82% Building a Mobile Applica -tion To Finish





Tommy O'Connor Mobile Design We Are William Design You should walk out of this session with a non-technical map of key phases and decisions you'll need to consider during the creation of a mobile app.

Main Phases:

Specifications & Research
UX/UI Design
Architecture & Implementation
Marketing
Iteration

Phase 1 Specifications & Research

What are you trying to accomplish?

- Decide what your user's goals are with your app
- Determine the tasks they'll need to complete in order to accomplish these goals - this establishes a super set of features your app needs
- An exact set of features is a requirement to estimate or bid your project
 - These features then drive design, architecture and implementation decisions

Who is your audience?

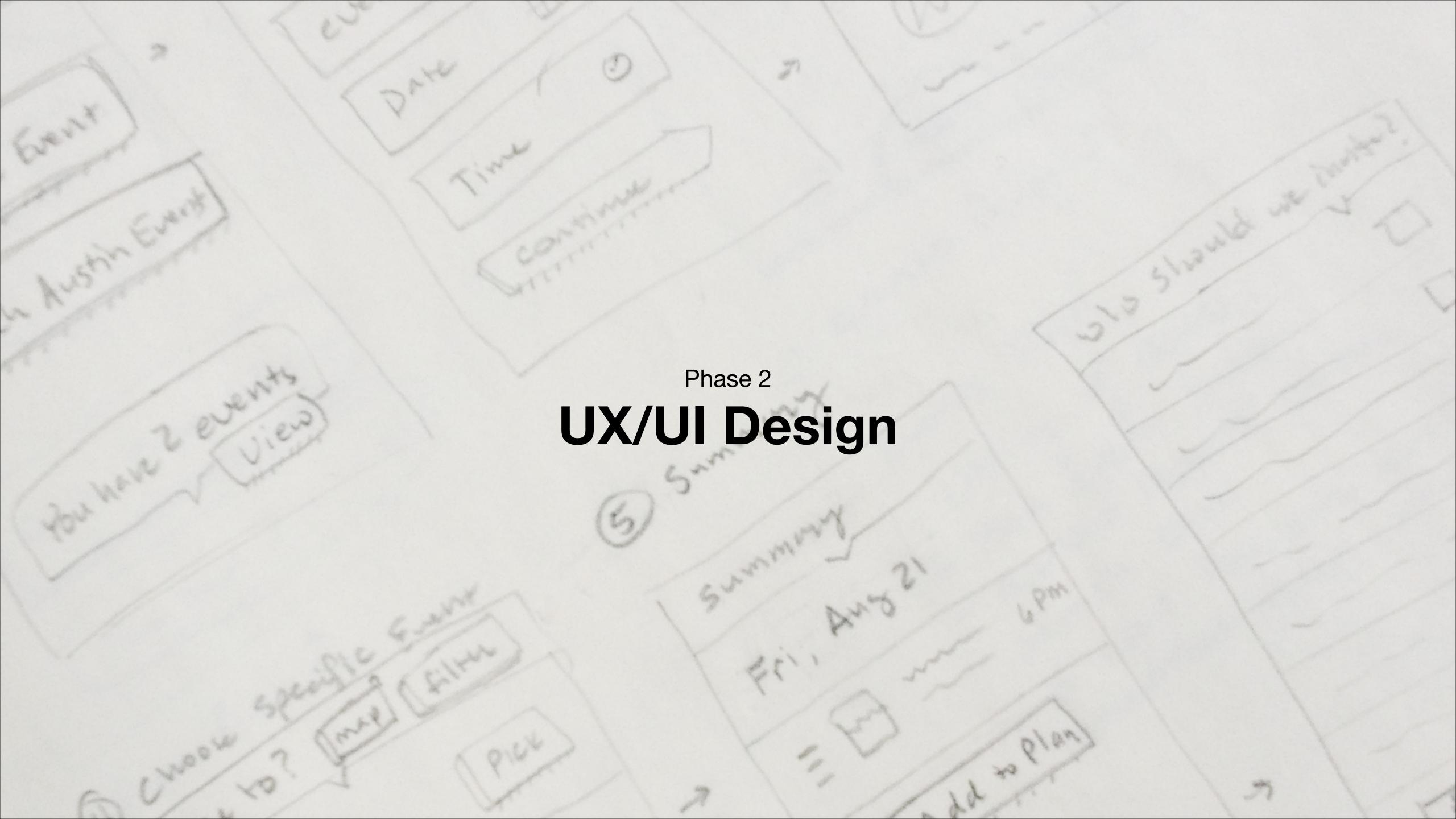
- Who is going to use your app?
- This will drive design, architecture and implementation decisions

What value are you providing?

- Why are people going to use your app?
- Are there competitors out there? If so, why will yours be better?

How will you make money?

- Subscription: Recurring payments that allow for app's maintenance and development, and your profits.
- Advertising: Need high volume of users to make money. Poor user experience, especially on smaller screens.
 - App Store Sales: Can be good model as long as you continually sell to cover maintenance costs.
 - Freemium: This model generally involves a free initial download, then users will pay for more content.



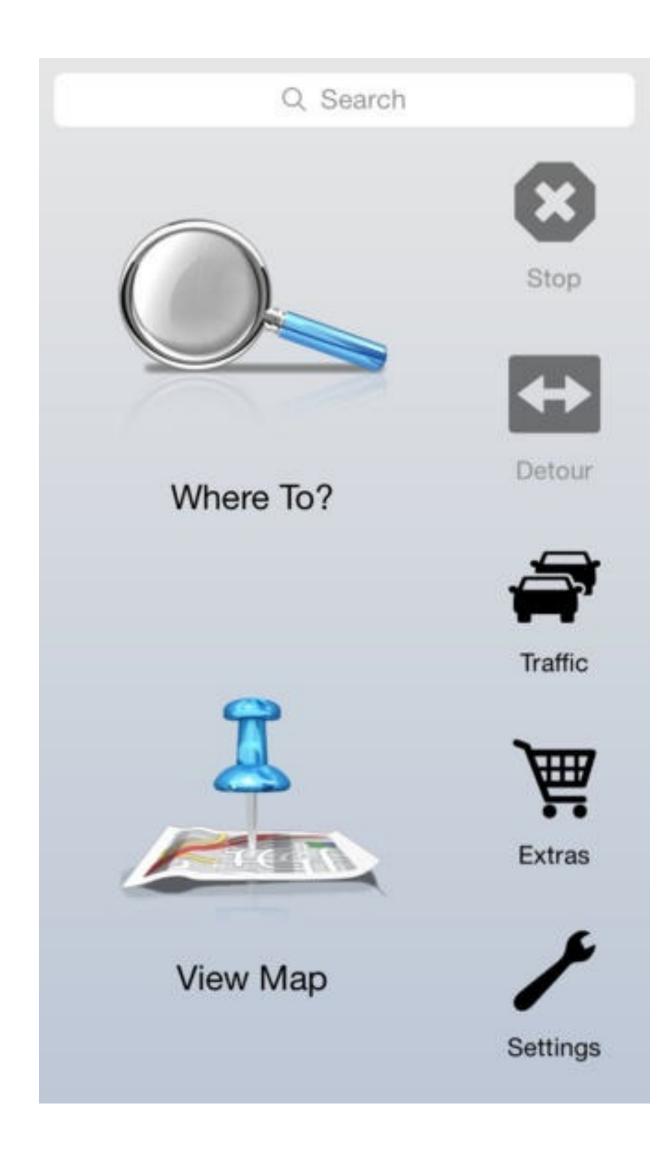
What is UX/UI design?

User Experience (UX): Determines how a user moves through an application, the navigation and content structure.

User Interface (UI): Determines what the interface looks and feels like.

Prioritize

- Determine which features users need to access and give them stronger visual priority.
- 5% Rule: If only 5% of your users will use a certain feature, consider getting rid of it.
- Establishing priority gives focus to your application. Users will enjoy using your application more when they aren't given too many choices.





UI/UX Design

Don't Over Design

- Don't reinvent the wheel by applying custom designed elements to every screen.
- Good interface design is design that isn't noticed.







