成为Mendix快速开发者

mendix

欢迎

Start	09:00
Break	10:30 – 10:45
Lunch	12:00 – 13:00
Break	14:30 – 14:45
End	16:00

- Agenda
- Questions
- Knowledge checks (Kahoot)
- Certification

Create a Mendix account
https://signup.mendix.com/

Install the version 9.5 of
Mendix Studio Pro
https://marketplace.mendix.com/

目录

1 Make it w/ Mendix

2 Make it together

3 Make it w/ Mendix Studio

4 Make it dynamic

5 Make it automated

6 Make it w/ Mendix Studio Pro

7 Make it smart

8 Make it valid & consistent

9 Make it secure

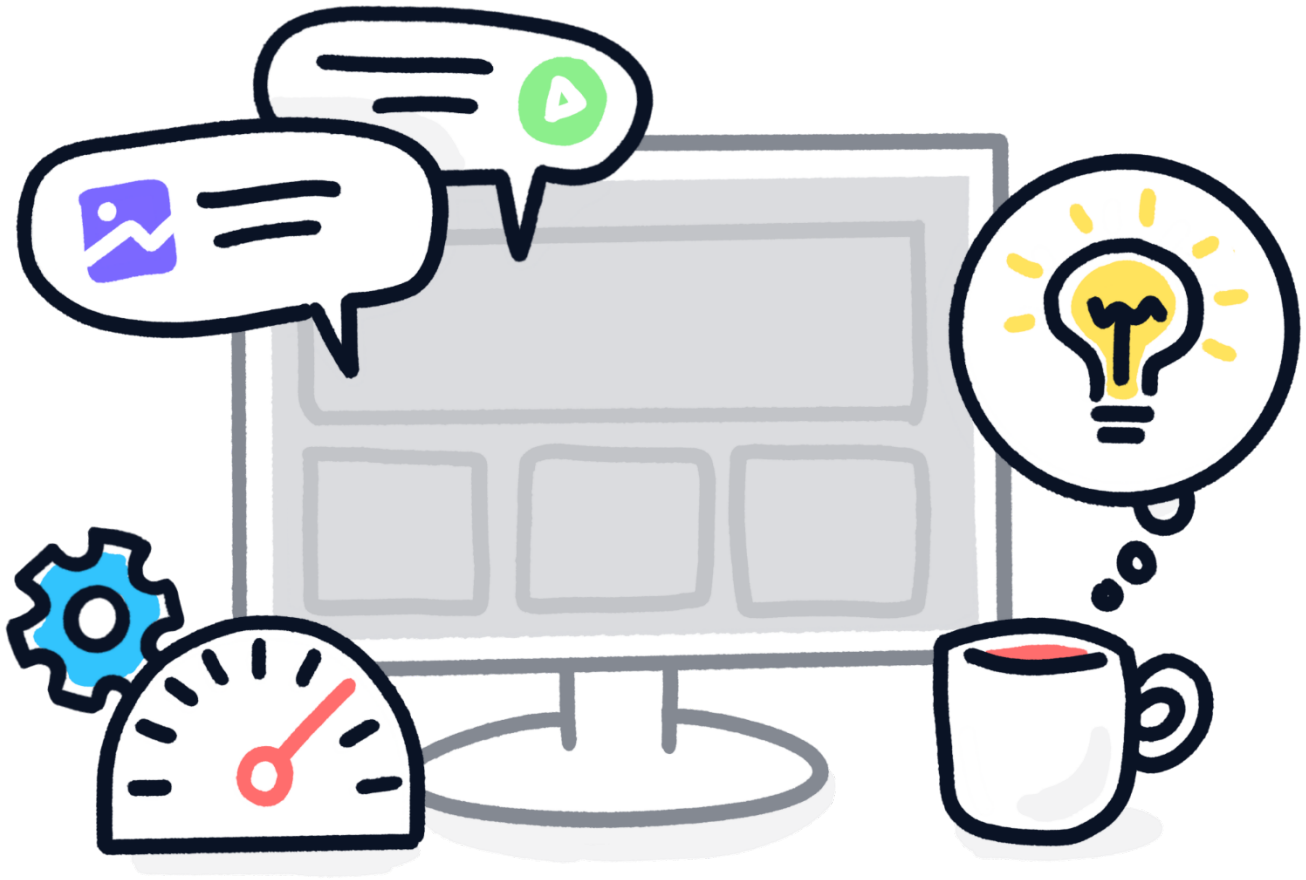
10 Make it mobile

11 Go make it!

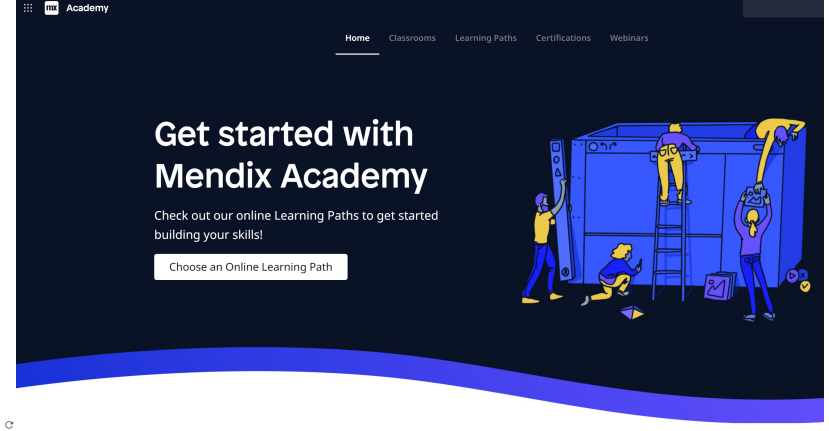
Make it w/ Mendix

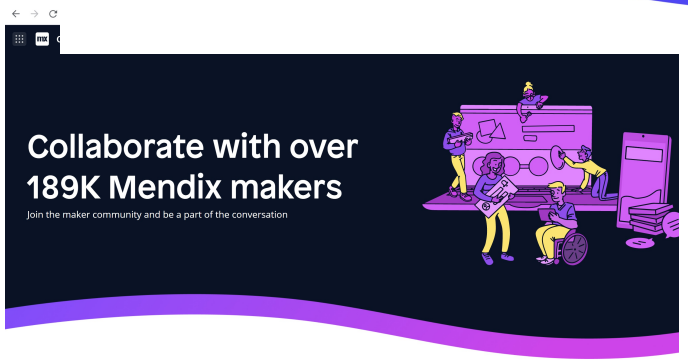
学习目标

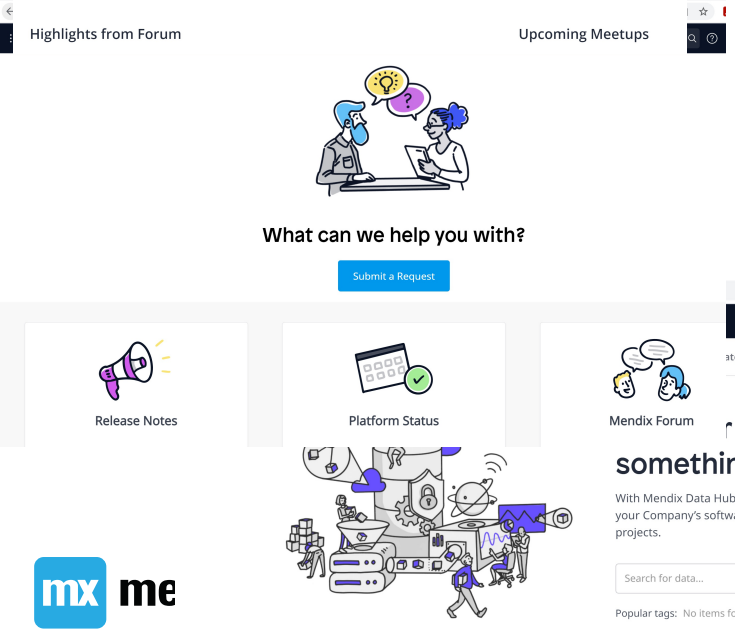
- 了解Mendix生态
- 了解如何获取Mendix相关信息
- 创建、完善、分享你的Profile

