept poster template, which includes the following:

- **App name and tagline**
The tagline should explain what your app is about in a few words.
- **Pitch**
The pitch should convey whom the app is for, what problem it solves, and how it's different from existing apps. It may also incorporate elements of your Product Definition Statement.
- **Characteristics**
These are the qualities that make your app unique and interesting.

- **Inspiration**

This section should capture influences and inspirations for your app, which may include products or services uncovered in your research. If you have a relatively new concept, references to familiar products may help communicate your ideas.

- **Experience sketches**

These are simple representations of the experience your app will provide. Previous research and ideation activities—user research, competitive research, brainstorming—will be valuable references as you create these sketches.

FIGURE 6.6 shows a concept poster that Alexa Andrzejewski created for her company, Foodspotting, Inc. According to Alexa, the simple stick figures she used to illustrate how to “Discover new foods” and “Build your personal food passport” were enough to get people excited about the experience and drove many of the design decisions down the road. In addition to sharing the concept poster with stakeholders, Alexa used the poster to elicit feedback from prospective users.



FIGURE 6.6 Concept poster created by Alexa Andrzejewski (Courtesy of Alexa Andrzejewski, founder, foodspotting.com)

Concept Screens

Concept screen sketches are another effective way to explore alternative directions without getting into design details. With this approach, the designer may illustrate one aspect of the user experience, while explaining other elements in written annotations or verbally. Adaptive Path used this strategy when developing iPhone app concepts for Smart.fm, a learning tool. Instead of sketching the entire user experience, they initially focused on Smart.fm's reward system, the way users measure their progress. For example, one concept called "Your World" uses the change of seasons as a metaphor for progress, and another, called "Scratch-off," uses scratch-off cards to show progress (FIGURES 6.7–6.8). Aspects of these sketches that work well include the hand gestures, simple screen contents, and concise annotations. Additional explorations and information on this project can be found online.¹¹

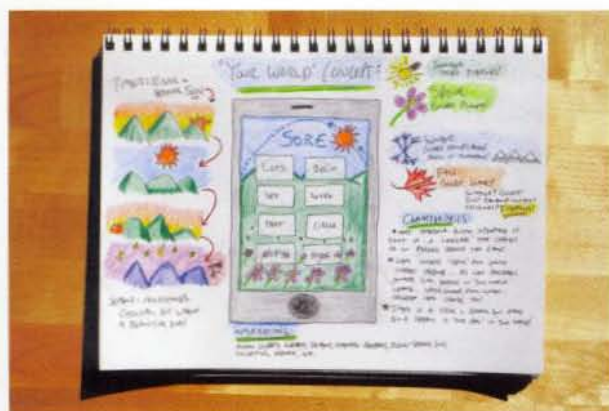


FIGURE 6.7 Your World concept for the Smart.fm iPhone app (Courtesy of Dane Petersen)

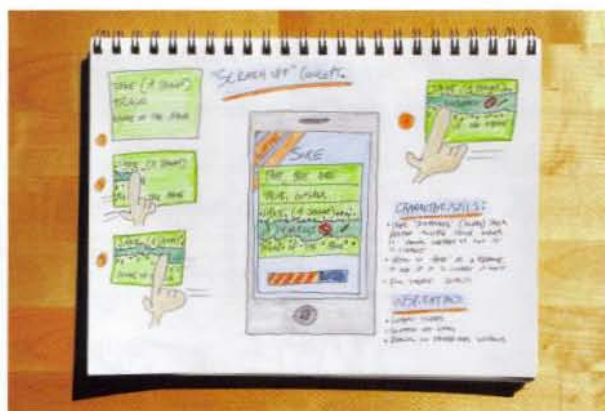


FIGURE 6.8 "Scratch-off" concept for the Smart.fm iPhone app (Courtesy of Dane Petersen)

Screen sketches can also be used to explore alternative interaction models for a particular concept. FIGURE 6.9 illustrates how Cultured Code used sketches to help determine whether to include a tab bar or a list view for their Things iPhone app. The company has an impressive gallery of sketches that can be found online.¹²

Storyboards

Storyboards contain a series of illustrations or images displayed in sequence (FIGURES 6.10–6.11). They were originally created for pre-visualizing motion pictures but have been adapted for other interactive media such as web and mobile design.

11. Adaptive Path smart.fm Blog, www.adaptivepath.com/blog/category/smartfm/.

12. "Designing the UI of Things for iPhone," <http://culturedcode.com/things/iphone/makingof/>.