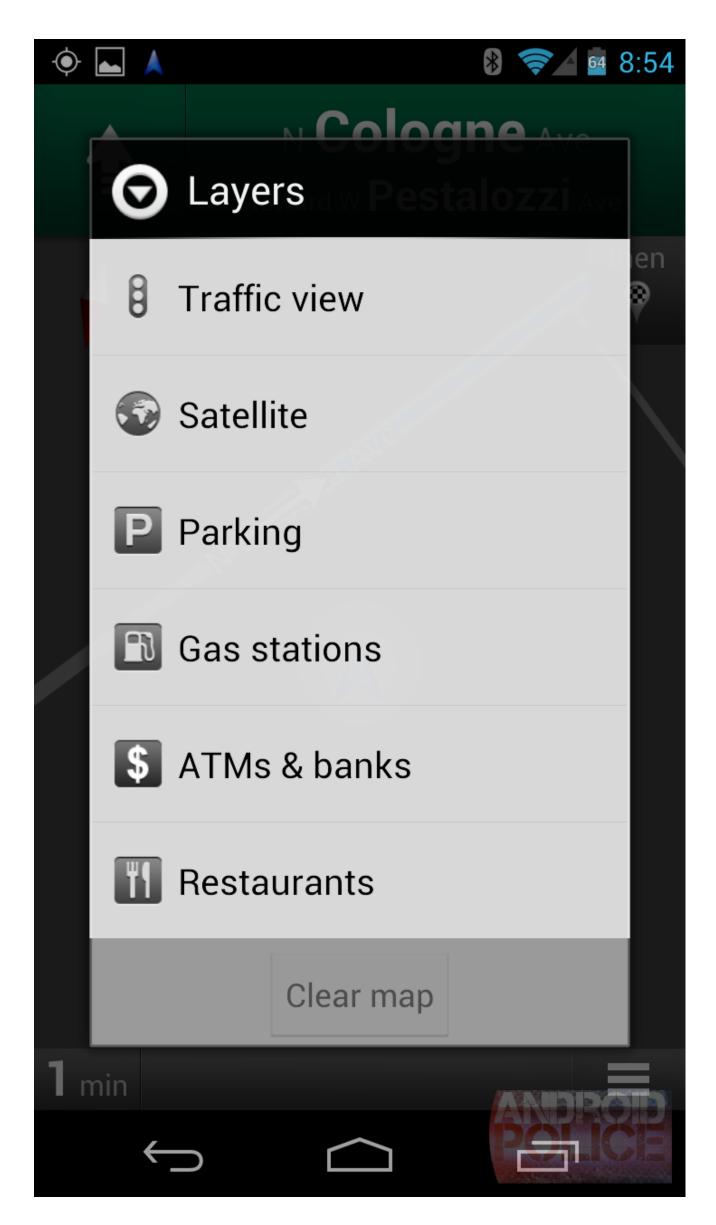


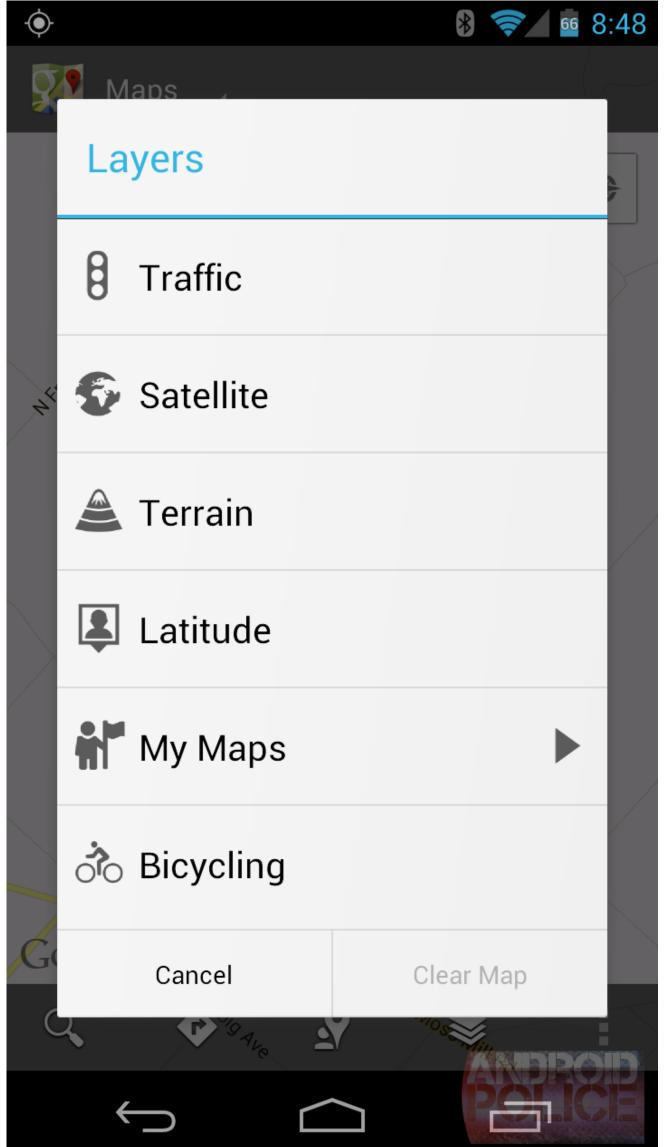




Consistency

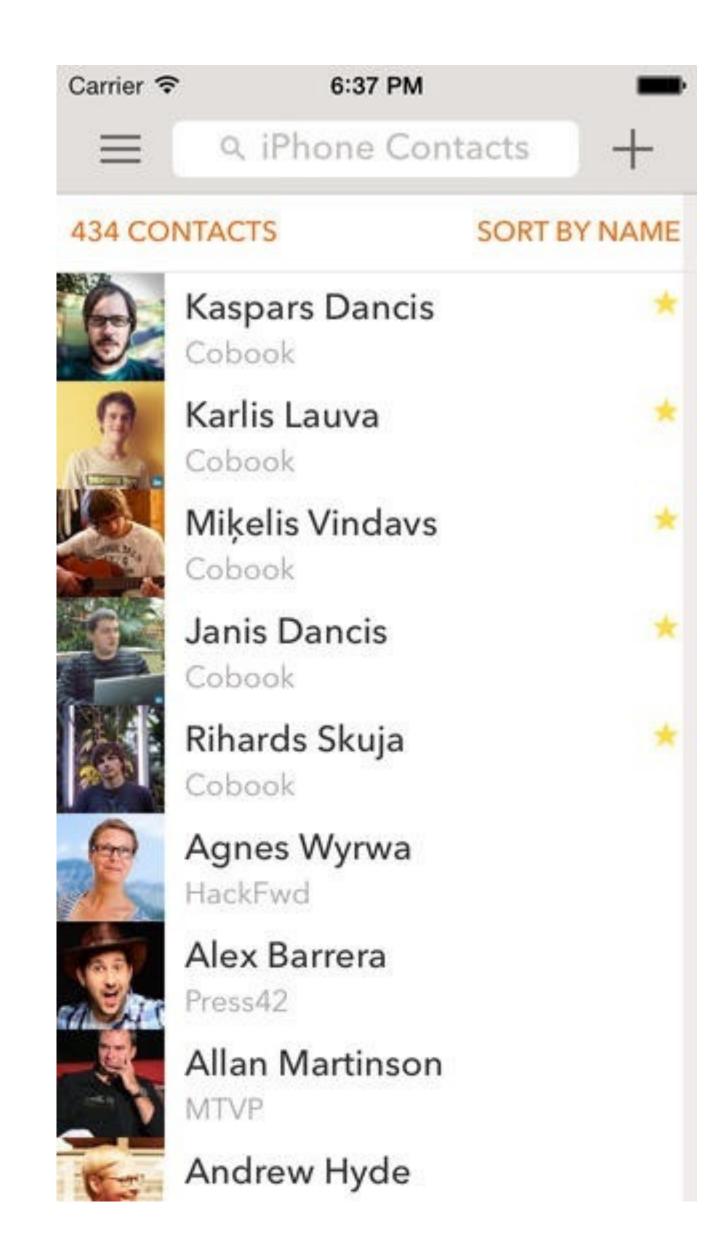
- Button placement should be the same on every screen.
- Establish a system of typeface sizes, button categories and colors. Then stick to that system.
- Creating many different interface element scenarios will confuse users. It will also add complexity in the development stage in both initial development as well as when changes need to be made to the application.

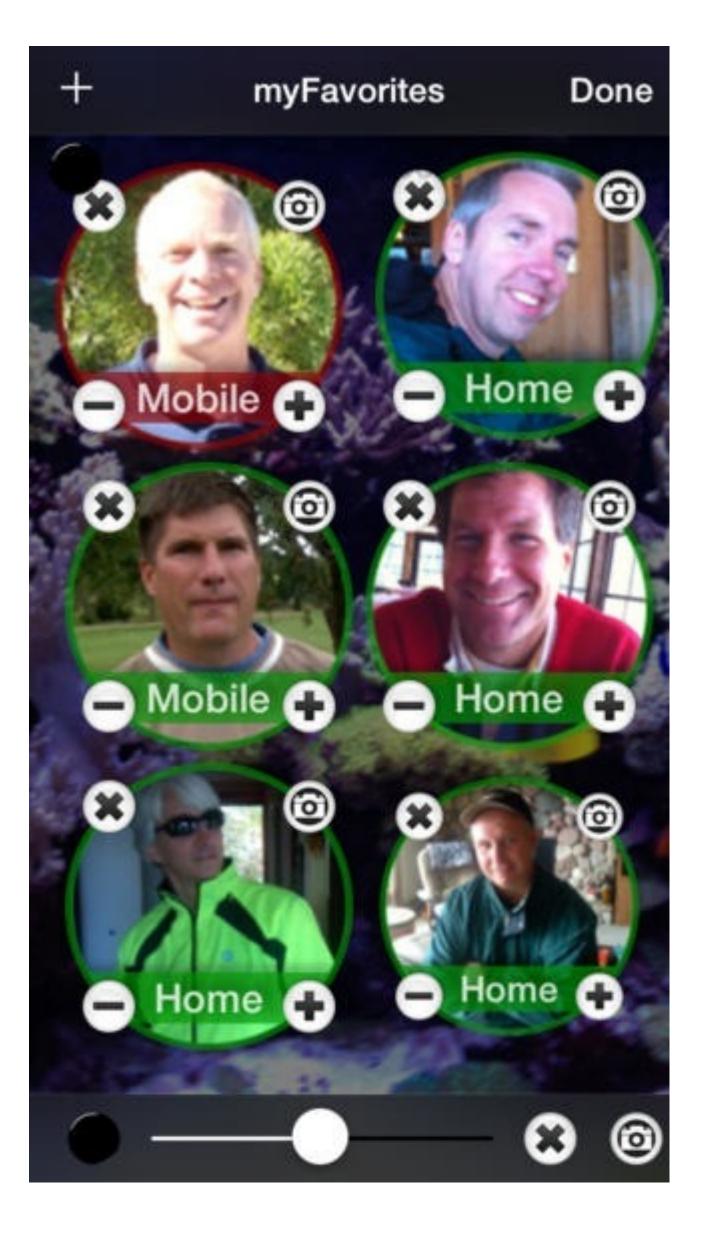




Familiarity

- People don't like having to learn new ways of accomplishing the same tasks
- Use Design Patterns
- Familiarity lets users focus on learning the things that really are unique about your app instead of the things they already know how to use