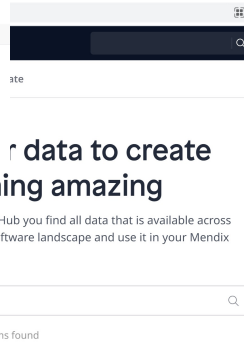


Mendix Ecosystem









Online Project Management

Academy

Marketplace

Community

Atlas UI

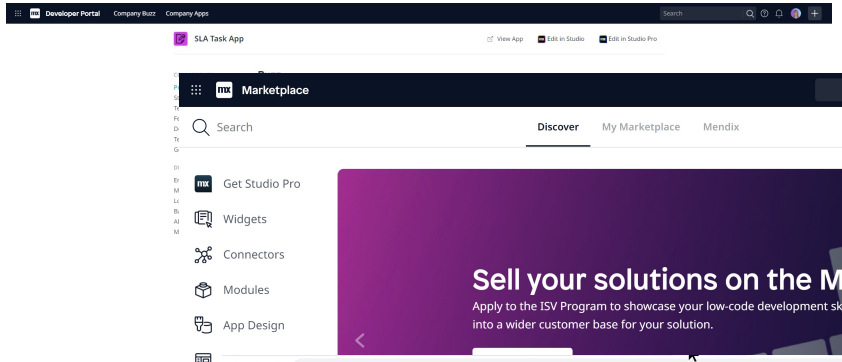
Support

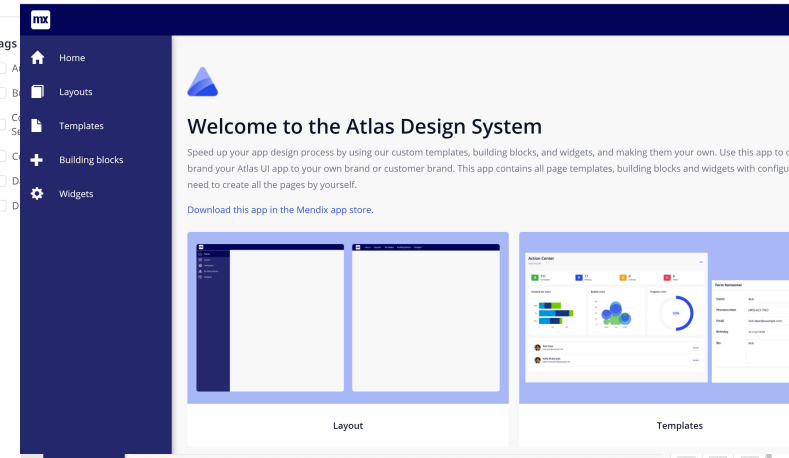
Mendix Studio

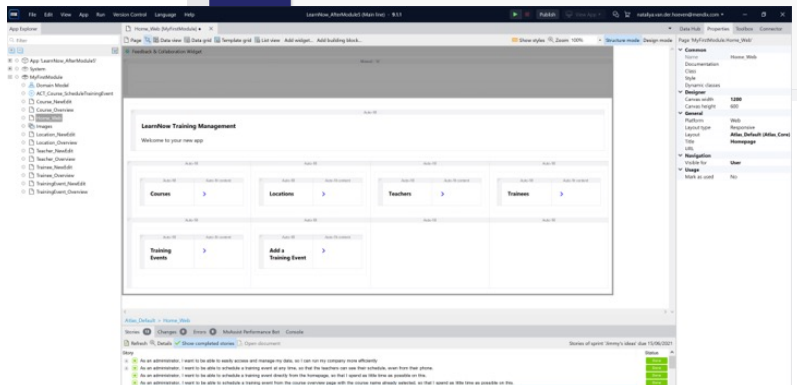
Mendix Developer

Data Hub

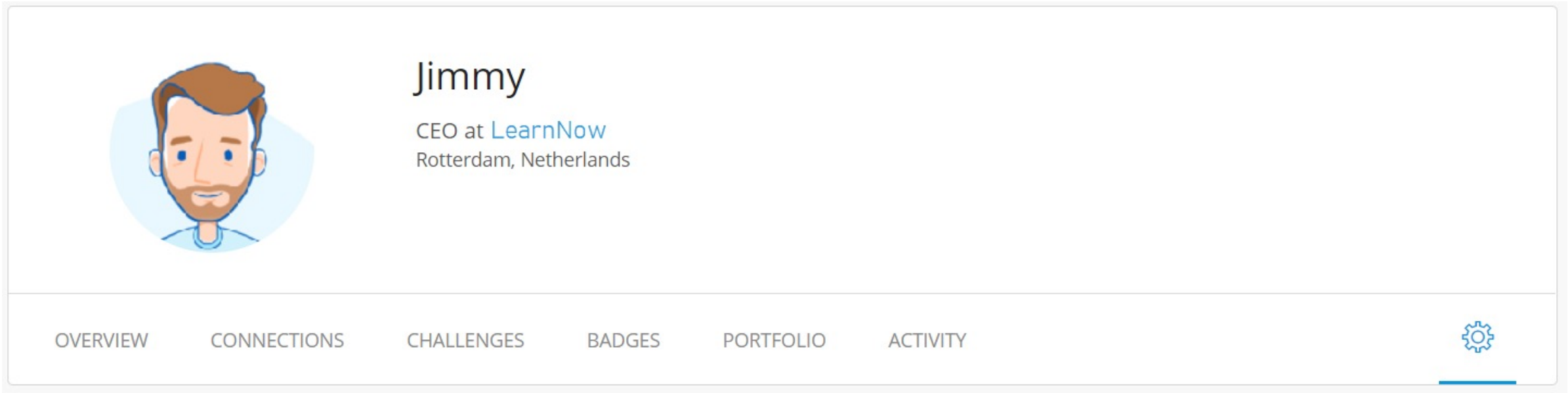
Mendix Studio Pro







创建并完善你的账号



... 并上传头像

Summary

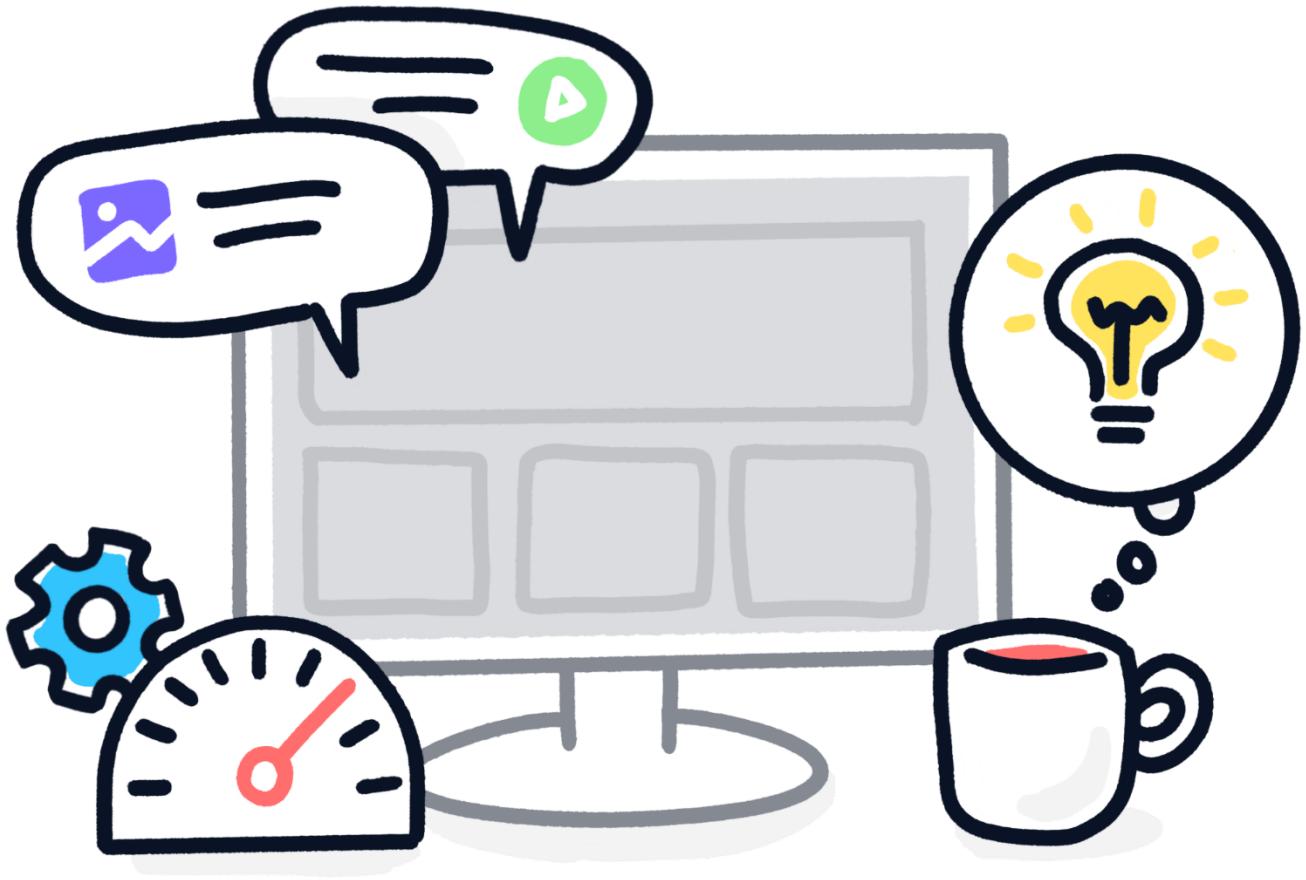
Knowledge checks

Go to kahoot.it

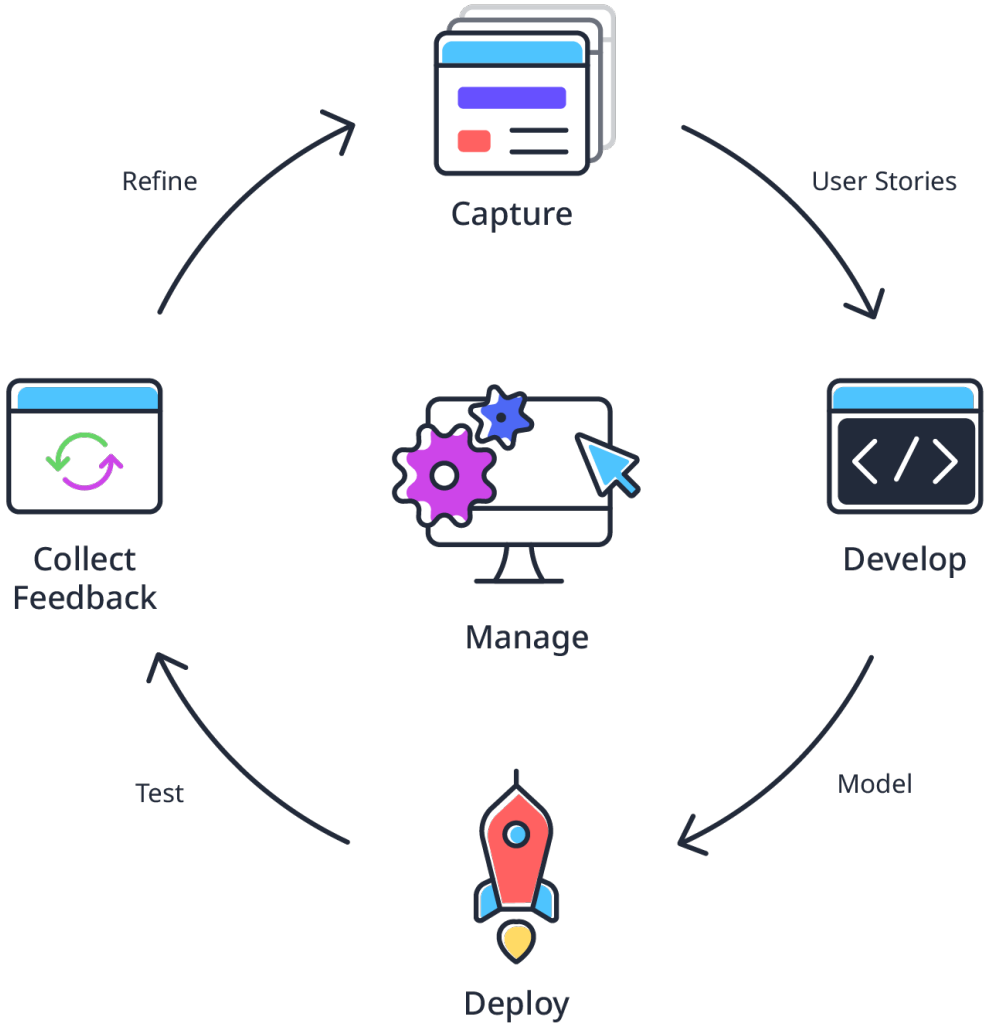
Make it together

学习目标

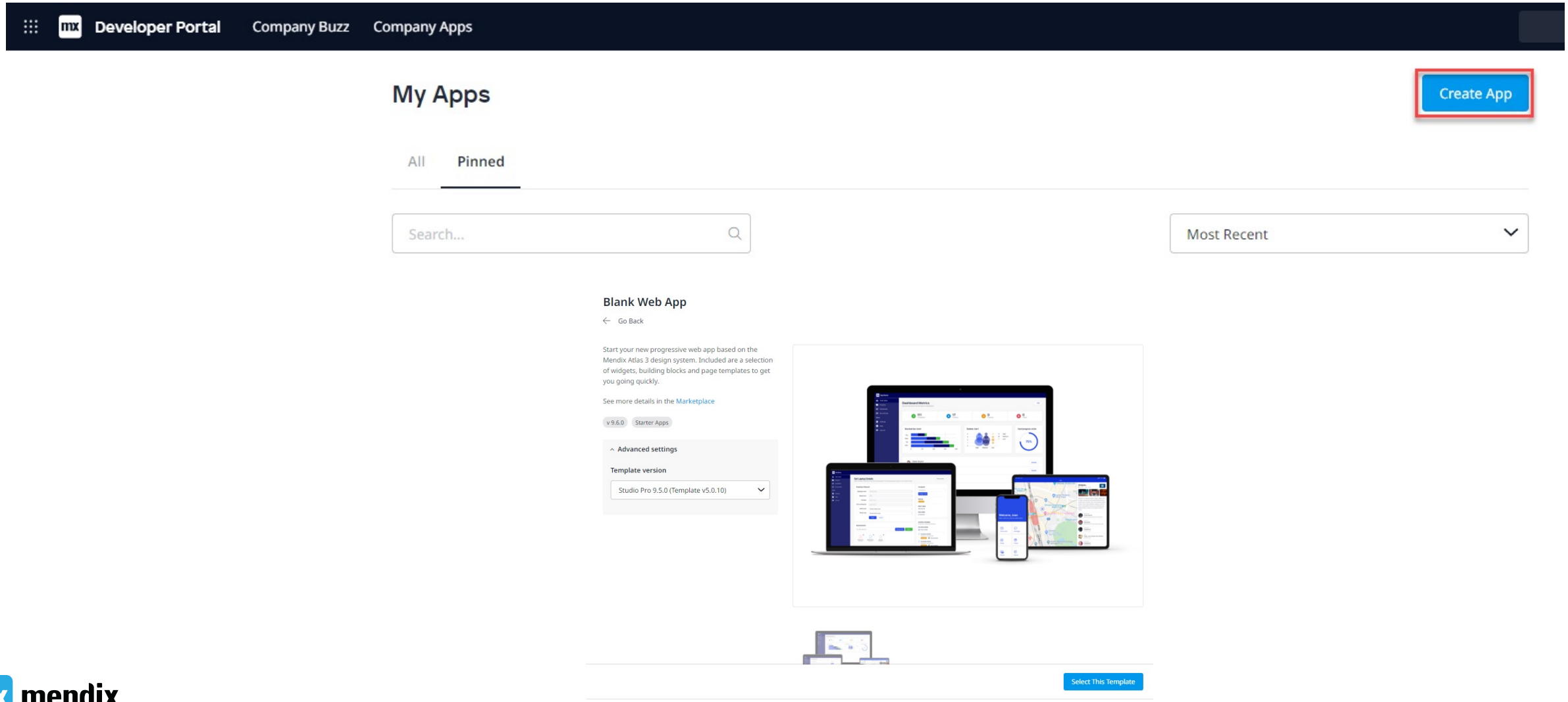
- 了解应用生命周期
- 在示例场景中运用应用生命周期管理
- 从Mendix Developer Portal创建新工程
- 理解Mendix使用的敏捷开发方法
- 向你的Mendix工程添加成员
- 创建User Stories
- 创建线框设计稿



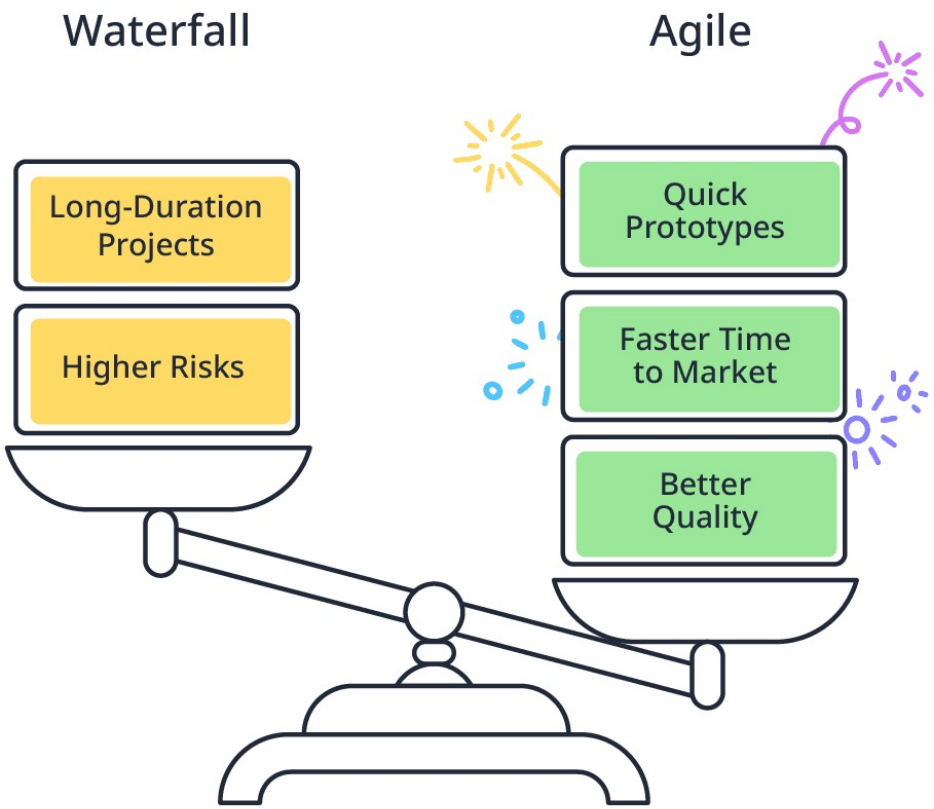
应用生命周期


Capture
User Stories
Develop
Model
Deploy
Test
Collect
Feedback
Refine
Manage

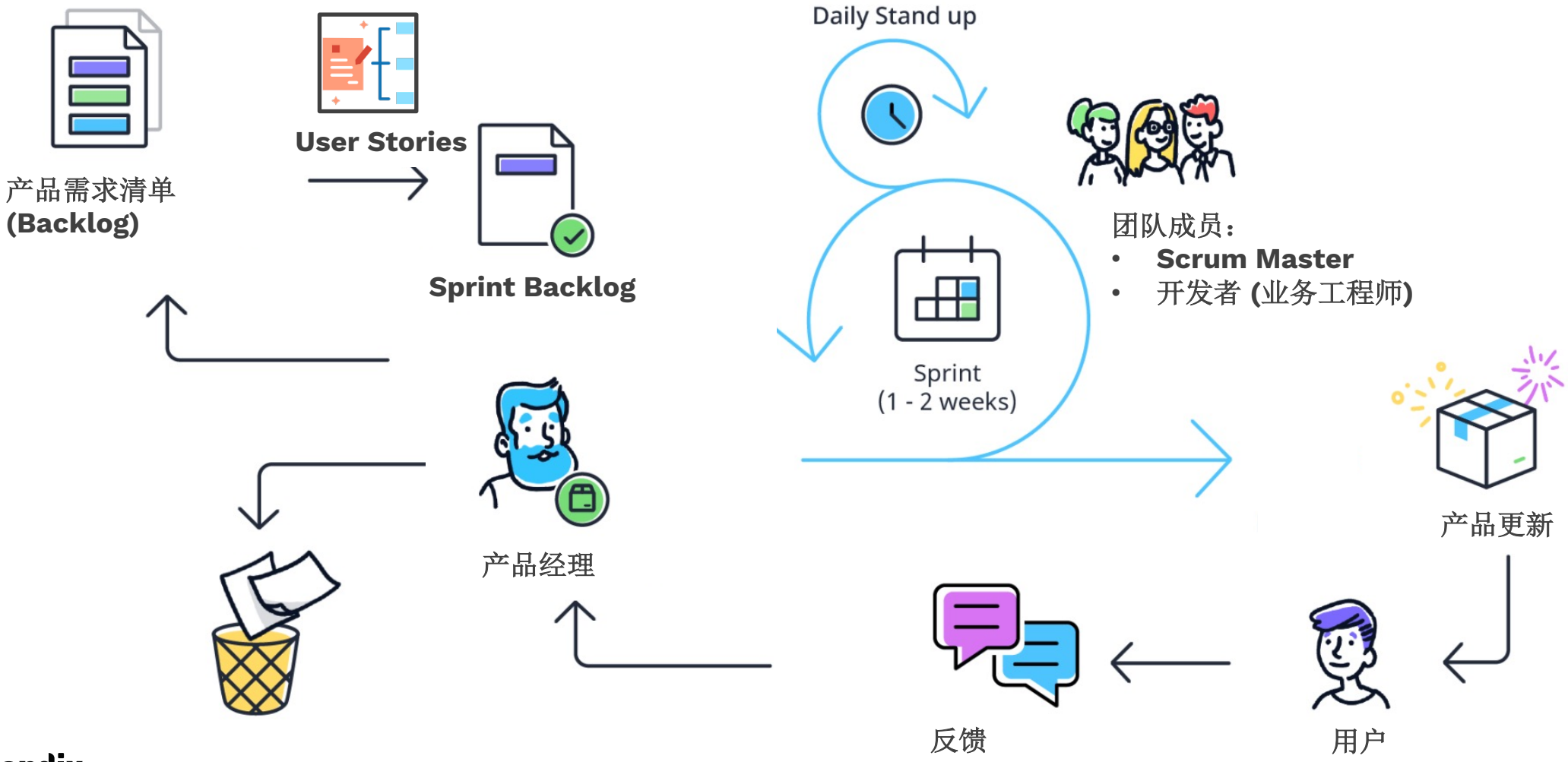
创建新应用


Developer Portal
Company Buzz
Company Apps
My Apps
Create App
All
Pinned
Search...
Most Recent
Blank Web App
Go Back
Start your new progressive web app based on the Mendix Atlas 3 design system. Included are a selection of widgets, building blocks and page templates to get you going quickly.
See more details in the Marketplace
v 9.6.0
Starter Apps
Advanced settings
Template version
Studio Pro 9.5.0 (Template v5.0.10)
Select This Template

