

Start-Up Creation: The Smart Eco-Efficient Built Environment

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Chapter 18: App programming and its use in smart buildings

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Abstract

App start-up companies require little overhead and investment to create apps that are profitable. Successful apps require people, both managers and developers, a deep understanding of software engineering. This chapter will focus on the many aspects of software engineering for creating apps for smart building management systems. Readers will get an overview of the many different issues to consider when developing apps and what some of the problems are to avoid. We will discuss the types of apps that can be considered for creation and discuss how they are used. This chapter serves as a primer to understanding apps and app development.

Keywords: software, apps, human-computer, interaction, HCI, software development, software engineering, smart building

Chapter Outline

r8.1 Introduction

- Motivating app start-ups
- From building automation to smart buildings
- Remaining chapter organization

r8.2 Types of apps

- General building system anatomy
- Native Apps
- Cloud Apps
- Web Apps
- Dashboard Apps
- Ambient Devices
- Agent Apps
- Other issues to consider

r8.3 Methodologies for creating apps

- Creating apps using evolutionary delivery
- Frontend and backend app development
- How to collect and store data
- Ubiquitous sensor platforms and IoT
- App development environments

r8.4 Conclusions

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