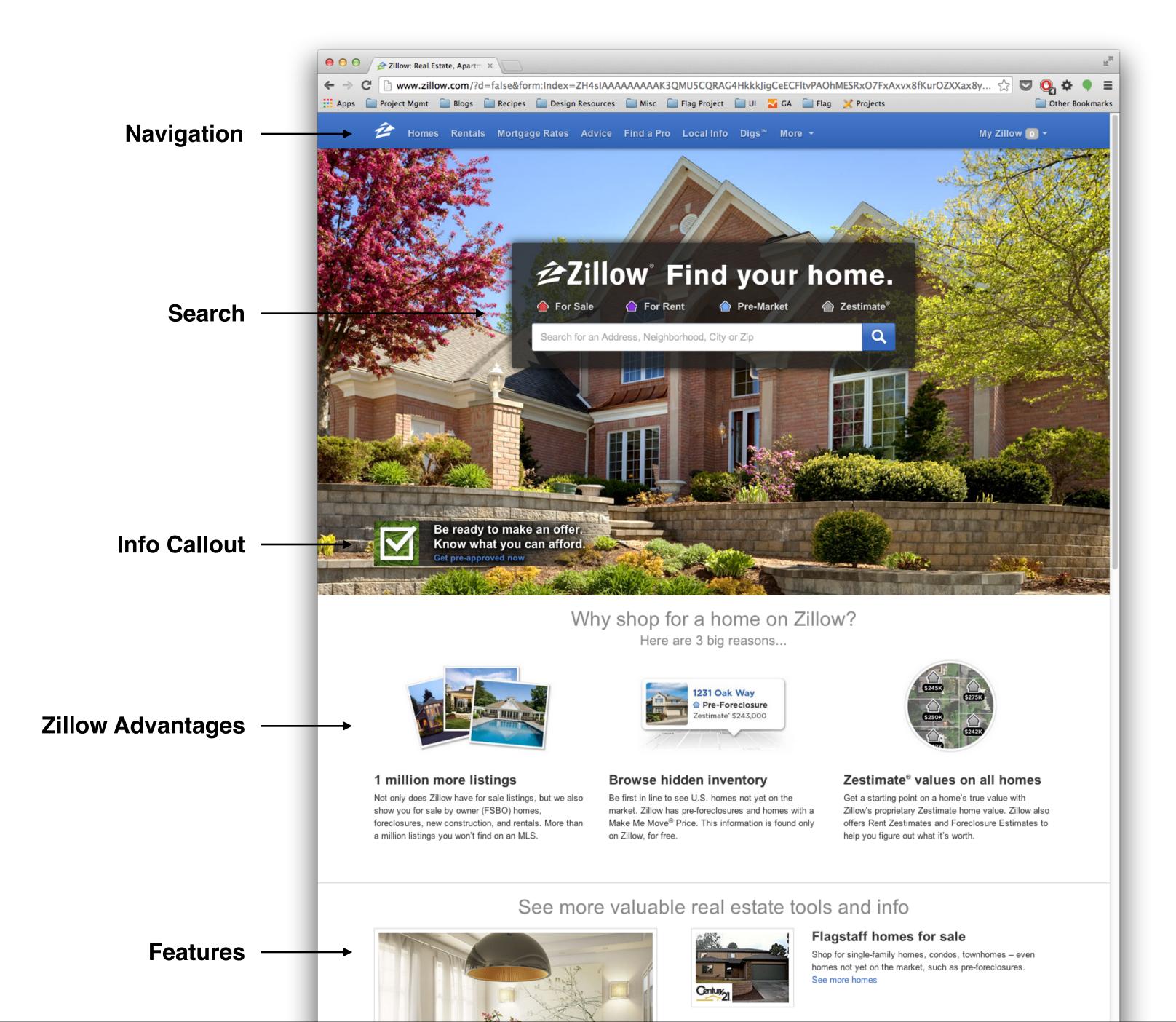




Mobile application design is very different than web design.

Web Design

- Screen Real Estate
- Features
- Navigate the same way from every page

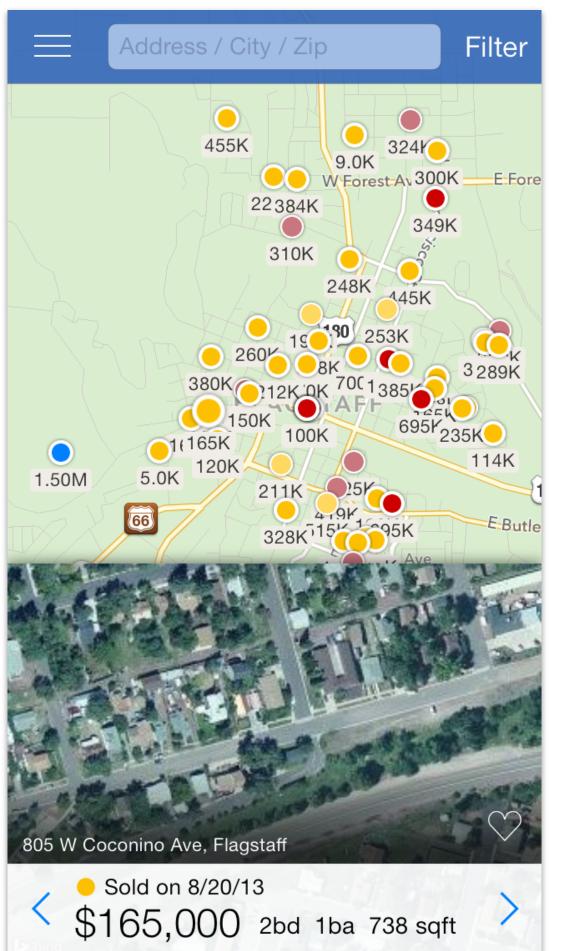


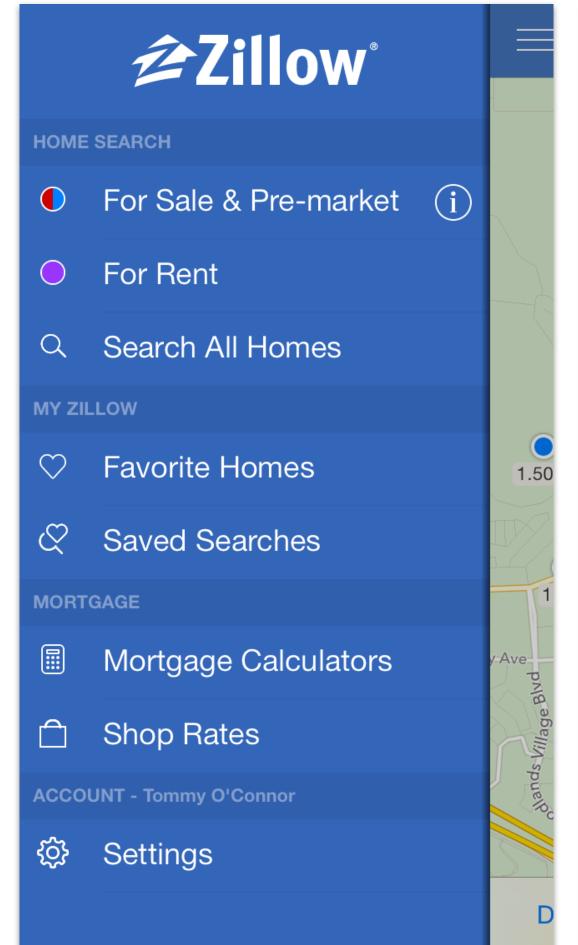
UI/UX Design

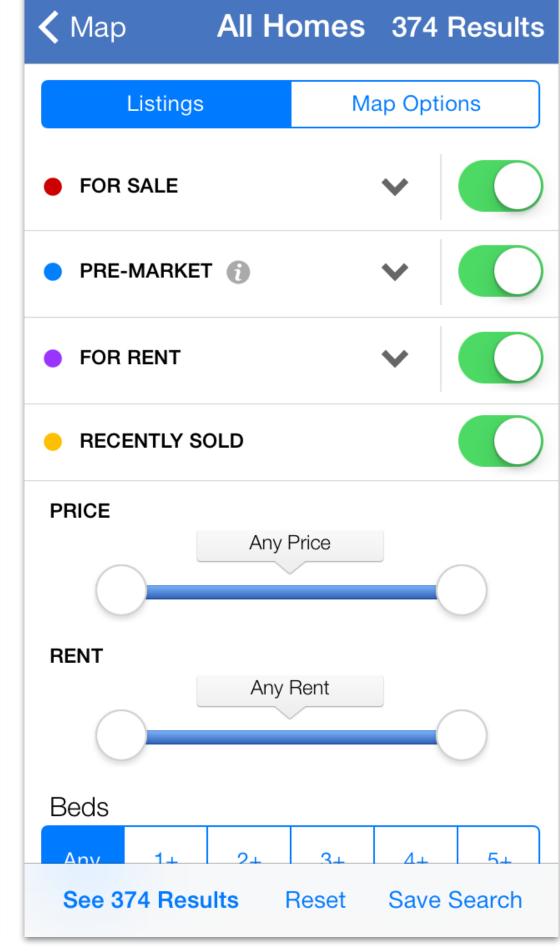
App Design

Landing Page

- Navigation is hidden
- Filter is hidden
- Very little promotional or informational content







Landing Page

The Zillow App drops users directly into a search based on where you are located.