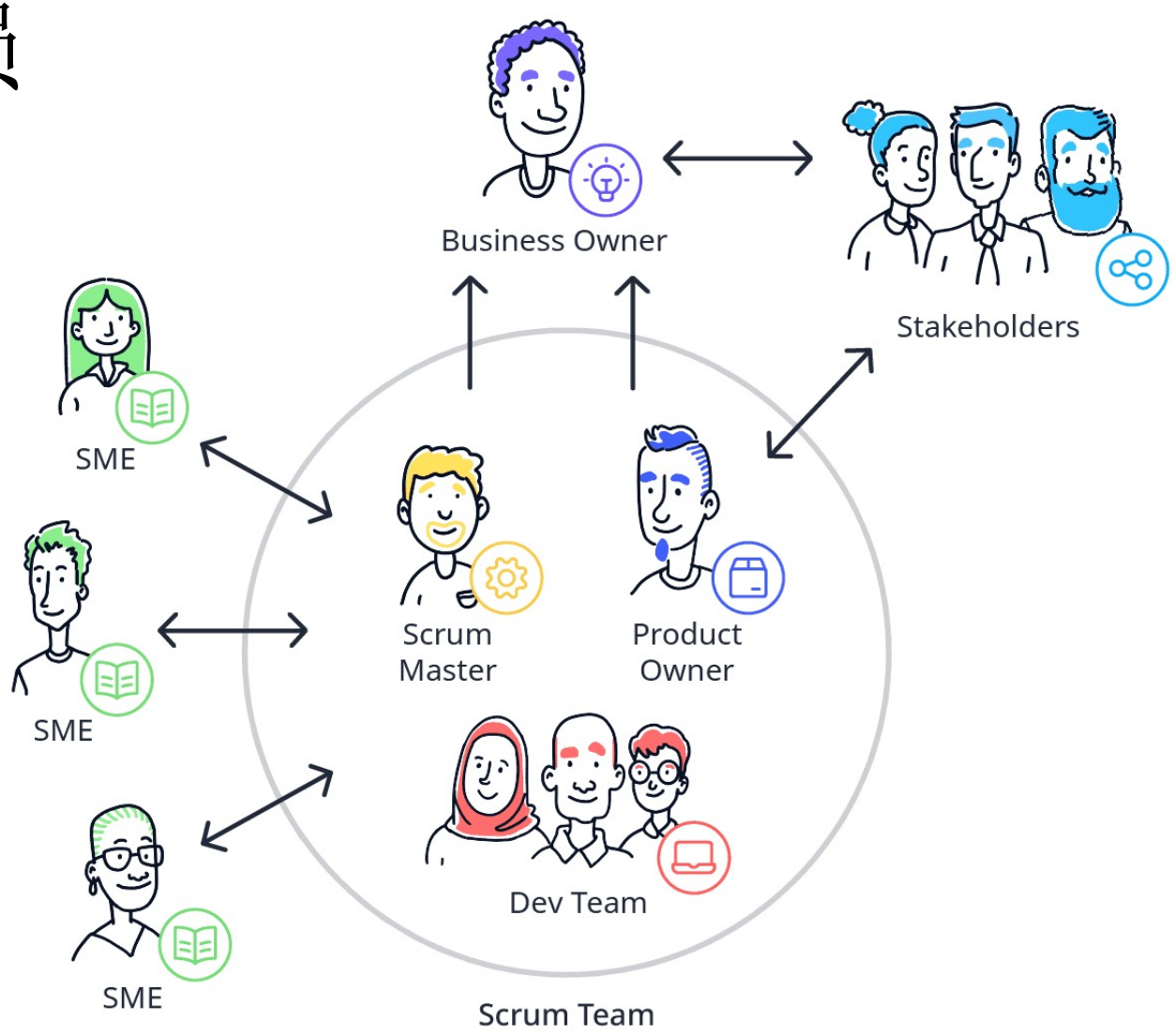
软件工程方法

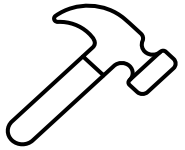

Waterfall
Agile
Long-Duration Projects
Higher Risks
Quick Prototypes
Faster Time to Market
Better Quality

敏捷流程与角色


产品需求清单
(Backlog)
User Stories
Sprint Backlog
Daily Stand up
团队成员：
• Scrum Master
• 开发者 (业务工程师)
Sprint
(1 - 2 weeks)
产品更新
产品经理
反馈
用户

项目组成员


Business Owner
Stakeholders
SME
SME
SME
Scrum Master
Product Owner
Dev Team
Scrum Team



邀请团队成员

COLLABORATE

- Project Buzz
- Stories
- Team
- Feedback
- Documents
- Team Server
- General Settings

DEPLOY

- Environments
- Metrics
- Logs
- Backups
- Alerts
- Mobile App

Team

Search...

Role settings | Change log | Invite member

User	Role	
Nataliya van der Hoeven Mendix	SCRUM Master	Remove Member
Jimmy	Business Engineer	Remove Member

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User Stories

- 拆解的产品需求
- 描述需求对于产品用户的价值
- 以Story point衡量复杂度

作为 管理员, 我希望 能新增培训事件, 以便于 我及时维护培训计划.

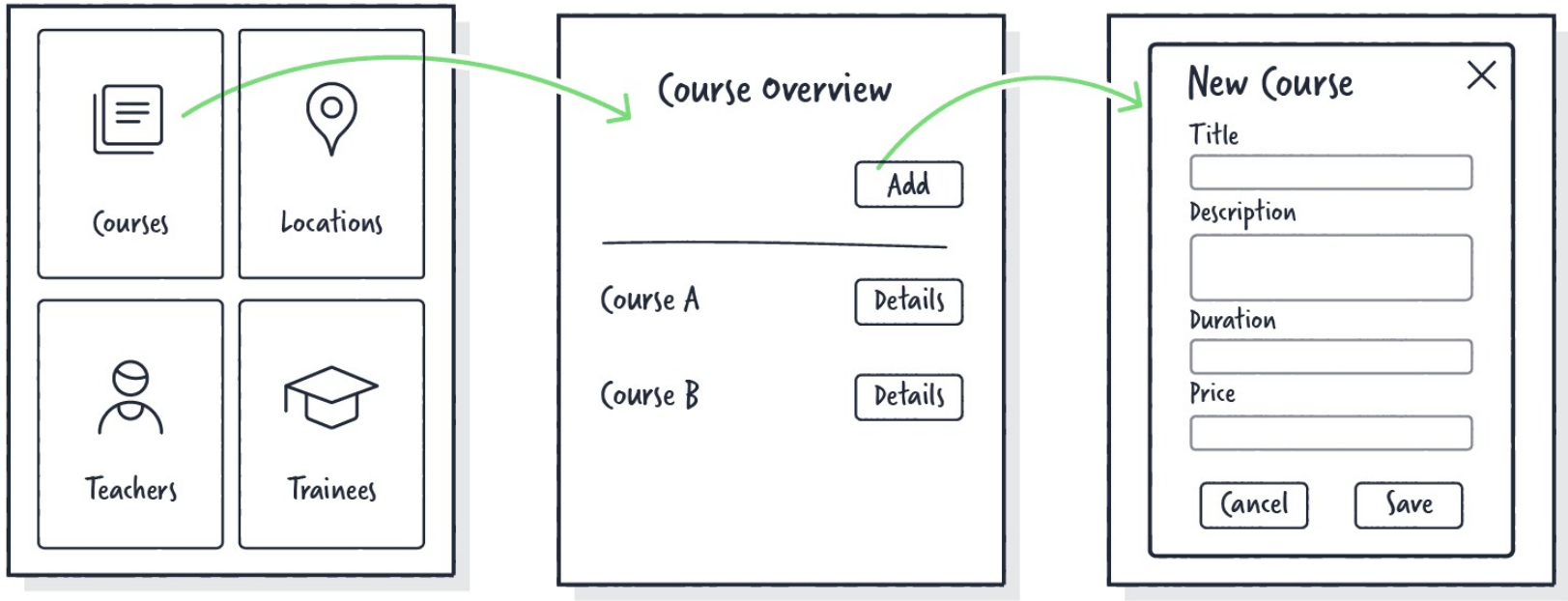
```
As a <user type>, I want <what>, so that <business value>.
```

我们的虚拟场景: LearnNow 培训机构

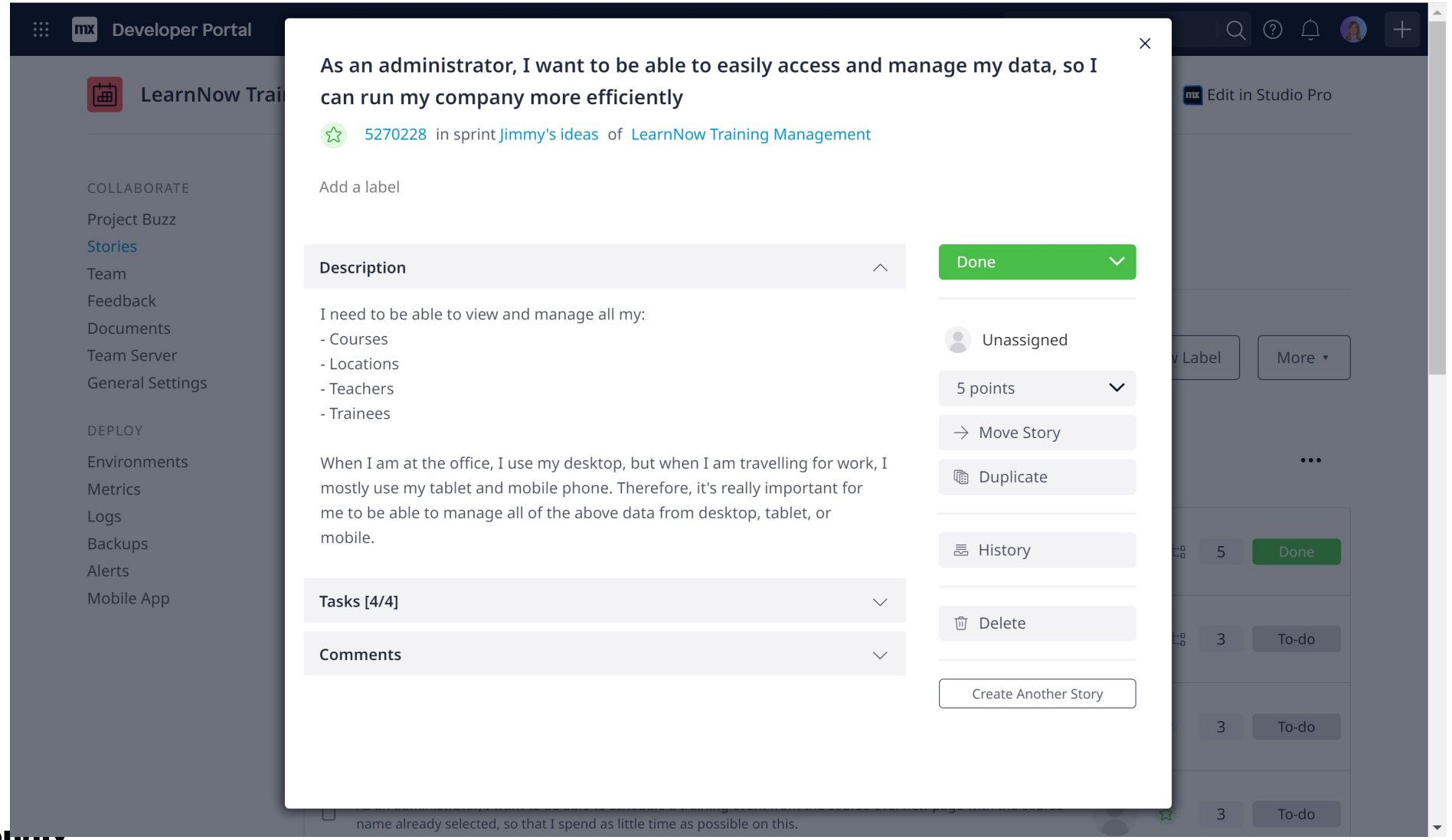
Jimmy 是培训机构 LearnNow 公司的总监。他一直使用Excel来管理公司提供的培训课程。