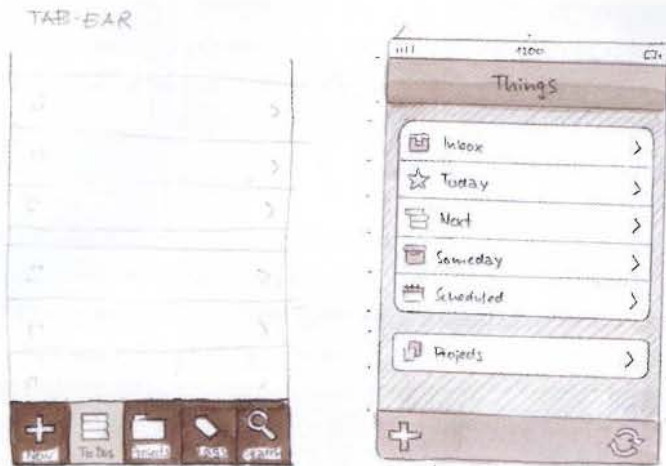


FIGURE 6.9 Alternative interaction models explored for the Things iPhone app
(Courtesy of Cultured Code)

With user-centered design, the “story” behind the storyboard is typically one of the scenarios from up-front user research. Each illustration in the sequence represents an action the user must take to reach the scenario goal. Storyboards may include arrows or instructions to indicate movement as well as annotations. In addition to communicating concepts, storyboards are an effective way to uncover potential user experience issues. As you walk through the sequence, you may discover missing elements or parts that can be more streamlined.



FIGURE 6.10 Storyboard for a project management app
(Courtesy of Daniel H. Chang)



FIGURE 6.11 Storyboard for a children's game app
(Courtesy of Jaehi Jung)

You can create your storyboards in a large sketchbook (at least 8 × 12 inches). Another option is to use a storyboard template like the one included in the book *Drawing Ideas: A Field Guide for Visual Thinking*,¹³ by Mark Baskinger, an associate professor in the School of Design at Carnegie Mellon University.

Comics

Storyboards tend to focus on what users will see on their iPhone when interacting with your app. In contrast, comics can incorporate users, their environment, the screen, and the device itself. This holistic view is particularly valuable for apps where context is a defining aspect of the user experience. For example, if you were designing an augmented reality iPhone app, comics could be used to capture the relationships between the user, the device, and the points of interest highlighted in the app. Moreover, comics can communicate the human emotions evoked when using a particular app: delight, frustration, freedom.

Creating recognizable scenes and convincing characters may be a significant undertaking for many designers. In recent years, a number of web sites and tools have emerged to help designers create their own comics. The web site Pixton, for example, has template themes and a library of comic elements to jump-start the process. **FIGURE 6.12** shows an iPhone app comic created with Pixton's online tools. Another alternative is to combine photographs with sketches and dialogue. Whether you choose the template route, the photo route, or create your own, consider the tips listed here:

- Start with your primary scenario.
- Use your personas as characters (though not in the same scenario!).
- Include approximately six to ten panels for each scenario.

ADDITIONAL SKETCHING EXAMPLES

This section includes a few additional sketching examples (**FIGURES 6.13–6.14**). Aspects that work particularly well in these sketches include the hand gestures and their explorative quality—these are clearly “thinking” as opposed to presentation sketches. “Thinking” sketches are rough in appearance; they explore what’s possible and may include many unanswered questions. Presentation sketches are more polished and less ambiguous.

NOTE

To learn more about creating comics, read Scott McCloud's classic *Understanding Comics*¹⁴ or Kevin Cheng's book *See What I Mean*.¹⁵

TIP

If you need some help adding gestures to your sketches, try the stencils created by Rachel Graves.¹⁶

13. *Drawing Ideas*, www.drawingideasbook.com/.

14. Scott McCloud, *Understanding Comics: The Invisible Art* (Harper Paperbacks, 1994).

15. Kevin Cheng, *See What I Mean: How to Use Comics to Communicate Ideas* (Rosenfeld Media, 2009).

16. Kicker Studio Touchscreen Stencils, www.kickerstudio.com/blog/2008/12/touchscreen-stencils/.



FIGURE 6.12 Augmented reality app comic created with Pixton (Copyright © 2009, Pixton Comics, Inc.)