Navigation Tray

When users click the menu icon at the top left, then they have access to a basic set of navigations.

Filter Settings

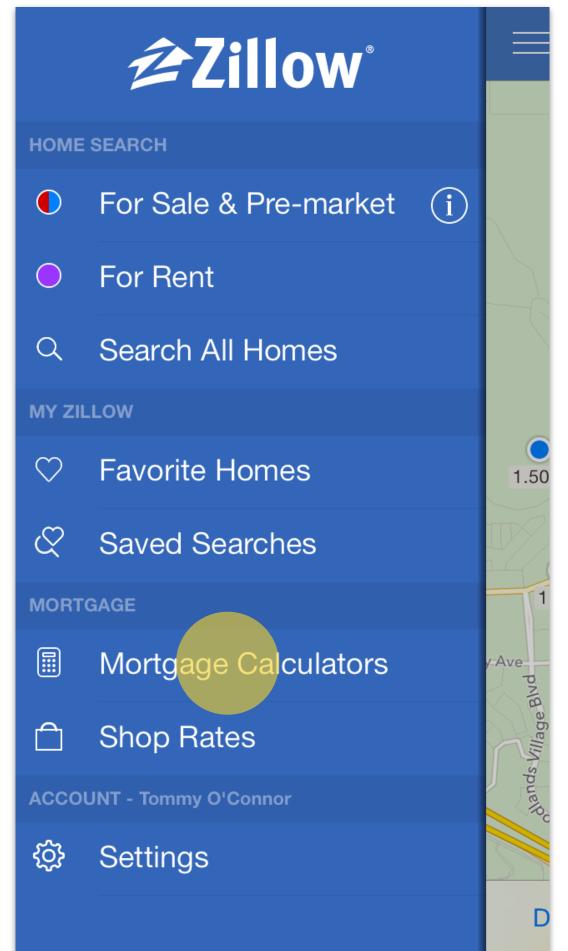
When users click the 'filter' button at the top right, then they have access to a basic set of filter settings.

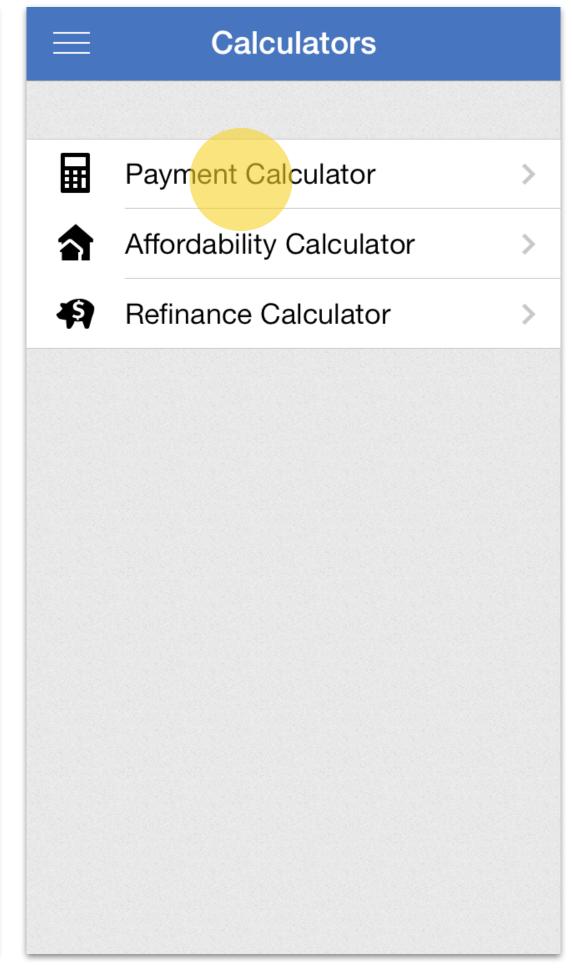
UI/UX Design

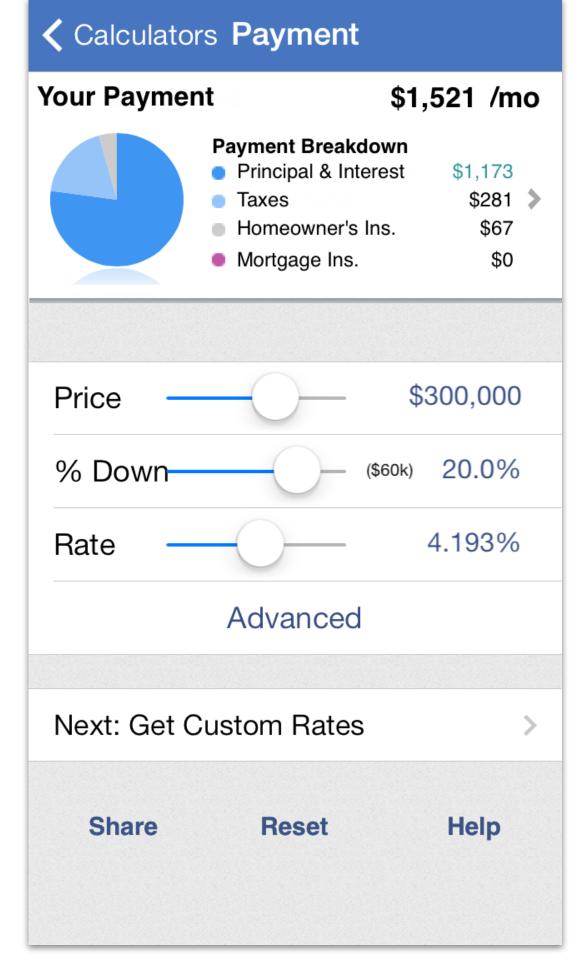
App Design

Calculator Flow

- Linear
- In this case three taps on the mobile app equals one tap on the website







Navigation Tray

Users tap the menu button to access the Mortgage Calculator section.

Calculator Menu

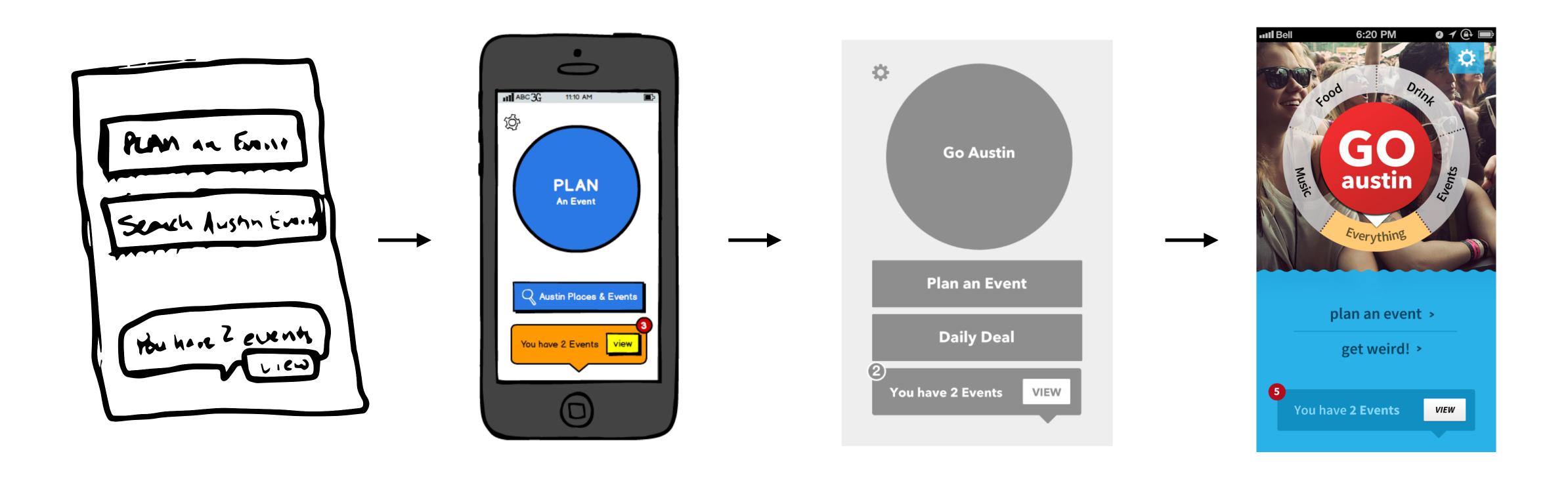
User chooses which type of calculator they want to use.

Payment Calculator Screen

Users have a very simple set of sliders from which to set the info of the mortgage calculation. If they want to use all of the parameters they will click the 'Advanced' button.

