

Table of Contents

Preface

Section 1: The Basics

1

Introducing Mendix

What is low-code?	4	Summary	9
What is Mendix?	7	Knowledge check	9

2

Getting to Know the Mendix Platform

Creating an account	12	Mendix App Store	19
Home page overview and breakdown	14	Summary	20
Apps, People, and Community	15	Chapter 1 knowledge check answers	20
Mendix Forum and Docs	17	Chapter 2 knowledge check	20

3

Getting to Know Mendix Studio

What is Mendix Studio?	23	Why would you use Mendix Studio?	29
Using Mendix Studio	24	Summary	29
A breakdown of the UI and features	25		

Chapter 2 knowledge check answers	30	Chapter 3 knowledge check	30
-----------------------------------	----	---------------------------	----

4

Getting to Know Studio Pro

What is Studio Pro?	32	Summary	38
Downloading and launching Studio Pro	32	Chapter 3 knowledge check answers	38
UI breakdown	34	Chapter 4 knowledge check	38

Section 2: Building Your First App

5

Getting Started with Your Baseline App

Technical requirements	43	Creating a module	62
Managing apps in the Developer Portal	44	Deleting a module	64
Creating a new app and writing your first user stories	46	Adding elements to modules	64
Embracing a development methodology	49	Finding project settings, security settings, and preferences	64
Inviting collaborators to your Mendix app	52	Managing project security	64
Using Mendix Studio Pro and the Mendix App Store	53	Maintaining project settings	65
Opening your app in Mendix Studio Pro	53	Configuring project preferences	66
Installing a module from the Mendix App Store	56	Summary	66
Working with modules in your Mendix app	61	Chapter 4 knowledge check answers	66
		Chapter 5 knowledge check	66

6

Understanding Domain Model Basics

Technical requirements	70	Designing a database for your Mendix app	84
Understanding the different entity types in a Mendix domain model	70	Using validation rules at the entity level	85
Creating an entity and setting entity properties	71	Using event handlers in your domain model	86
Working with attributes and getting to know data types	74	Optimizing your database with indexes	90
Getting to know attribute types	74	Summary	92
Adding attributes to an entity in the domain model	75	Chapter 5 – Knowledge check answers	92
Creating associations between entities to relate objects	78	Chapter 6 – Knowledge check	93
Adding an entity with associations	79		

7

Understanding the Basics of Page Design

Technical requirements	96	Calling a page in your Mendix app	106
Building user interfaces	96	Understanding the main navigation	107
Creating a new page	96	Calling a page directly	108
Understanding the Atlas UI framework	100	Calling a page from a microflow	110
Applying layouts, widgets, and building blocks	100	Summary	115
Getting to know navigation layouts	100	Chapter 6 knowledge check answers	116
Using common widgets	101	Chapter 7 knowledge check	116
Creating with Atlas UI building blocks	104		

8

Getting to Know Microflows

Technical requirements	120	Putting annotations in your microflow	133
Understanding common microflow elements	120	Adding an annotation, or two...	133
Controlling the flow with events	120	Extracting a sub-microflow	134
Working with objects and lists	121	Learning with Mendix Assist	137
Using decisions to navigate your application logic	125	Summary	138
Validating phone number on save	125	Chapter 7 knowledge check answers	138
Validating PhoneNumberType on save	129	Chapter 8 knowledge check	139

Section 3: Leveling Up Your App

9

Customizing Your App

Technical requirements	144	Improving the readability of large, complex microflows	159
Having some fun with Mendix functions and expressions	144	Go (con)figure – configurable settings	160
Understanding string functions	145	Let's get some Java – Java actions	163
Integer function calls	151	Additional validations	164
DateTime function calls	154	Changing requirements	165
Enumeration function calls	155	Summary	174
Relational expressions	156	Chapter 8 knowledge check answers	175
Understanding sub-microflows – when and why?	157	Knowledge check	175
Grouping similar functions or logic	158		
Reusability across your application	159		

10

Error Handling and Troubleshooting

Technical requirements	178	Channeling your inner lumberjack - logging	193
Being defensive with your programming	178	Stepping through it - the Debugger	195
empty and " (blank) checks	180	Seeing it - developer pages	198
Defensively minded if statements	183	Overview pages	199
Manually checking your code	186	Let's go make it!	201
Unit tests	186	Summary	218
Getting a handle on those errors - error handling	188	Knowledge check	219
Error handling options	188	Chapter 10 knowledge check	220

11

Storing Data

Technical requirements	222	Understanding generalizations and specializations of entities	231
Creating associations for your data	222	Pros	232
One-to-one association	223	Cons	233
One-to-many (or many-to-one) associations	225	Conclusion about inheritance	233
Many-to-many associations	226	Let's go make it!	234
Building functional modules	226	Summary	241
Cross-module associations	227	Knowledge check	242
		Chapter 11 knowledge check	242

12

Getting Some REST

Technical requirements	246	Import mapping	255
Understanding REST	246	Message definition	257
Testing your integration	247	Publishing REST	258
Consuming REST	253	Export mapping	259
JSON structure	253	Published REST service	260

Understanding basic security and authorization	262	Summary	288
Let's go make it!	263	Knowledge check	288
		Chapter 12 knowledge check	288

13

A Review and What's Next

Reviewing the material	292	Preparing for the next steps	297
Chapter 1	292	Rapid Developer Certification (and beyond)	297
Chapter 2	292	Advanced Certification	298
Chapter 3	292	Expert Certification	298
Chapter 4	292	Mendix MVP	298
Chapter 5	293	Additional experience and resources	299
Chapter 6	293		
Chapter 7	293	Summary	299
Chapter 8	294	Chapter 12 knowledge check answers	299
Chapter 9	294	Why subscribe?	301
Chapter 10	295		
Chapter 11	296		
Chapter 12	296		

Other Books You May Enjoy

Index