随着公司规模的扩大，他发觉使用现有工具管理内容逐渐变得吃力。

创建线框图

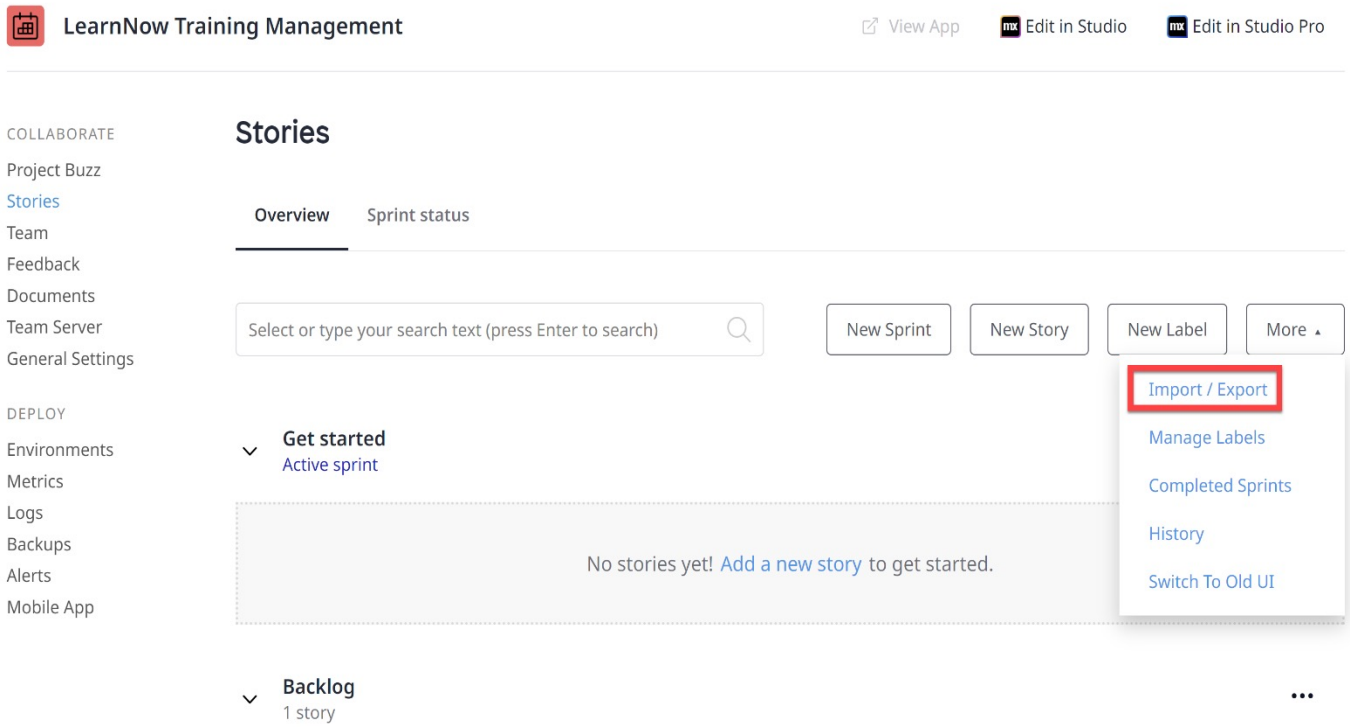

Courses
Locations
Teachers
Trainees
Course Overview
Add
Course A
Details
Course B
Details
New Course
Title
Description
Duration
Price
Cancel
Save

添加用户故事


Developer Portal
LearnNow Trai
COLLABORATE
Project Buzz
Stories
Team
Feedback
Documents
Team Server
General Settings
DEPLOY
Environments
Metrics
Logs
Backups
Alerts
Mobile App
Edit in Studio Pro
Label
More
As an administrator, I want to be able to easily access and manage my data, so I can run my company more efficiently
5270228 in sprint Jimmy's ideas of LearnNow Training Management
Add a label
Description
I need to be able to view and manage all my:
- Courses
- Locations
- Teachers
- Trainees
When I am at the office, I use my desktop, but when I am travelling for work, I mostly use my tablet and mobile phone. Therefore, it's really important for me to be able to manage all of the above data from desktop, tablet, or mobile.
Tasks [4/4]
Comments
Done
Unassigned
5 points
Move Story
Duplicate
History
Delete
Create Another Story
5
Done
3
To-do
3
To-do
3
To-do
name already selected, so that I spend as little time as possible on this.

添加用户故事

- 导入 user stories
- 完成 ‘Get Started’ sprint



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Summary

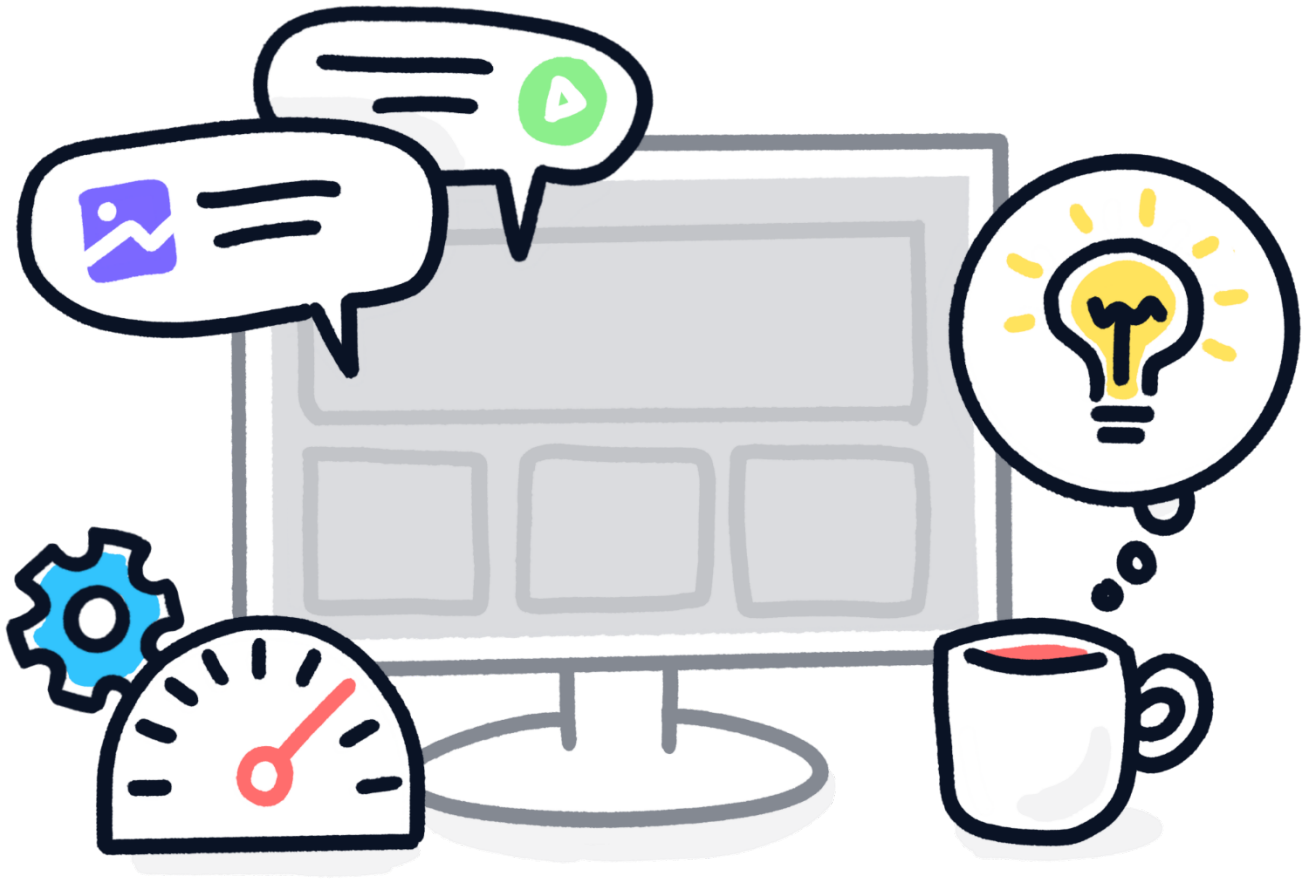
Knowledge checks

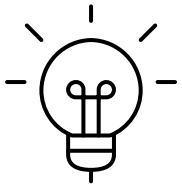
Go to kahoot.it

Make it w/ Mendix Studio

学习目标

- 了解 Mx Studio
- 为 LearnNow app 创建首页
- 设置页面布局
- 了解页面创建的规则
- 使用 building blocks 并设置控件属
- 理解首页与overview页面的区别与联系
- 设置导航菜单

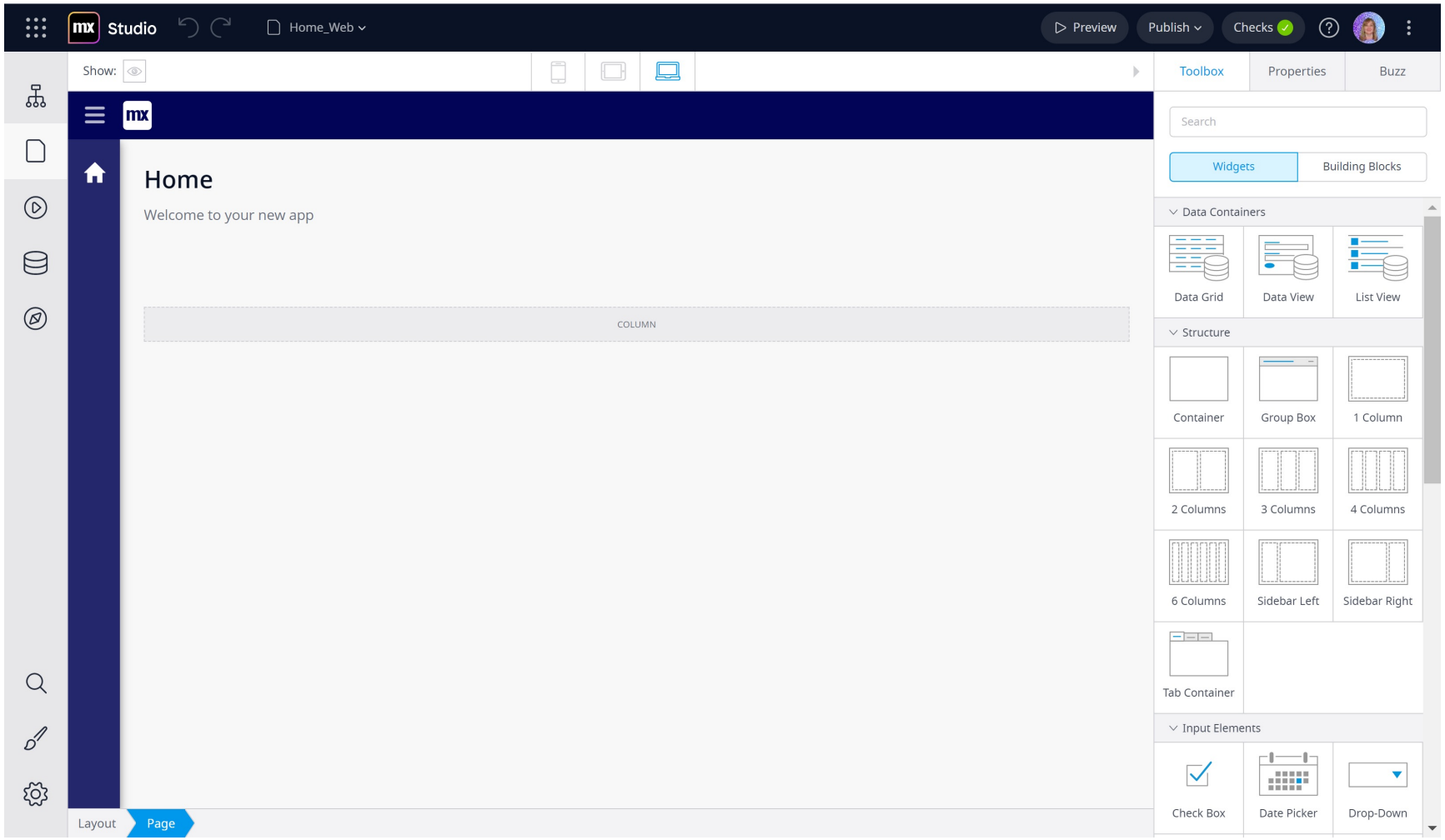




User Story 1

As an administrator, I want to be able to easily access and manage my data, so I can run my company more efficiently.

在Mendix Studio中打开应用



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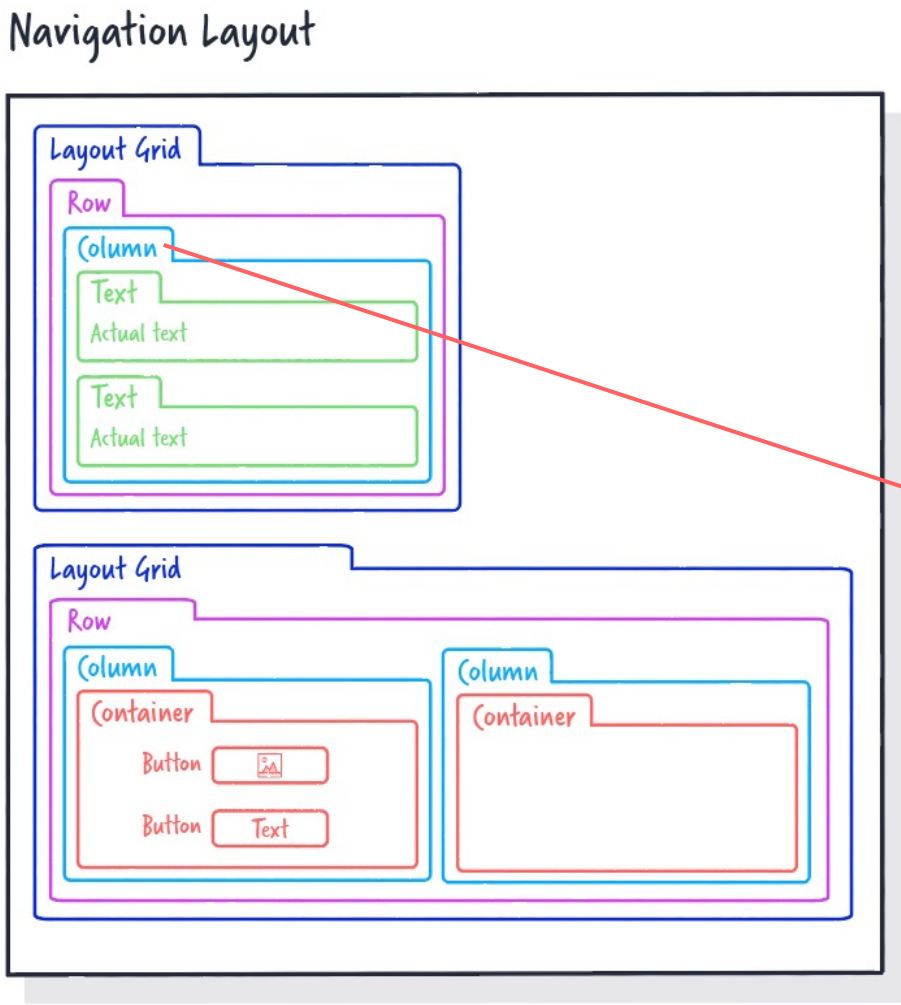
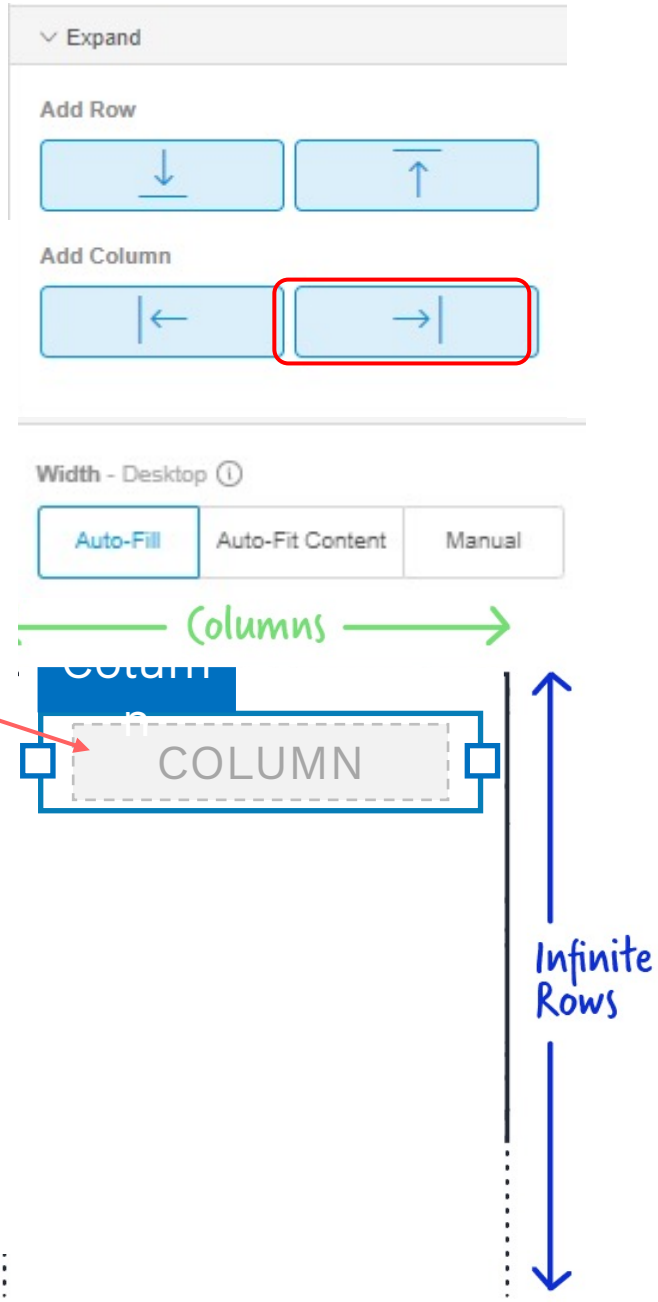
多列视图