Because of the linear nature of mobile apps there are a LOT more steps taken during the planning/design process.

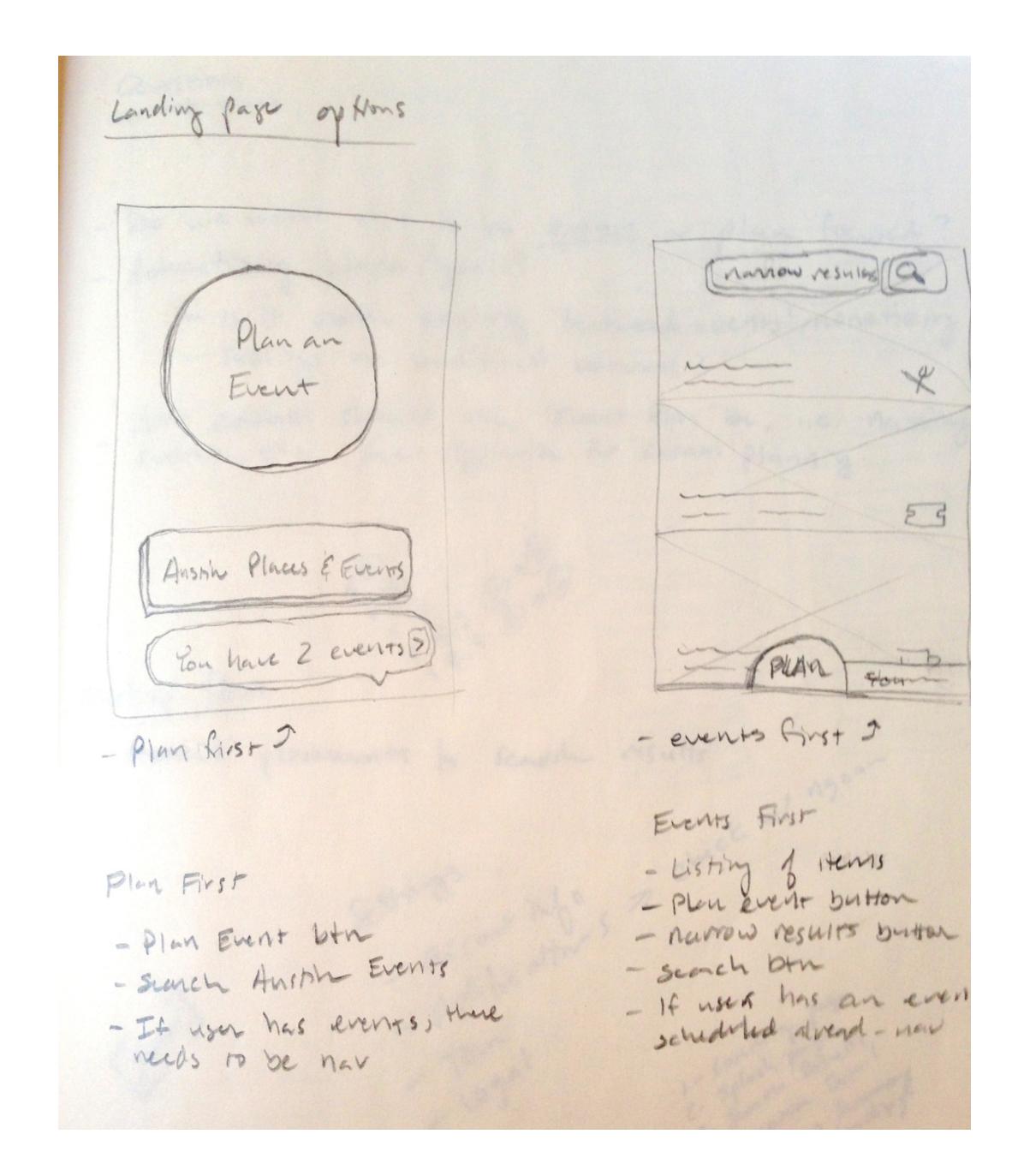
From Low to High Fidelity



UI/UX Design

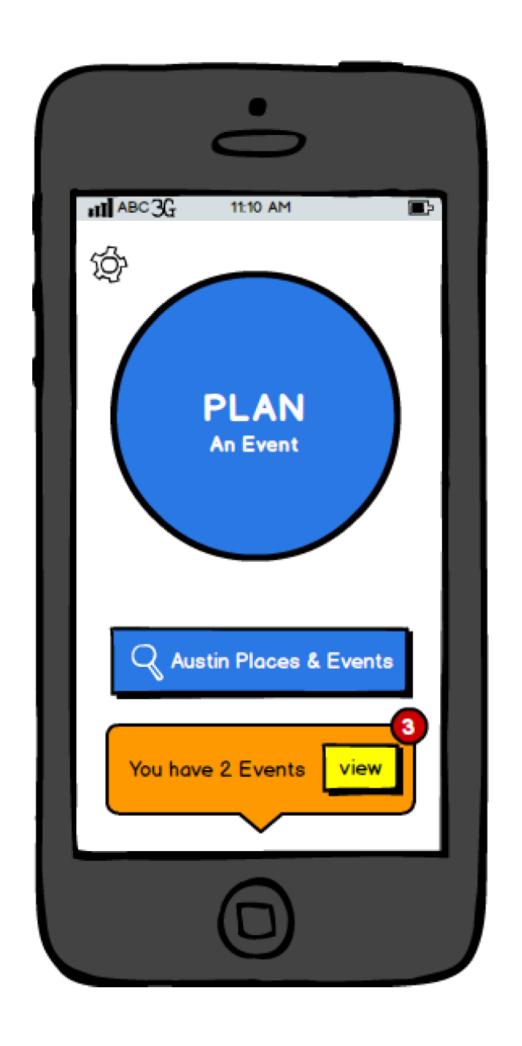
Sketching

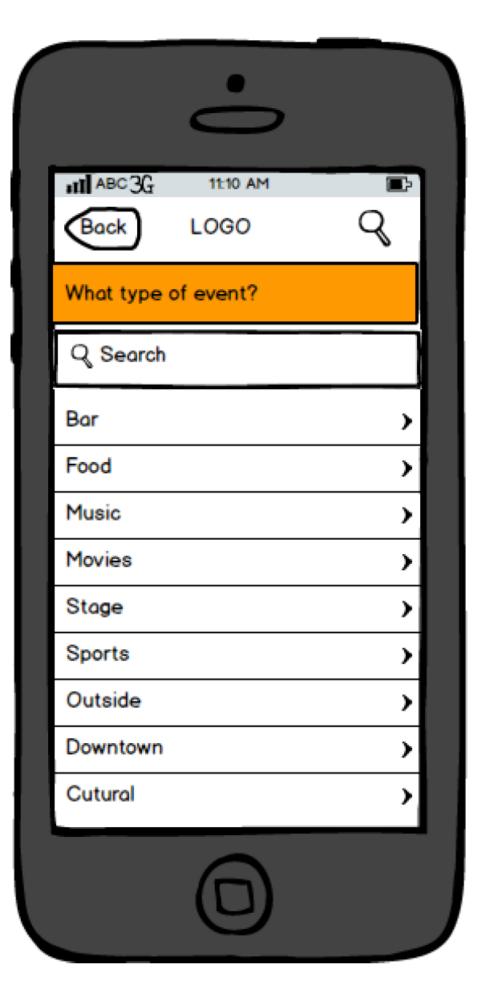
- Sketch major screens to figure out how you'll integrate features.

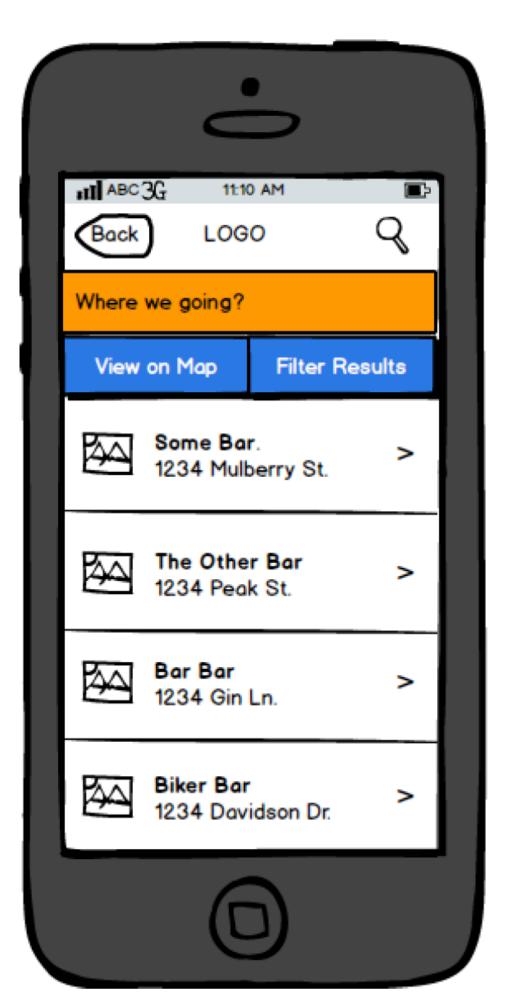


Rough Flows

- Go through the major flows of the app to find any possible navigational issues
- Doesn't need every piece of navigation on screens
- Balsamiq App allows you to make really simple, quick, clickable walk-throughs



