Sandra Bochmann | Thomas Ritz

# Prototyping Tools for Mobile Applications

Steinbeis-Edition

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Sandra Bochmann | Thomas Ritz

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**Imprint**

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# Preface

With this book we focus on two highly dynamic markets. First, we address the market of mobile apps which is growing now for a couple of years. Secondly, we analyze features of prototyping tools, thus software, which are also constantly evolving and sometimes improving. So it was a risk to bring these dynamic contents into a paper based traditional book and we faced this risk at the beginning of our project. But we are deeply convinced that "Prototyping for mobile apps" deserves a publication dealing with foundations and practical tools.

Will the information be outdated soon? This is a critical question when writing a book about software products where new versions appear approximately on a yearly basis. As this is not a training book on all the features of the prototyping tools, we would like to answer that this information will not outdate soon. We are convinced that this publication gives you an in-depth introduction into the method of prototyping with a special focus on mobile apps. The requirements derived for the prototyping tools will stay up-to-date for a very long time. Our checklist for prototyping tools and our illustrative testing of the tools' recent versions can help you to repeat the proceeding. And finally we will keep track of recent developments…

We would like to thank all the people at the Steinbeis Edition for their support. Finally, Thomas Ritz would like to thank the students of the "User Centered Development Techniques" Course in Maastricht in 2012, which read the first manuscript and gave valuable feedback.

*Sandra Bochmann & Thomas Ritz*
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# 1 Introduction

Mobile applications become more and more popular. The most crucial factor for these applications is acceptance by the user. To ensure a high acceptance level, prototyping could be helpful in all stages of the development process. Prototyping can be supported by tools in order to minimize efforts to produce the prototypes while maximizing the use of the resulting prototypes. As proved in this book, there is a wide variety of prototypes and also a wide variety of prototyping tools. This makes it hard for users to select a prototyping approach and at the same time a useful tool to support the approach selected. This book copes with this challenge by introducing prototyping for mobile applications, dealing with requirements for tools and applying these criteria to some selected tools.

The book starts with an introduction into user centered development for mobile applications. Based on the special characteristics of mobile applications, user centration is derived as an appropriate method to raise the acceptance level. This chapter shows how user centration is used in the software engineering domain as well as in the usability engineering domain. As a next step a method is presented which integrates the extreme programming approach and the usability engineering lifecycle into one coherent method recommended for the development of mobile enterprise software. Finally, it is shown that prototyping could be applied to different stages of this methodological approach.

The third chapter gives an overview on prototyping and related tools. It starts with a summary of purposes which can be addressed with prototypes. This results in a distinction of kinds of prototypes based on certain characteristics. Finally, three tools are briefly introduced which will deal as sampels for different classes of prototyping tools in the further course of this publication.

Chapter four is focusing on the selection of prototyping tools. After an introduction of characteristics for users, individual prototype requirements are derived and assigned to characteristics of prototypes. This gives the major input for a checklist presented at the end of the chapter. This checklist is a useful tool for the reader when selecting his own prototyping tool.