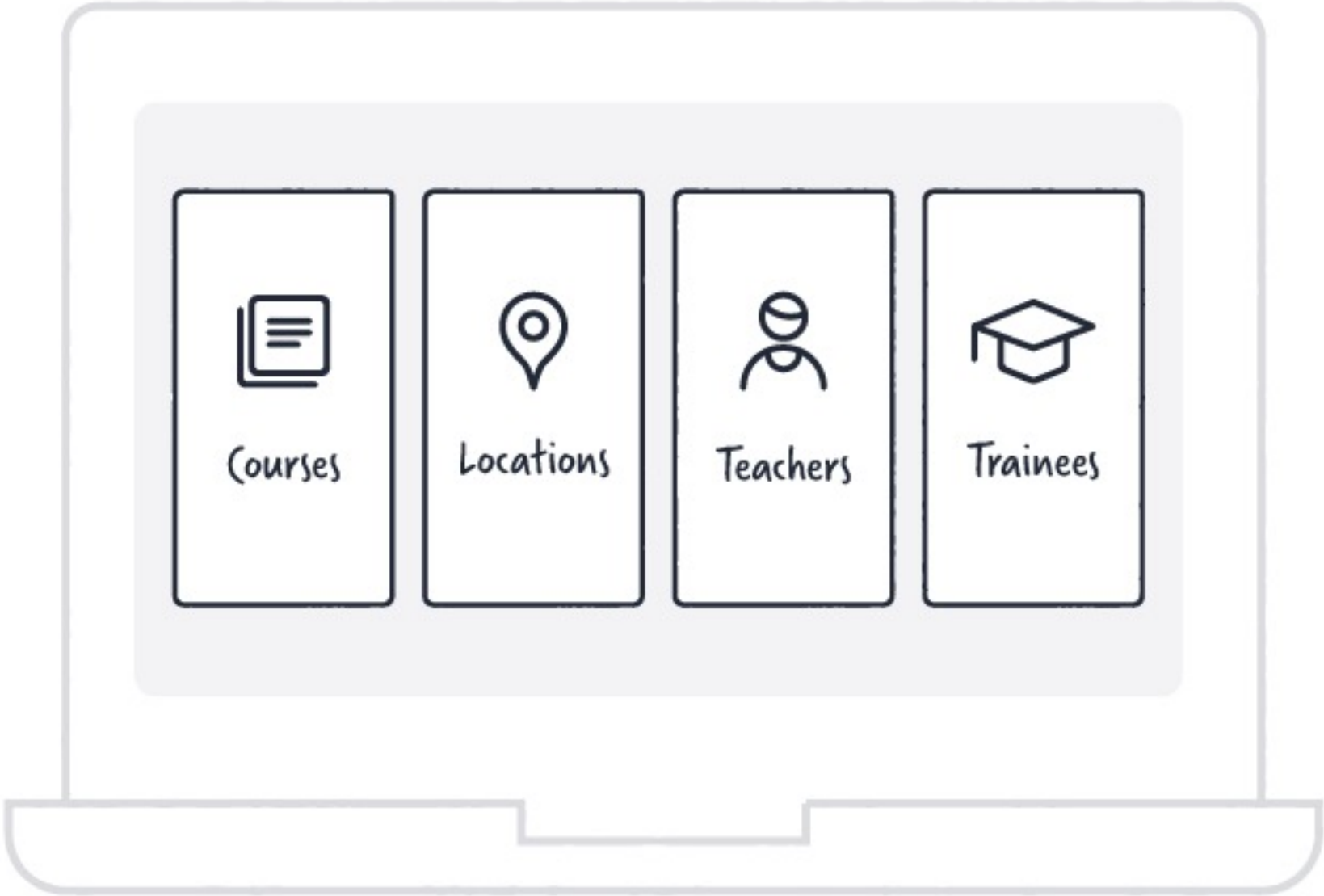
- Layout grid
- Containers
- Widgets





创建首页

1. 打开 Home page
2. 创建页面布局
3. 添加按钮
4. 添加页面
   - Layout: Atlas_Default
   - Template: List
   - 命名规则:
     - Course_Overview
     - Location_Overview
     - Teacher_Overview
     - Trainee_Overview
5. 链接按钮至页面



Summary

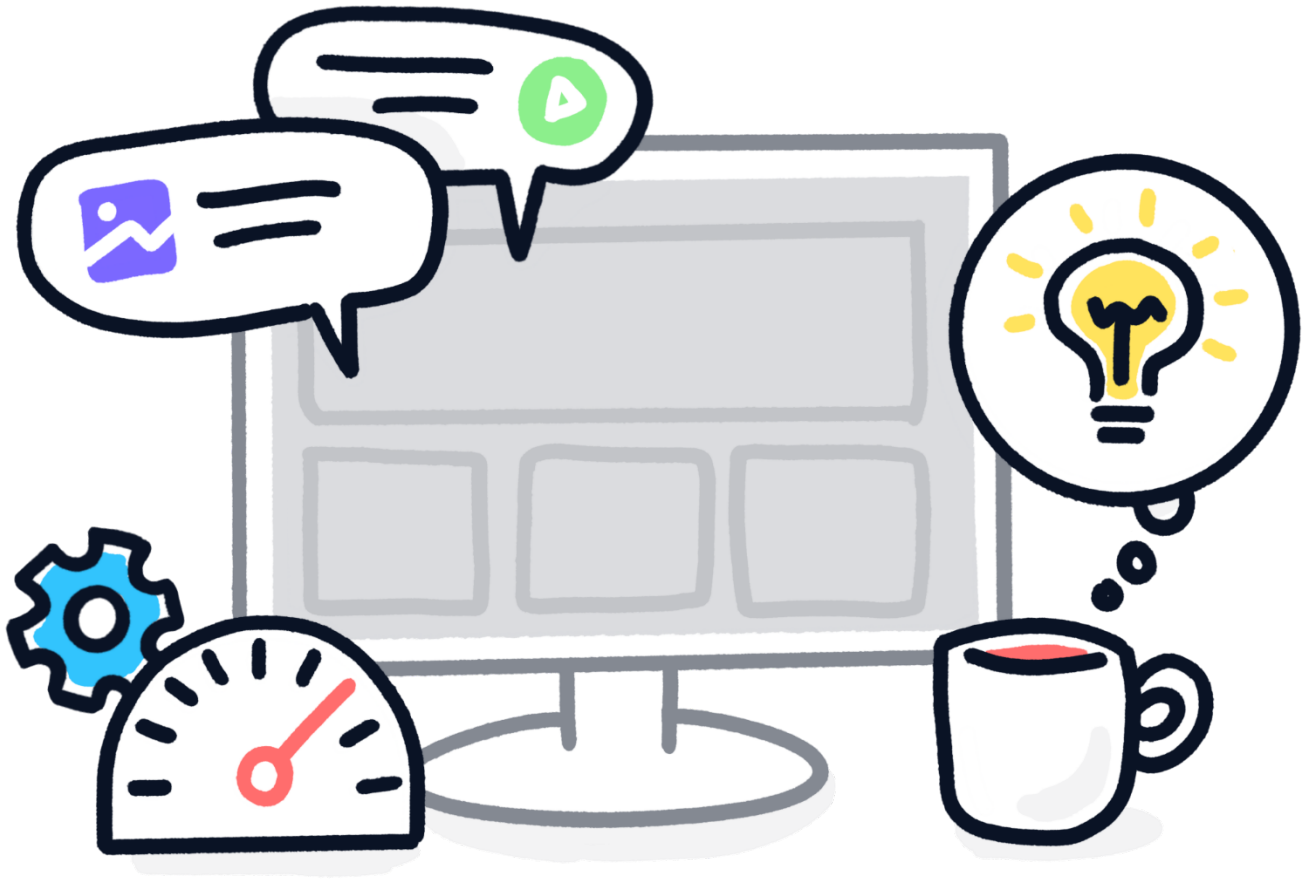
Knowledge checks

Go to kahoot.it

Make it dynamic

学习目标

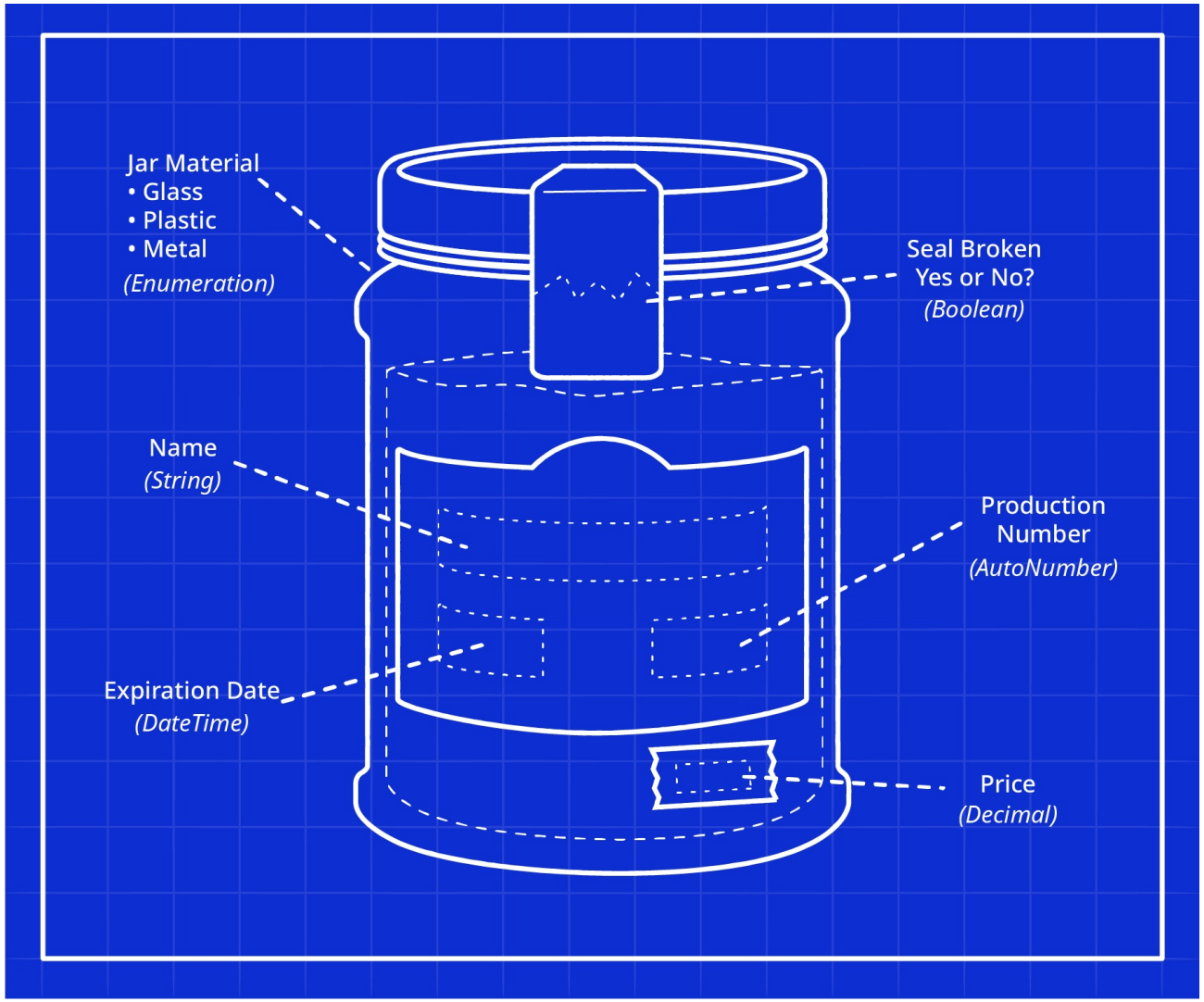
- 理解动态数据
- 使用实体与属性
- 显示动态数据
- 理解并使用对象（Object）
- 理解域模型（Domain Model）
- 理解概览页与详情页的不同



实体与属性

命名规则：

- 以单数形式的名词命名
- 驼峰式大小写命名（CamelCase）



定义属性类型

Course Entity

Attributes	Example	Attribute type
Title		
Description		
Duration (in days)		
Price		