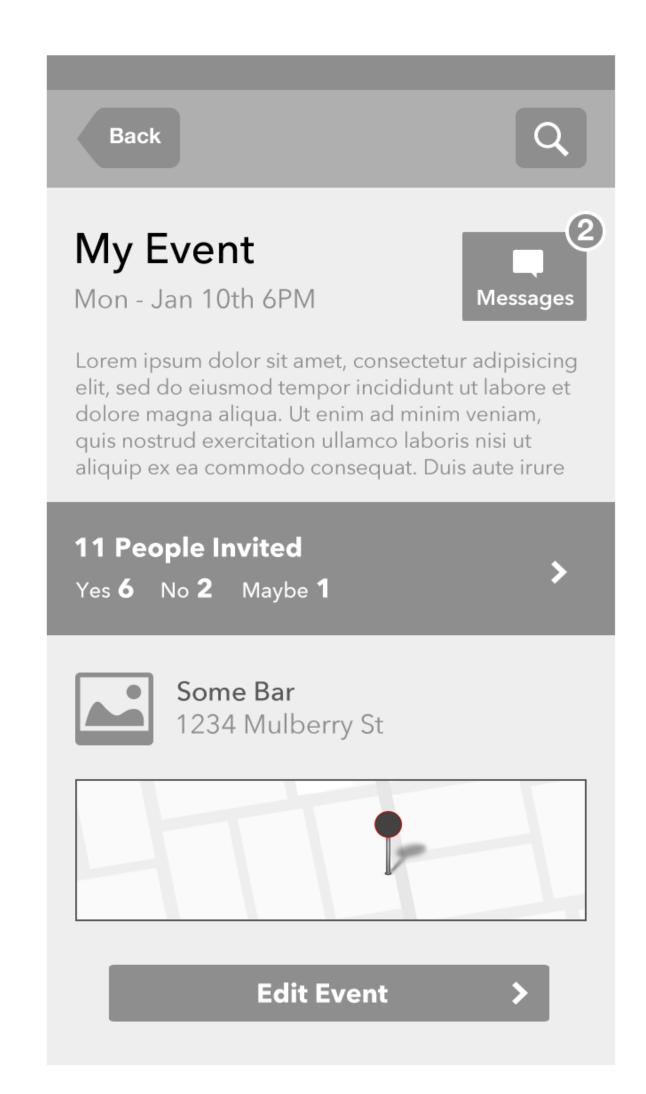


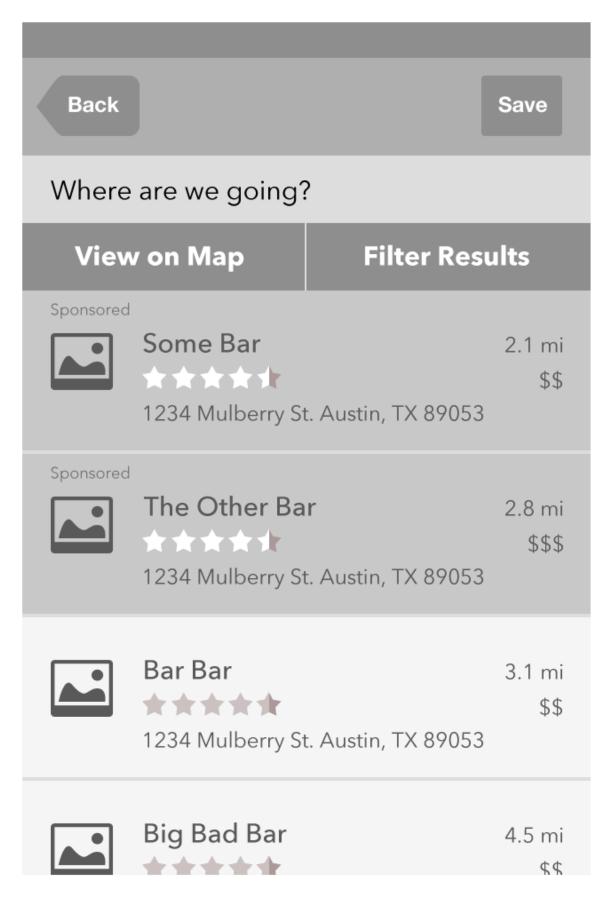


UI/UX Design

Wireframe

- Wireframes are intended to represent the utility of the design not aesthetic design
- Screens should account for all navigation elements and content
- Buttons and content should be exactly the sizes you intend to use to design the application

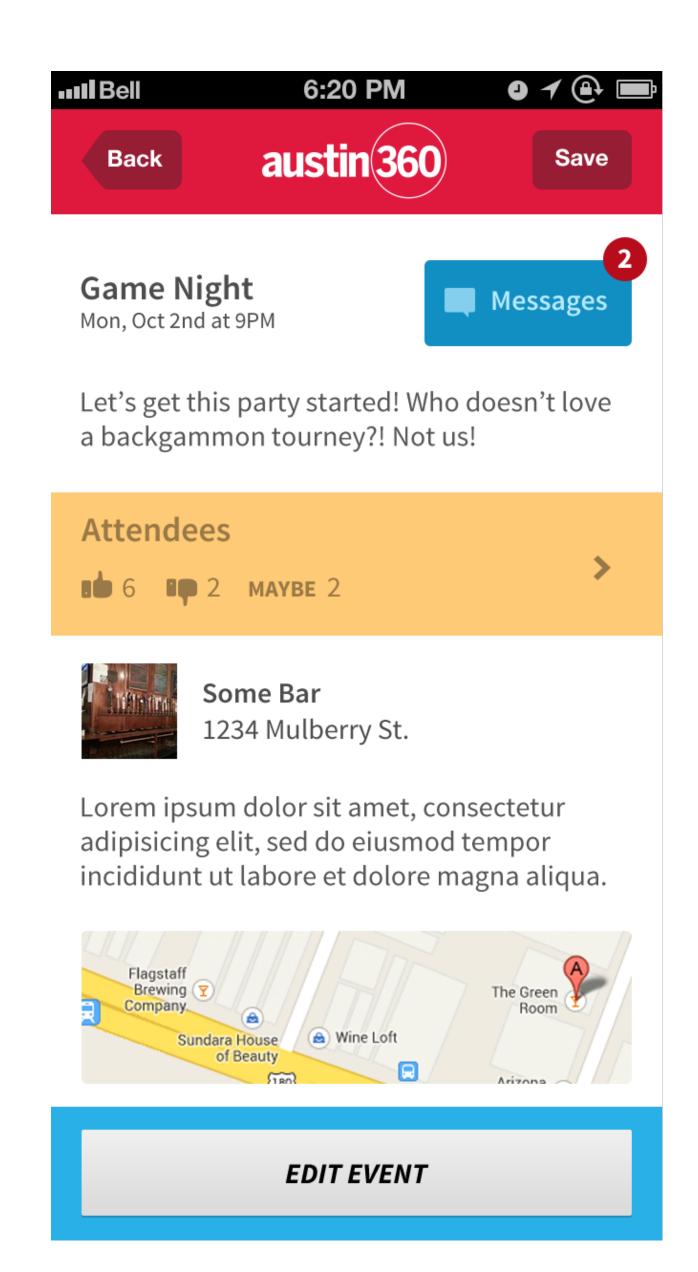


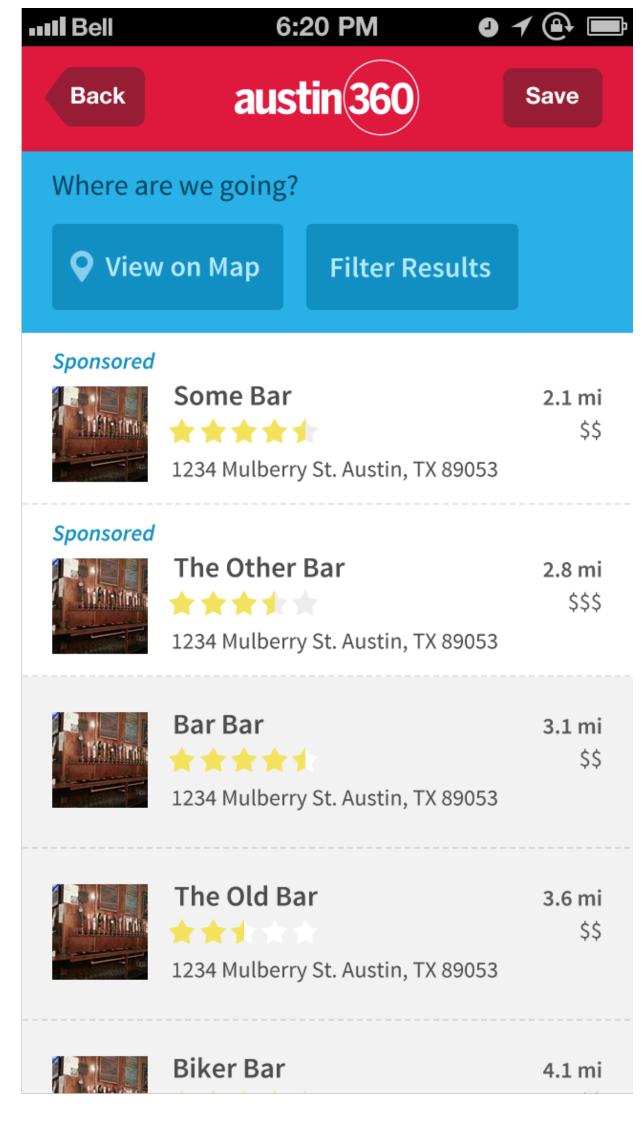


UI/UX Design

Full Design

- The final stage is the fullresolution, full-color designs
- The developer will follow these designs precisely to create the full application





UI/UX Design Wrap Up

Determine your user's goals/tasks and the app features before designing

Keep your app focused, consistent and familiar

From low-fidelity to high-fidelity

Phase 3 Architecture & Implementation

What is Architecture?

