

Chapter 8

An Analysis of UI/UX Designing With Software Prototyping Tools

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ABSTRACT

In an age where everyone is carrying a smart phone, it is of utmost importance to make efficient use of the upcoming technologies. This indicates the rise in number of applications being created for mobile devices. As a result, mobile user interface designing has become a significant part of application designing. There has been an increasing number of devices today providing powerful graphics capabilities helping users to deal with huge amount of information. However, the prototyping tools currently being used in the industry are lacking features and are not addressing some of the prime issues like user friendliness, functionalities, representation, and enforcement. This chapter presents a tool based on an analysis of different popular prototyping tools in the industry which will overcome some or all of the major issues faced by application designers. The authors describe the prototyping tool's concept, design, features, as well as how it is suitable for making great user interfaces helping application designers to design exactly what they want.

INTRODUCTION

User interface designing focuses on firstly identifying the needs of the users and then creating an interface with functionalities which implements these user needs ensuring ease of access (Oppermann, 2002; Sharp, 2003; Wood, 1997). Thus, we see that mobile interaction design is a challenging procedure as the success or

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failure of any application hinges on its ease of accessibility and understand ability (Myers, Hudson, & Pausch, 2000; Hix & Hartson, 1993). Due to cultural and literary differences, the usage of application varies and depends on demographics (Marcus & Gould, 2000). This clearly indicates the need of creating a prototype of software's or applications which will address the above issues. So what purpose do the prototypes have?

A prototype is created or developed to improve the efficiency of critical software developmental processes of planning and execution (Isreal & Lee, 2001). Pedro Szekely says that in order to develop complex applications, prototyping is an important stage which involves building a small scale version to reduce cost and risks involved (Szekely, 1994). It consists of some or all features of the software. The benefits from early prototyping are immense (Snyder, 2003). As said by Sidney L. Smith and Jane N. Mosier that designing of interfaces are time-consuming and costly but are very critical for the performance of the application (Smith & Mosier, 1986). The users can then use the prototype model of the software and give their feedback. The developers will gain a better understanding of what the requirements of the end users are and also if any modifications are needed (Hackos & Redish, 1998). This establishes good relations between users and developers which is ideal for any software project (Baumer, Bischofberger, Lichter & Zullighoven, 1996; Floyd, 1984).

Some designers in the beginning often create rough sketches of the screen layouts. Initially major design issues should be addressed rather than focussing on design details like color and alignment (Landay & Meyers, 1994). Since the end users are the ones who will be using our software, so ensuring a delightful experience for them is what is required and prototype definitely solves this purpose to a great extent. It is extremely important to meet the needs of the users (Nielson, 1993). Another important aspect is "Expectation Setting" which implies setting the expectations of our end users really high and this solely depends on how well our prototype speaks for us (Meyers & Rosson, 1992).

To understand how much importance UI/UX designing play, let's take an example of two very famous ecommerce applications, Flipkart and Amazon. They provide similar services and features but their usage varies a lot depending on their user interface designing. There can be a user who is comfortable with Flipkart but not with Amazon clearly indicating the importance of one's experience of using the application.

This leads us to a very important point. What is the one thing that the developers must always keep in mind while creating an application? Create a simple application and simple here implies that as soon as a user opens the software, he knows what to do. It sounds easy but it definitely isn't. The biggest challenge here is to think from the perspective of the user and not the developer. This again indicates the need for a prototype (Wilson & Rosenberg, 1988).

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