Location Entity

Attributes	Example	Attribute type
Name		
Address		

Teacher Entity

Attributes	Example	Attribute type
Name		
Email Address		

Trainee Entity

Attributes	Example	Attribute type
Name		
Address		
Email Address		

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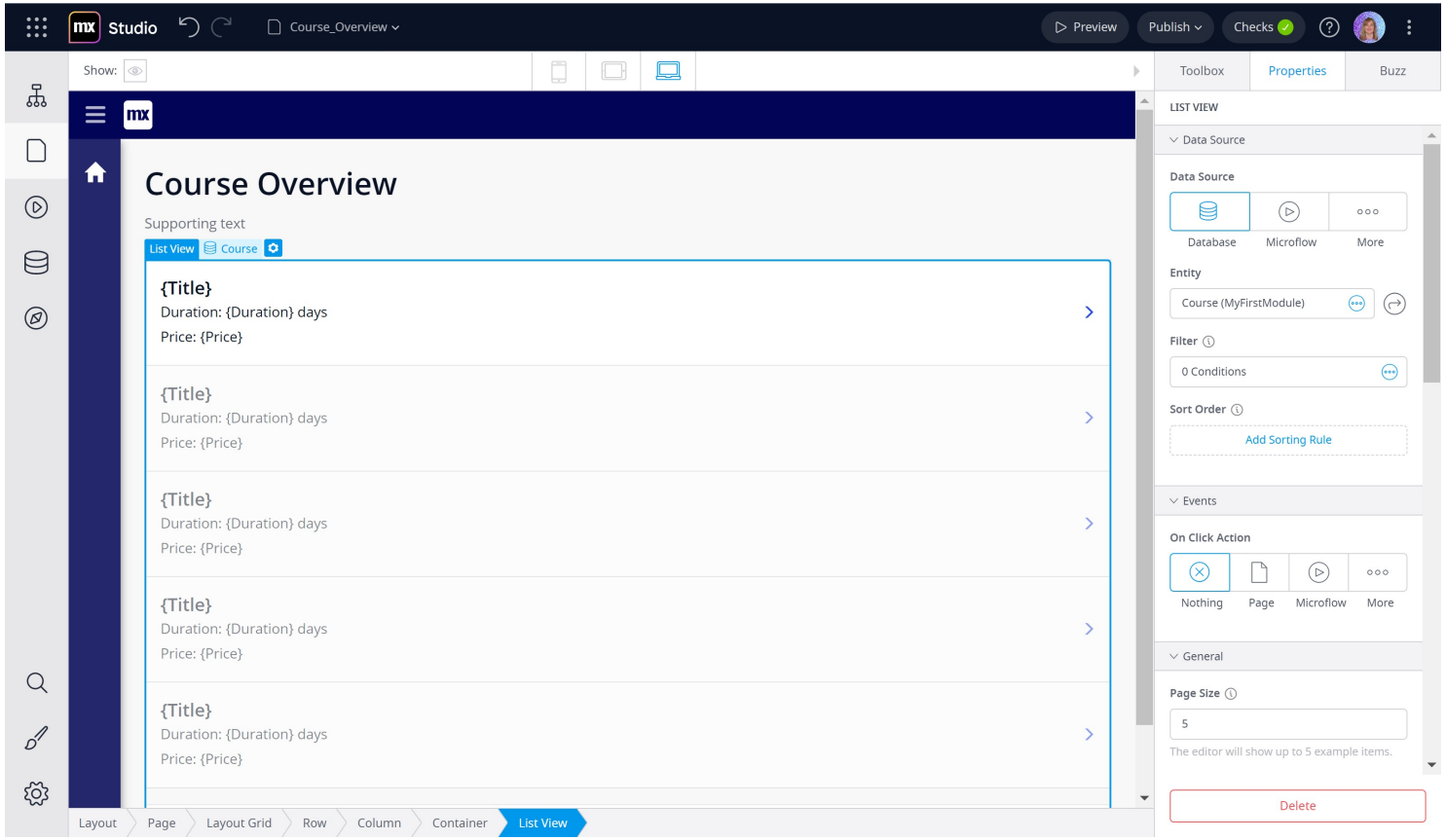
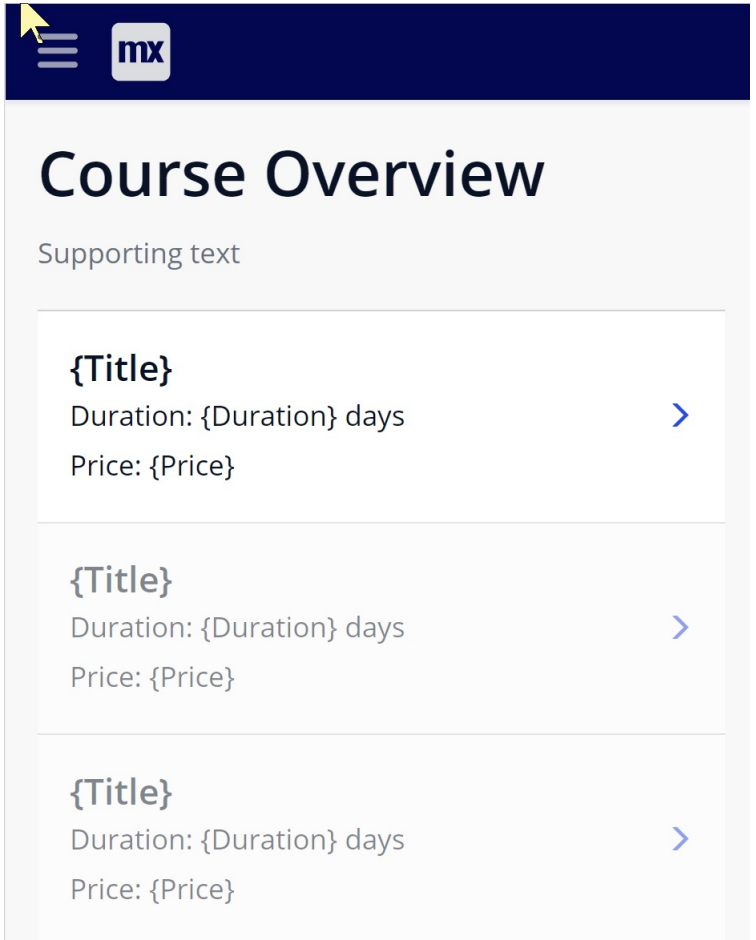
向页面添加动态数据





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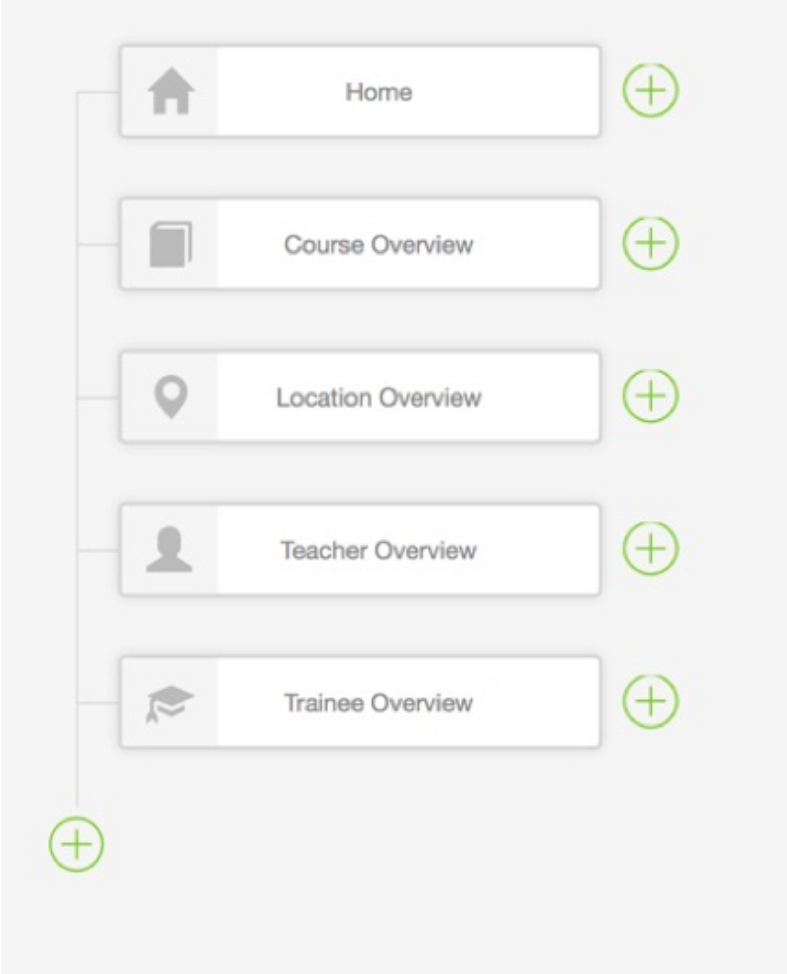
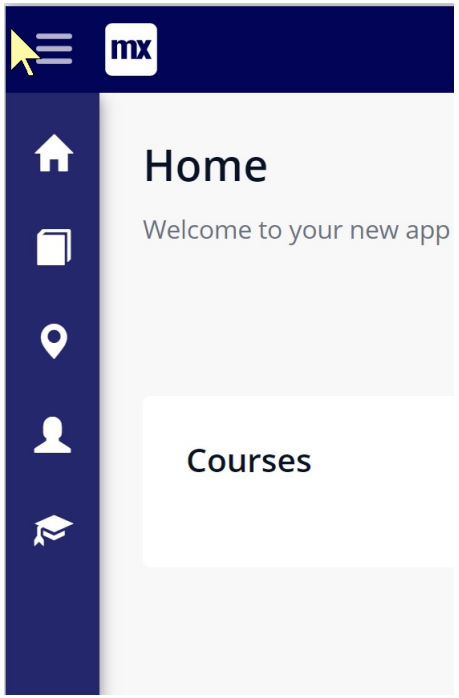
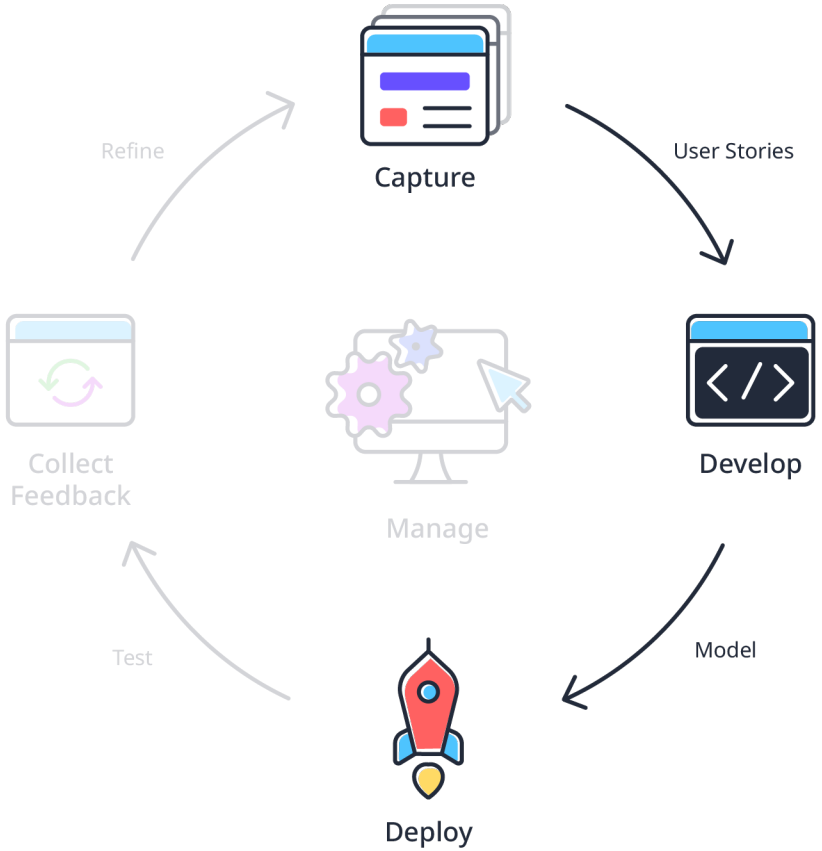
创建导航菜单


Home
Course Overview
Location Overview
Teacher Overview
Trainee Overview


mx
Home
Welcome to your new app
Courses

预览你的应用


Capture
User Stories
Develop
Model
Deploy
Test
Collect Feedback
Refine
Manage

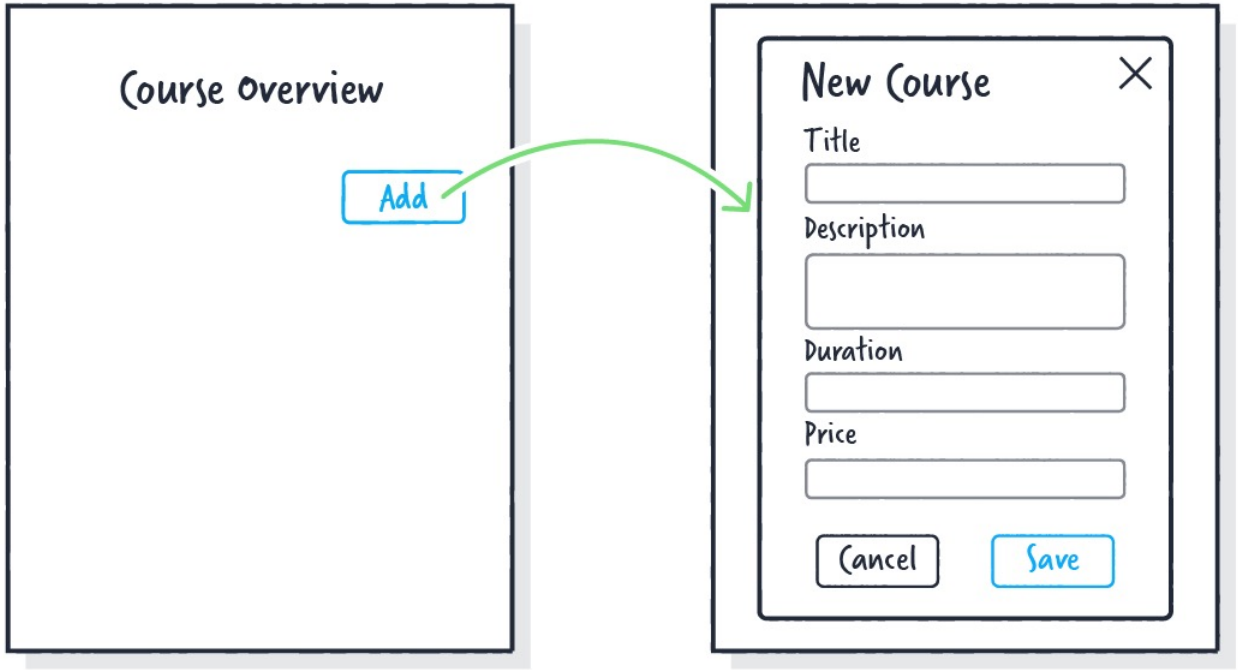
对象

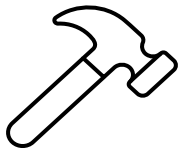
- 实体 + 属性 = 蓝图
- 对象是实体的实例

创建添加功能

- 步骤 1:
  - 在页面头部添加一列
  - 在页头中添加 Create Object 按钮
    - 设置标题（Caption）为 Add
    - 设置风格（Style）为 Success
  - 链接按钮至相应实体

- 步骤 2:
  - 创建详情页
    - Layout: PopupLayout
    - Template: Form Vertical
    - 命名规则：Entity_NewEdit