Architecture is the set of programs and devices/computers that make up your application, along with the basic paths they use to interface.

Web App

This type of mobile app, is really a broader application - on a mobile device.

Pros: Cheap, powerful and runs on more devices. You also have SEO opportunities for marketing on the web

Cons: It's not an explicit "app" on the mobile device. You have to browse to the relevant site to get to the app. The app is not listed in the app store(s). For example, most big mobile app businesses also have a web application.

Example: www.tripit.com, www.yelp.com, etc.

Client Only Application

This is an app that is installed on a mobile device and is static - it does not get new data from anywhere other than from it's own user.

Pros: Less cost (1/2 price) than server based application. Simpler implementation and therefore long term maintenance. Little or no recurring fees.

Cons: No sharing of data between users, or from a single source to all clients.

Example: Angry Birds

Client/Server Application

This is an app that is installed on a mobile device and interacts with a web server to get new information.

Pros: Most powerful model. New data can be downloaded during every use. Data can be shared among users.

Cons: Most expensive route. Like the Web App option, you also have some recurring fees.

Example: Podcast Apps - they get lists of podcasts and download on demand

Frameworks & Libraries

- Good (efficient) implementors do not reinvent the wheel. To avoid this, they make use of existing frameworks and libraries. If someone wants to build everything from scratch, that is not a good sign.
 - Frameworks tend to provide a more consistent and familiar user experience.

Are the frameworks and tools they select common?

For the most part, a more common tool is better than a unique tool. There are several reasons for this:

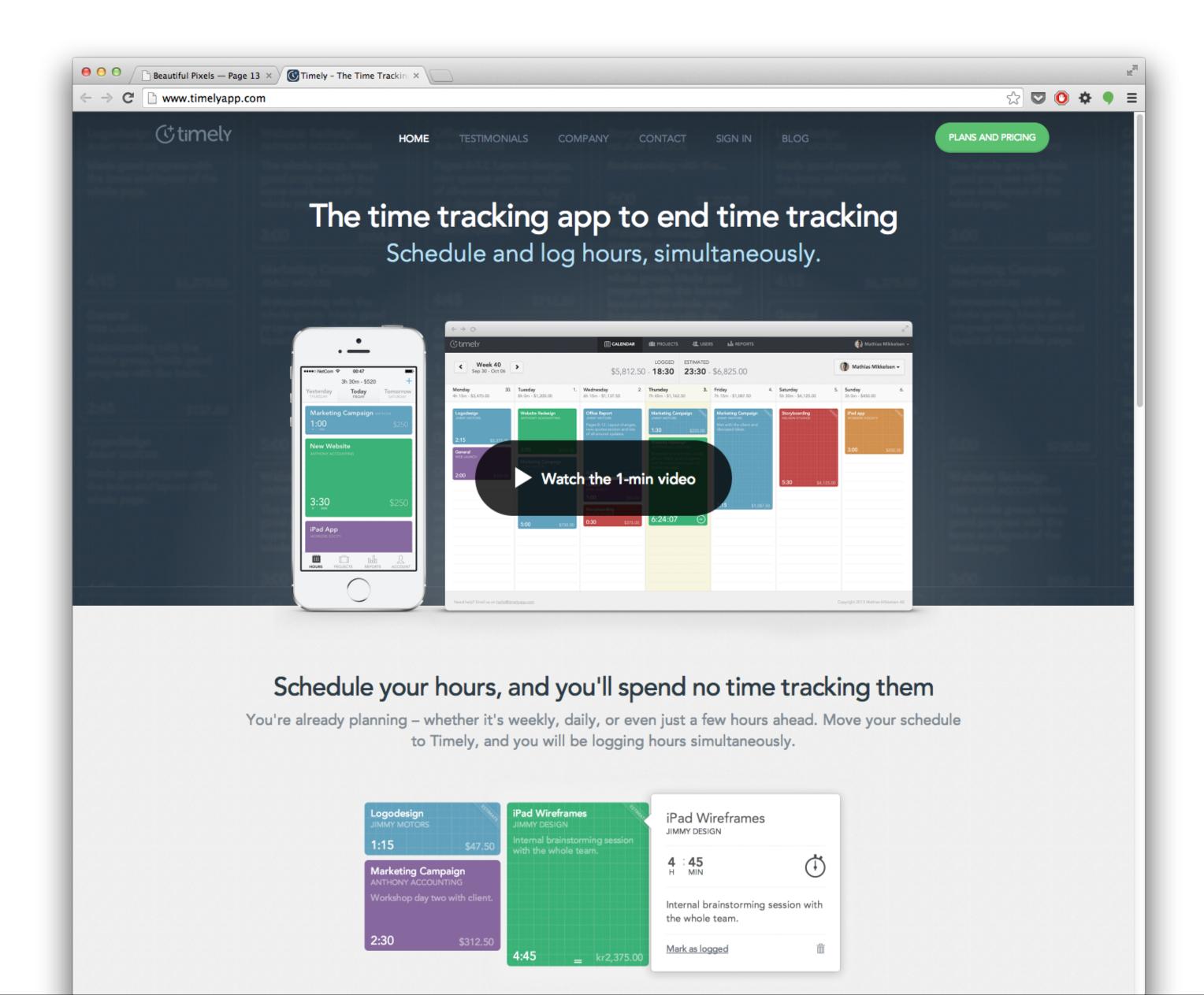
- A more common tool means many people have investigated the options and made that choice for a tool.
- More common tool means more people know it, and therefore if you fall out with your provider, you will have more options.
- A more common tool means more users, and more documentation



Yay! You built your app, now what?

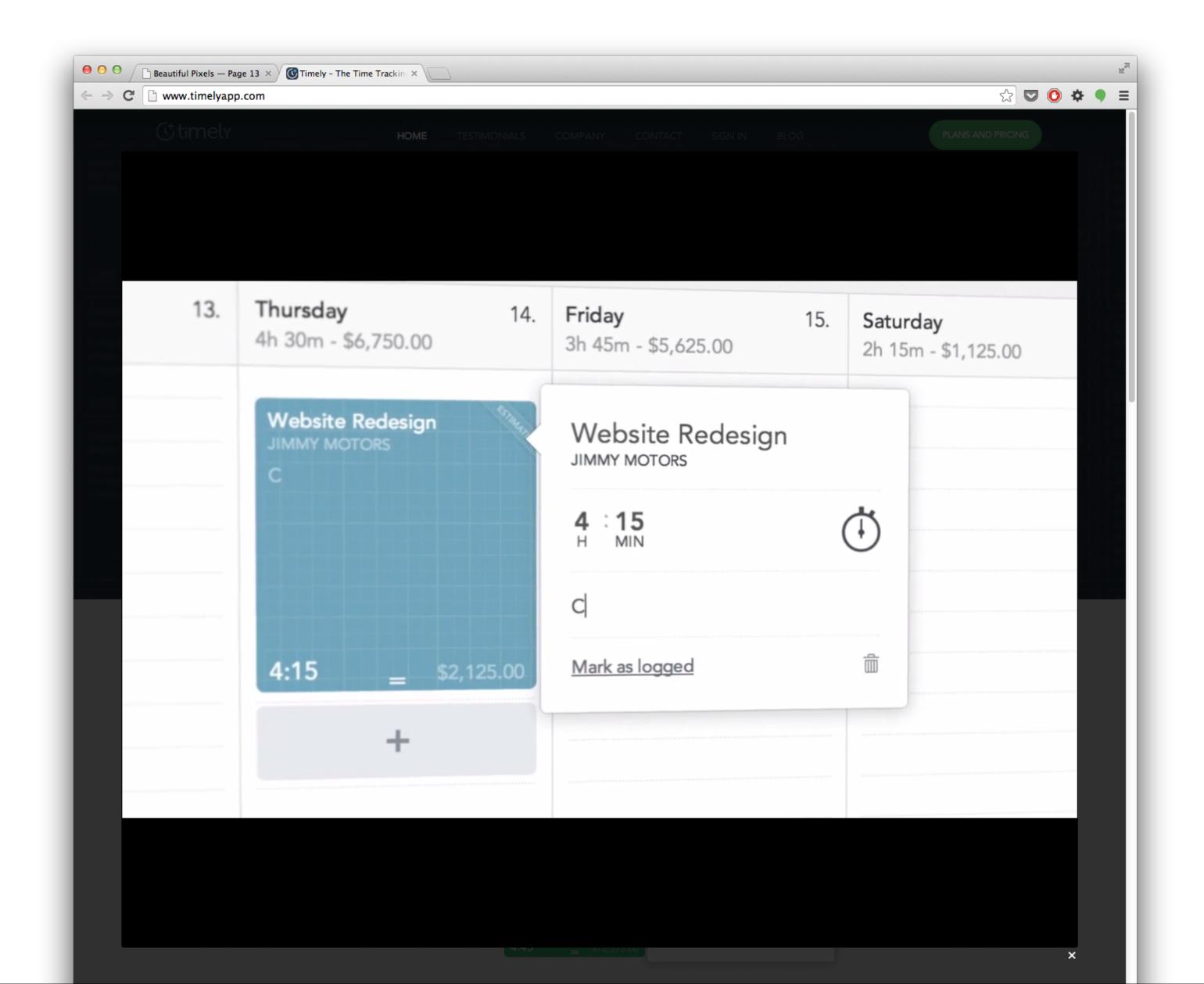
Build a Microsite

- Does a great job of showing off your features
- Generate leads with signup forms
- Increases the SEO potential for your app
- Create a blog. This also helps bring people to your site by way of increased SEO.



