

# App Development Process: Know the Basics

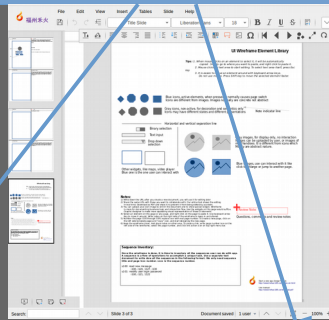
**INTERACTIVE DESIGN** This is the wireframing phase. We have an online design tool for this. We talk to our customer and design the features that suit their needs and delight their users. That is where great communication skills come to play. Our customer might not communicate well what they really want. It takes some intuition to figure out the real purpose of the app they are asking us to build.

**GRAPHIC DESIGN** Once all the features are decided, and interactive design is done, we move onto graphic design phase. Unlike interactive design phase where someone with a little training and practice can do a good job, graphic design and front end coding take skills and a lot of effort to do it well. Graphic designer comes up with an appealing graphic presentation based on the wireframe from last phase. This phase will deliver graphic elements and other artistic assets, which will be assembled in the next front end coding phase. Normally a tool is used to generate graphic icons and elements, and spec with positions and sizes from graphic PSD file.

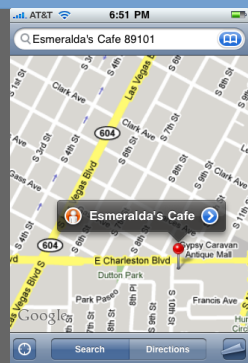
**SERVER API CODING** Coder designs data structure based on the wireframe of the product. Data structure concerns what information or data, and their relationships to keep in our system. APIs are programming interfaces used to access and manipulate those data structure. With the tooling system we have, most people with some training in data structure and basic programming will be able to code back end business logics. The standard data structure notation we use is JSON. Compound JSON structure with nesting hashes and occasionally arrays are used to represent data in our system.

**FRONT END CODING** Coder uses server APIs and graphic elements from last two phases, and uses front end specific languages and program structures to assemble graphic elements into app pages, and implement page transitions. To make it easy to use those server APIs we have SDKs in Android, iOS, and HTML5 form. Front end programmer will use those SDKs to access our back end server APIs in the code. Typically front end program calls back end API and handles the response or push from server asynchronously.

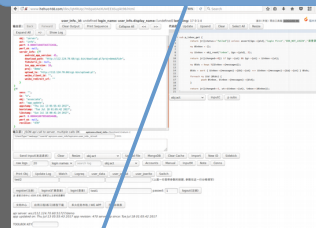
## INTERACTIVE DESIGN



## GRAPHIC DESIGN



## SERVER API CODING



## FRONT END CODING