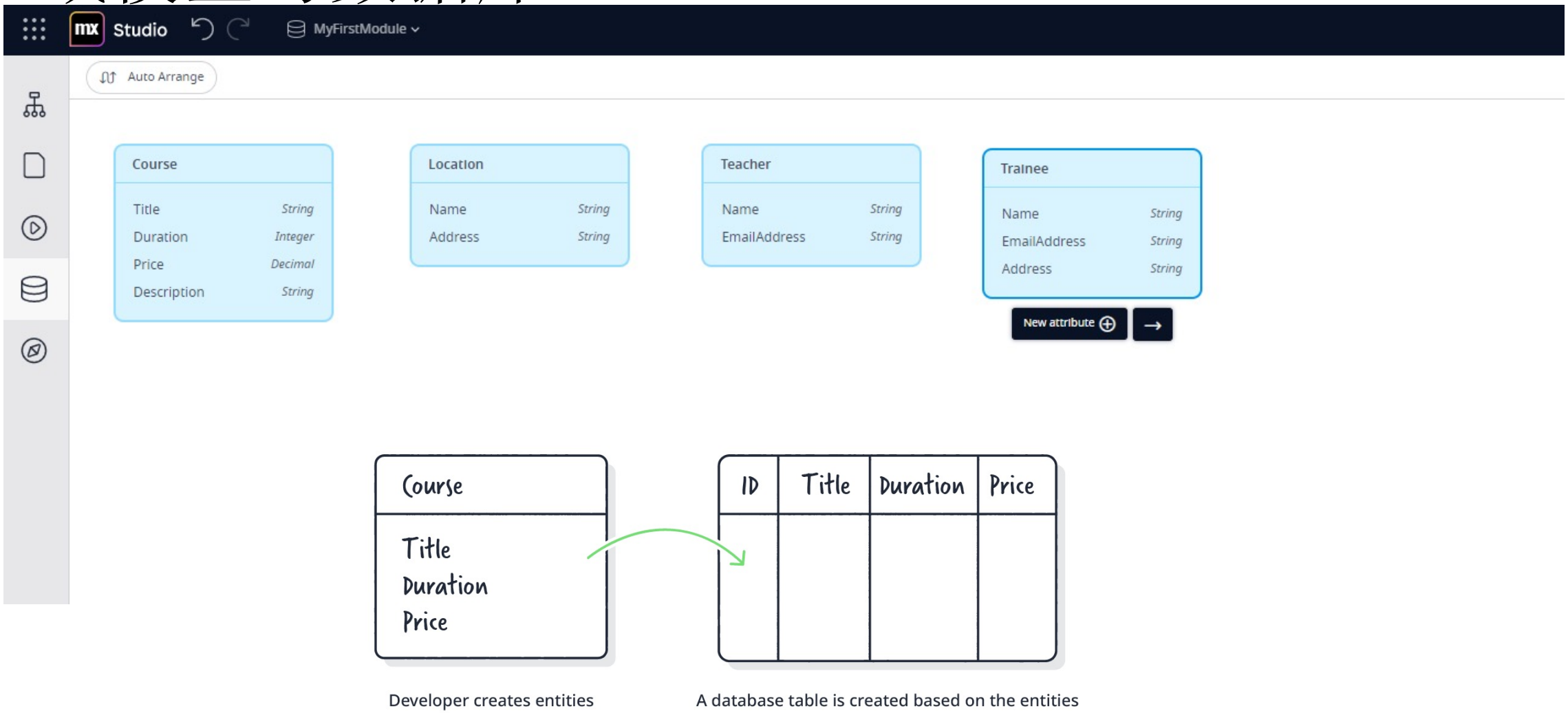




预览你的应用

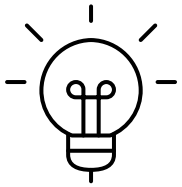
- 点击预览按钮
- 在移动端预览你的应用
- 将相应的 user story 设置为完成状态

域模型与数据库



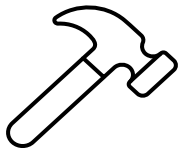
Developer creates entities

A database table is created based on the entities



User Story 2

As an administrator, I want to be able to schedule a training event at any time, so that the teachers can see their schedule, even from their phone



拓展域模型

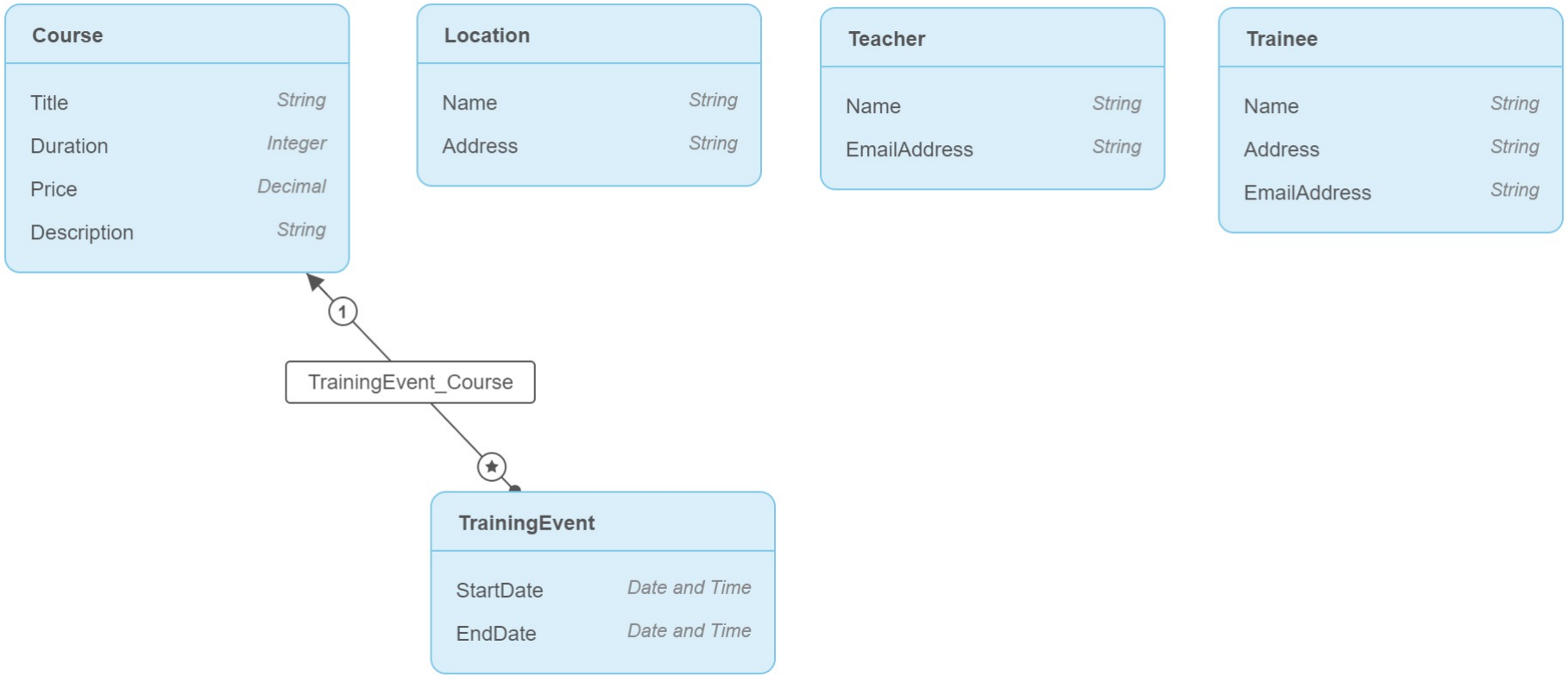
1. 在域模型中添加一个新实体：TrainingEvent
2. 添加 StartDate 与 EndDate 属性

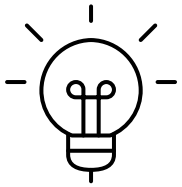
关联

- 1对多，One-to-Many (1 - *)
- 1对1，One-to-One (1 – 1)
- 多对多，Reference Set (* - *)

命名规则: Entity1_Entity2

添加关联

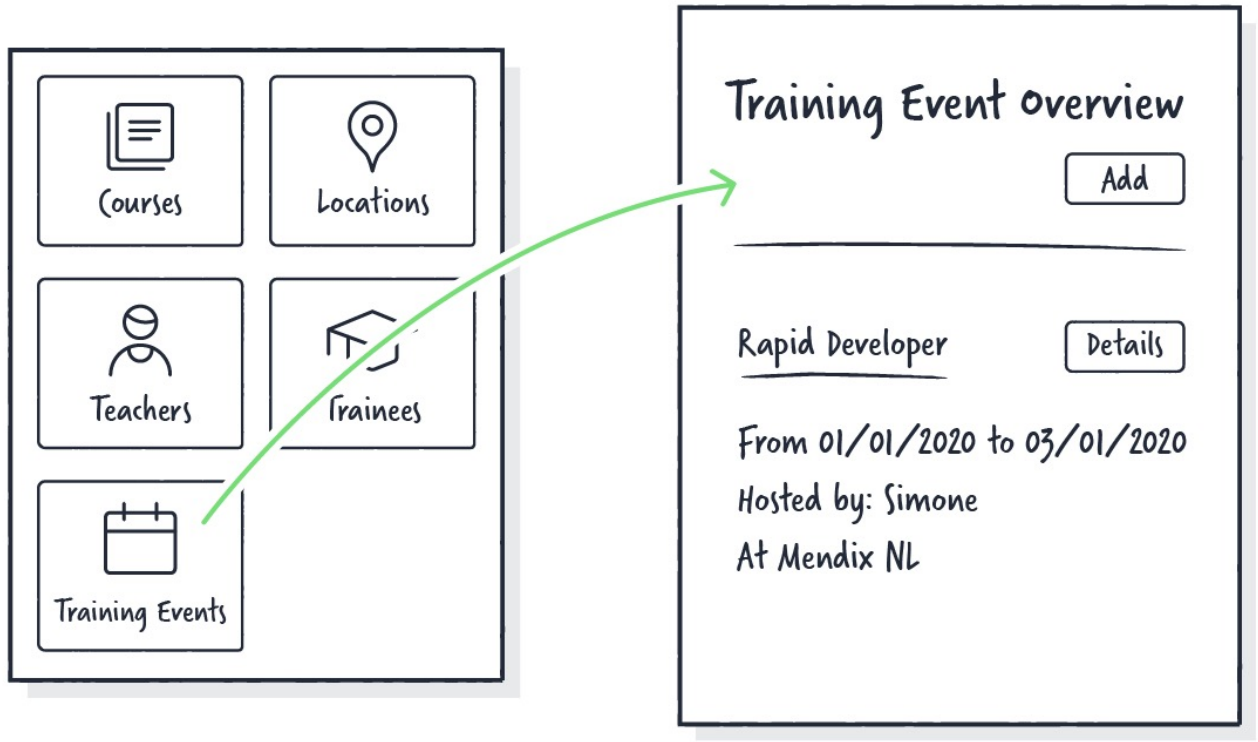

Course
Title String
Duration Integer
Price Decimal
Description String
Location
Name String
Address String
Teacher
Name String
EmailAddress String
Trainee
Name String
Address String
EmailAddress String
1
TrainingEvent_Course
TrainingEvent
StartDate Date and Time
EndDate Date and Time

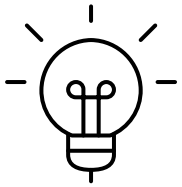


User Story 2

As an administrator, I want to be able to schedule a training event at any time, so that the teachers can see their schedule, even from their phone

使用下拉菜单

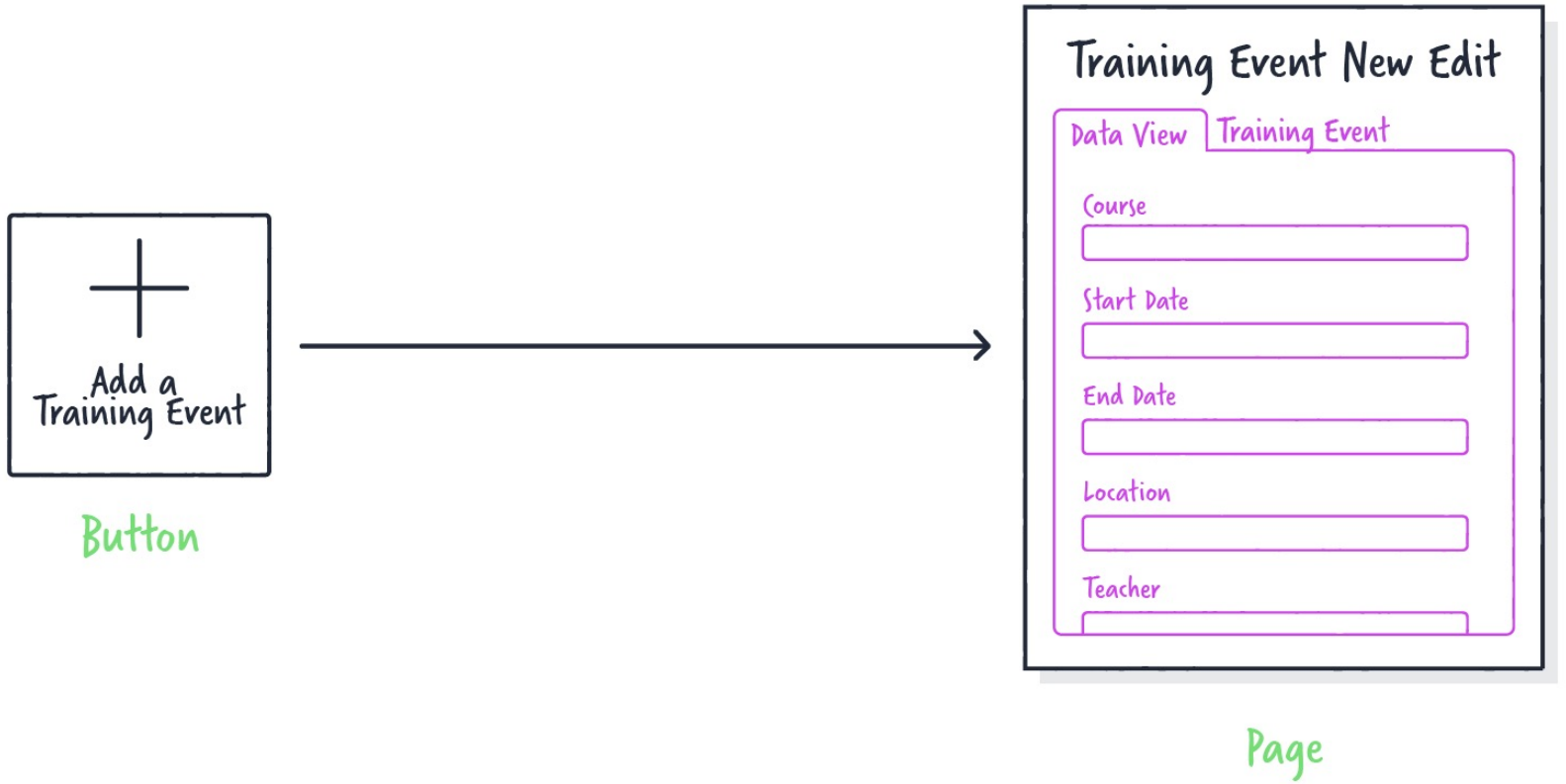

Courses
Locations
Teachers
Trainees
Training Events
Training Event overview
Add
Rapid Developer
Details
From 01/01/2020 to 03/01/2020
Hosted by: Simone
At Mendix NL



User Story 3

As an administrator, I want to be able to schedule a training event directly from the homepage, so that I spend as little time as possible on this.