Create a Video

- Can help explain the app
- Videos are a great way to evoke an emotional response



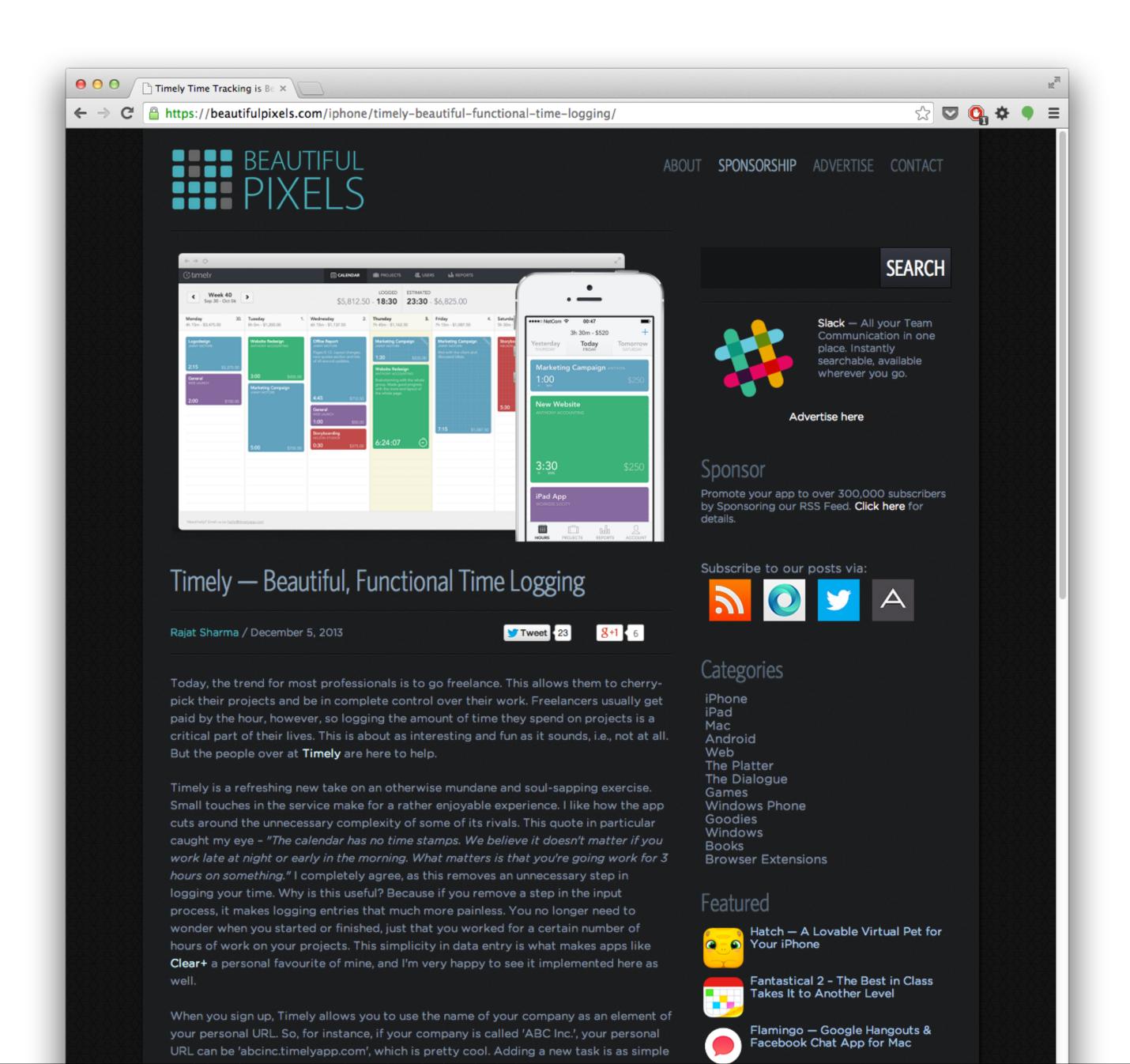
Social Media

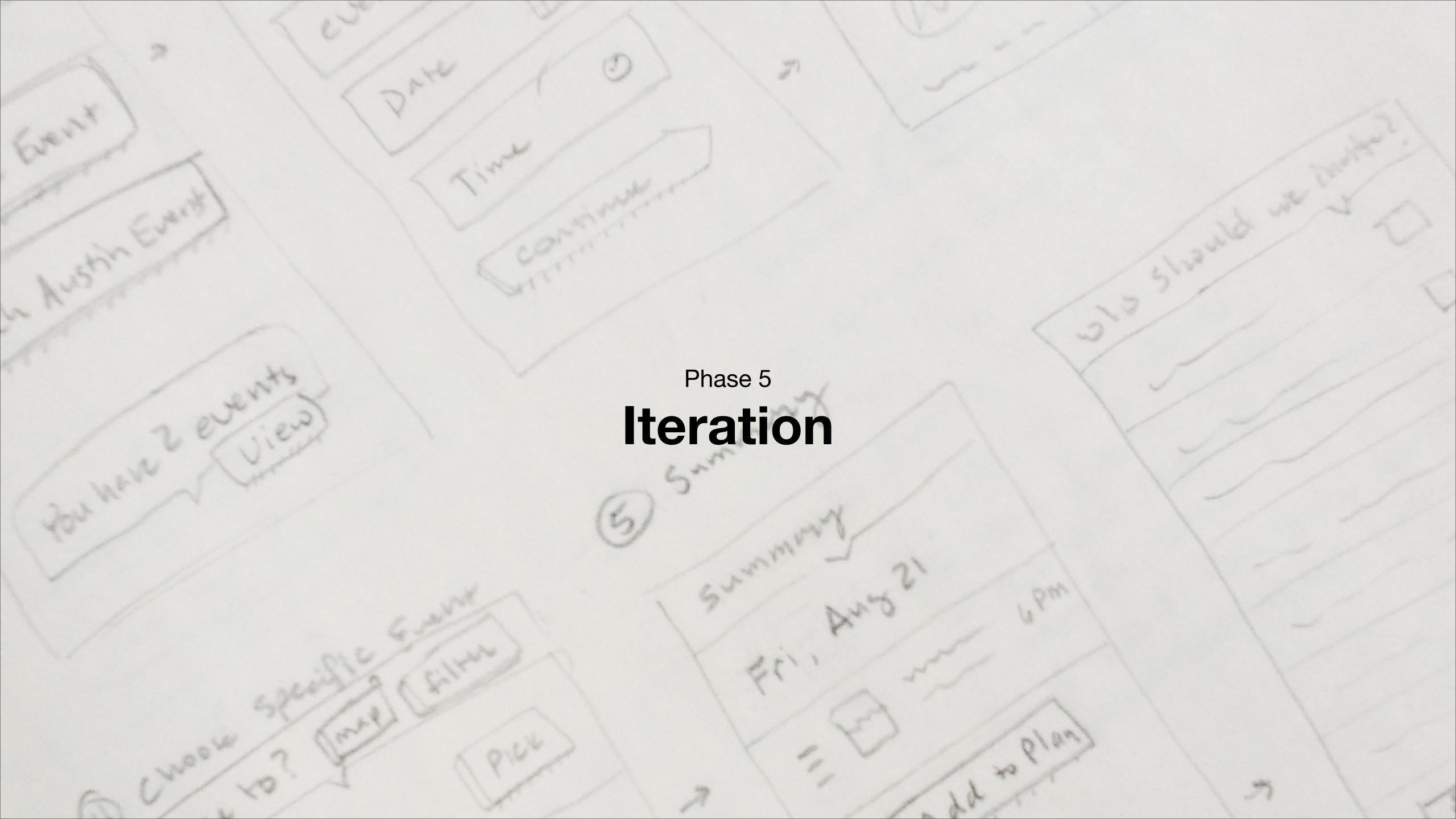
- Try to focus on users that might use your app
- Integrate with social platforms and create ways where users can share with others.
- Good way to keep open communication with your active users. By using social media as a customer service tool it may help keep your app rating up.



Get Press

- Try to get your app reviewed
 - beautifulpixels.com
 - <u>148apps.com</u>
 - appadvice.com
- Contact bloggers that specialize in the topics your app addresses





Minimum Viable Product (MVP)

- This means that you should curb your set of features and initial investment to the minimum that you believe will work in the marketplace, and try it out.
 - If it works, you have validated your concept
- If it fails, you need to examine your business assumptions, consider 'pivoting' to another business approach or...

 move on to your next idea.

Experiment and Re-release

Once released, you typically need to hone your product through experimentation

- Ideally, you get enough bites to validate your MVP. Then you should plan to experiment with more features, design changes, etc.
 - You need to collect good analytics to be able to tell the success or failure of an experiment.

Thank you for attending! Any questions?