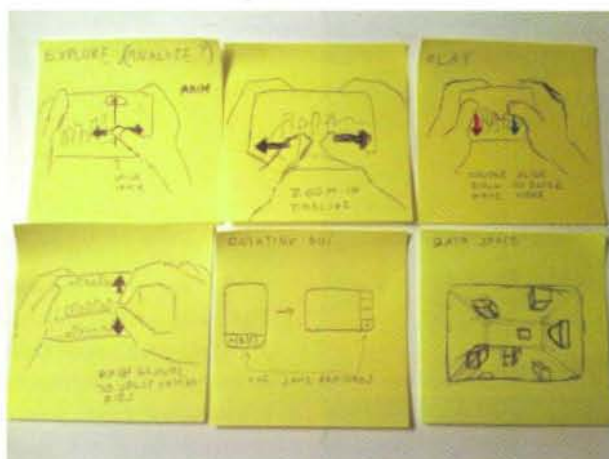


FIGURE 6.13 Sketches exploring gestures for a personal finance iPhone app (Courtesy of Marcin Ignac)

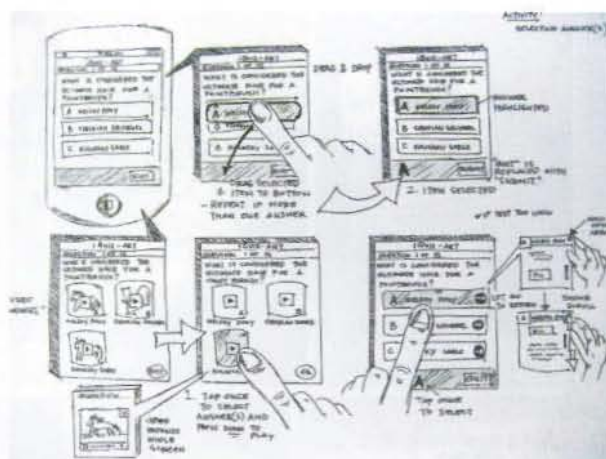


FIGURE 6.14 Sketches exploring an answer selection for a quiz iPhone app (Courtesy of Jason de Runa)

Common Questions

As you consider which sketching approach is right for your app, you may have some questions about the level of effort and the relationship of the sketches to other design deliverables. Answers to these questions and others are covered in this section.

WHAT IF I'M WORKING ON AN APP WITH FEW VISUALS TO SKETCH?

Certain immersive apps may not be well suited to the sketching approaches described. For example, storyboarding a musical instrument with pen and paper is missing its defining element—sound! That said, other parts of your app may benefit from visual representations, such as the first-time user experience, settings, and tutorials. Sketching these elements can be effective for almost any type of app. Alternatively, you may find that these elements are too interwoven into the overall app experience. In this case you may want to jump right into prototyping, which will be discussed in the following chapter.

WHEN SHOULD I CREATE FLOWCHARTS?

Flows are an incredibly important part of the iPhone app design process, but I recommend starting with one of the sketching approaches introduced in this chapter. Once you have explored alternative directions and narrowed down your options—we'll discuss the narrowing part in the next chapter—move on to flowcharts. If you begin with flowcharting software, you may get into edge case resolution mode as you branch every possible outcome. Don't get me wrong; solving edge cases is critical, but not in the concept stage.

HOW MUCH OF MY DESIGN TIME SHOULD BE DEVOTED TO CONCEPT DEVELOPMENT?

Every project is different, but try to allocate at least 20 percent of your overall design time to concept explorations. Having a solid concept will help make the rest of the design process go smoothly.

Summary

Concept exploration is perhaps the most liberating design phase—everybody's creative juices are flowing, there's excitement in the air, the possibilities are endless. However, designers often skip this process and run with the first good idea. While this may lead to success, it also runs the risk of missing out on something more thoughtful, innovative, and inspired.

This chapter discussed how to approach this important concept exploration phase. Specifically, we provided brainstorming tips and looked at alternative sketching techniques—diagrams, posters, screens, storyboards, and comics. As you start exploring concepts for your own app, remember the following:

- Creating a design-friendly space encourages informal collaboration.
- Team brainstorming is an effective way to jump-start concept development.
- Hand-drawn sketches allow you to think big. Instead of perfecting just one design, you can focus on developing several innovative solutions.

Whatever brainstorming and sketching approach you choose, the investment will be well worth your time. The next two chapters—Chapter 7, “Prototyping App Concepts,” and Chapter 8, “Usability-Testing App Concepts”—will discuss how to prototype and evaluate your app concepts. ■