从首页新建培训事件


Add a Training Event
Button
Training Event New Edit
Data View
Training Event
Course
Start Date
End Date
Location
Teacher
Page

Summary

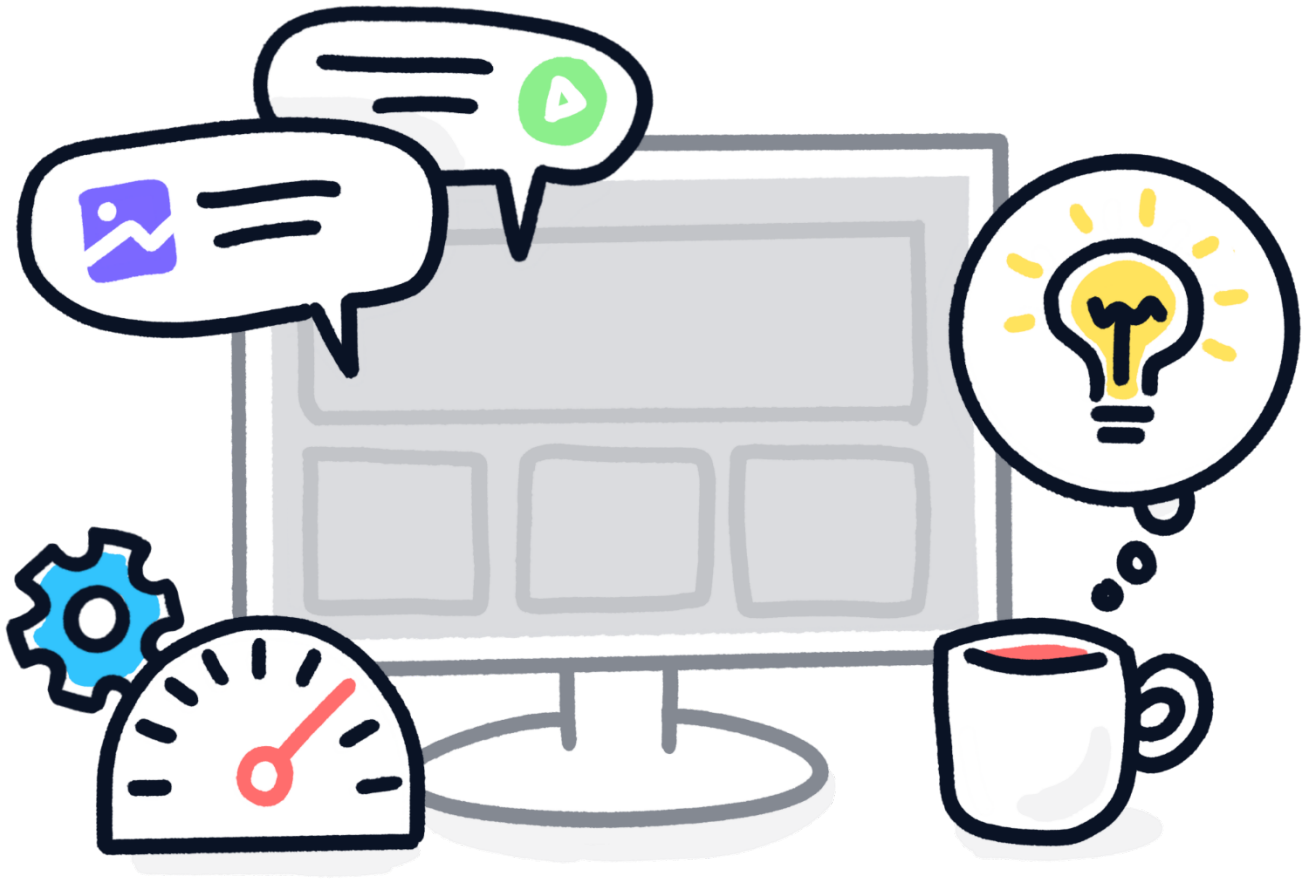
Knowledge checks

Go to kahoot.it

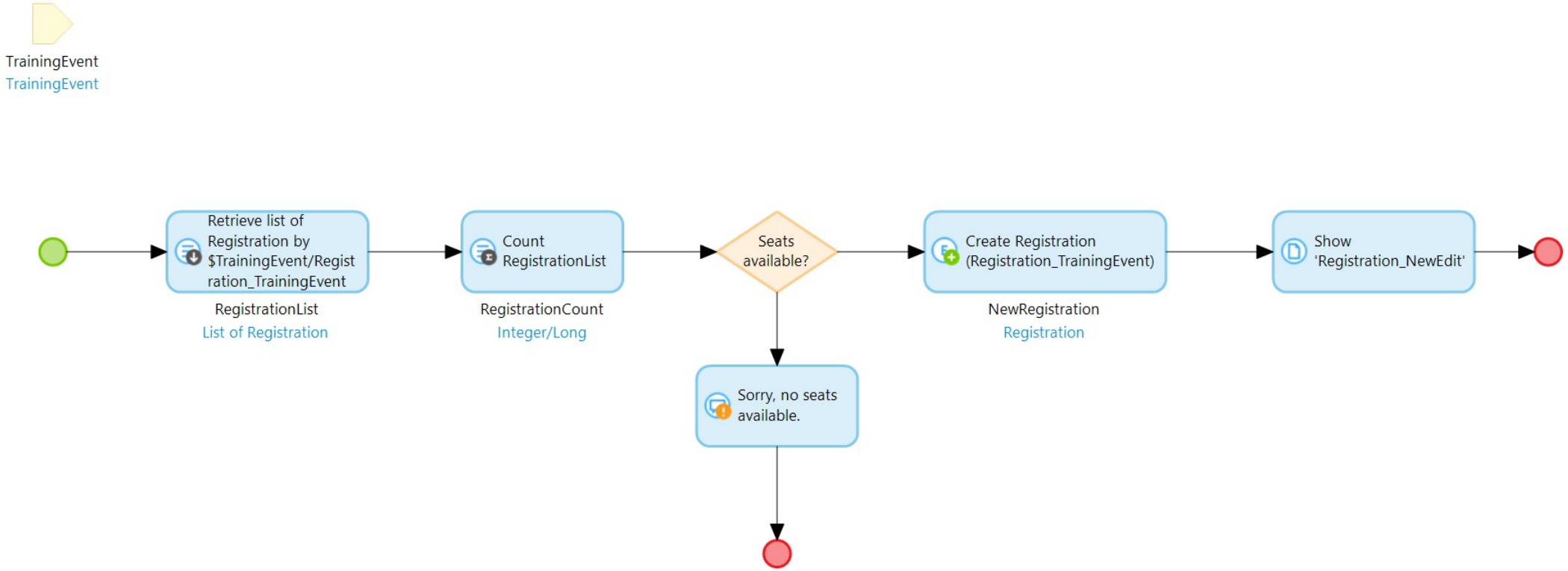
Make it automated

学习目标

- 了解自定义逻辑的价值
- 了解微流可包含的元素
- 学习创建微流



这是一个微流，
你能看明白它在做什么吗？

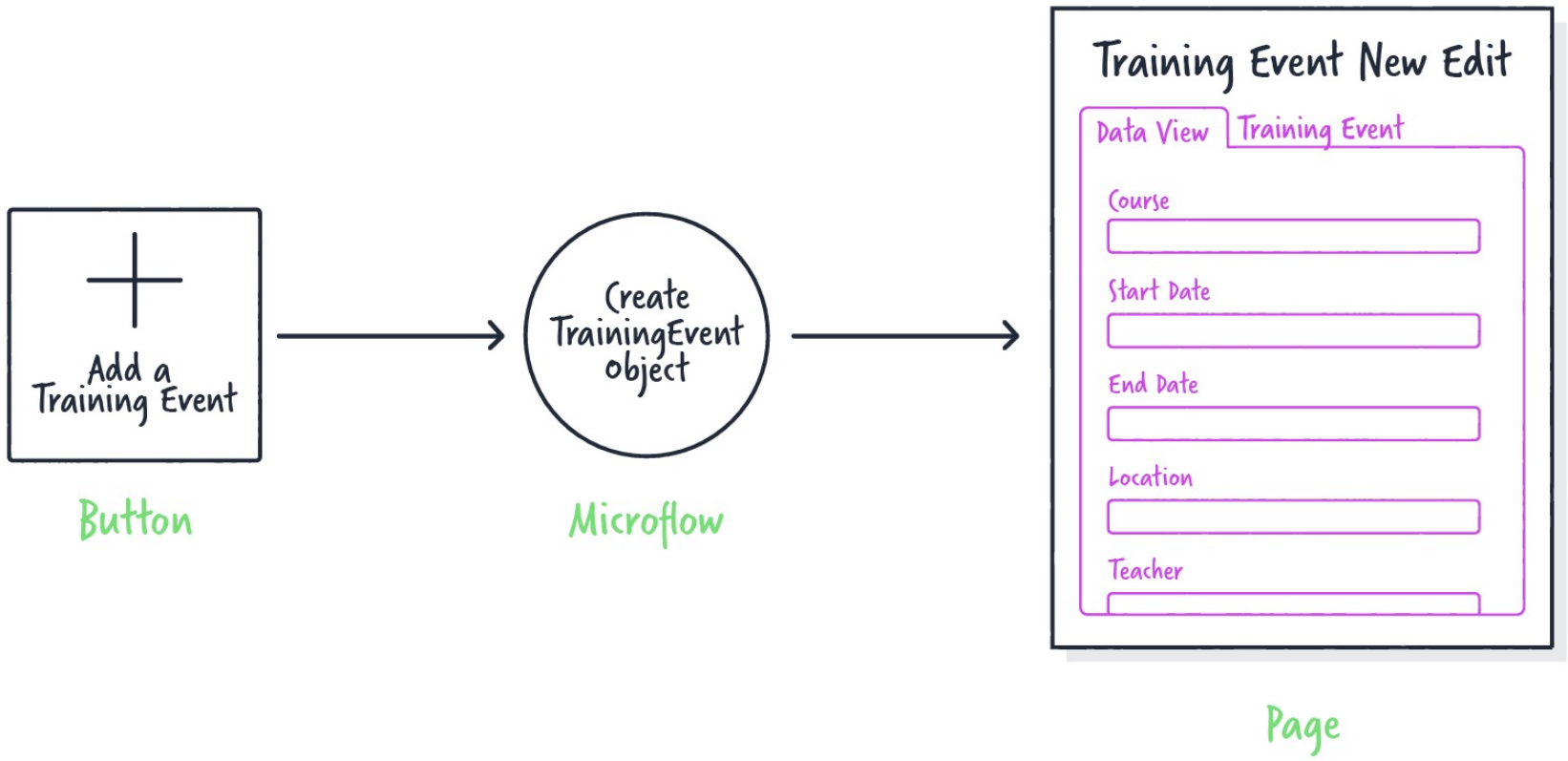


微流

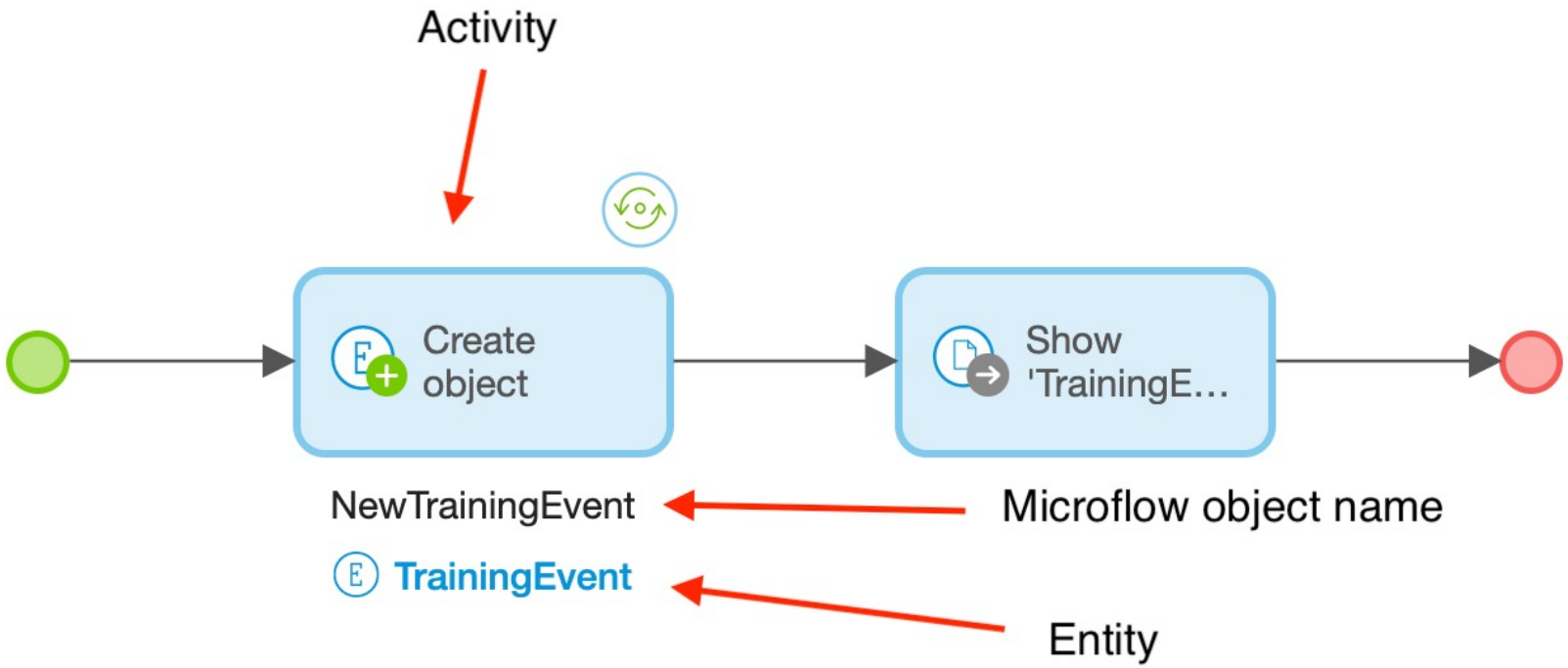
- 微流为您的应用程序添加逻辑。 逻辑用于使您的应用程序更智能、自动化并使其可维护。

- 你可以用微流来：
  - 扩展或改变默认行为
  - 处理特殊的业务流程
  - 集成外部系统、数据库、web服务等

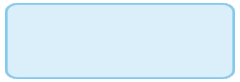
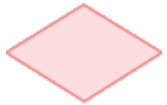
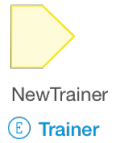
微流示例

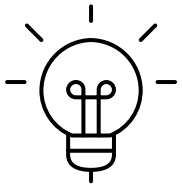

Add a Training Event
Button
Create TrainingEvent object
Microflow
Training Event New Edit
Data View
Training Event
Course
Start Date
End Date
Location
Teacher
Page

从首页安排培训


Activity
Create object
Show 'TrainingE...
NewTrainingEvent
Microflow object name
TrainingEvent
Entity

微流包含的元素

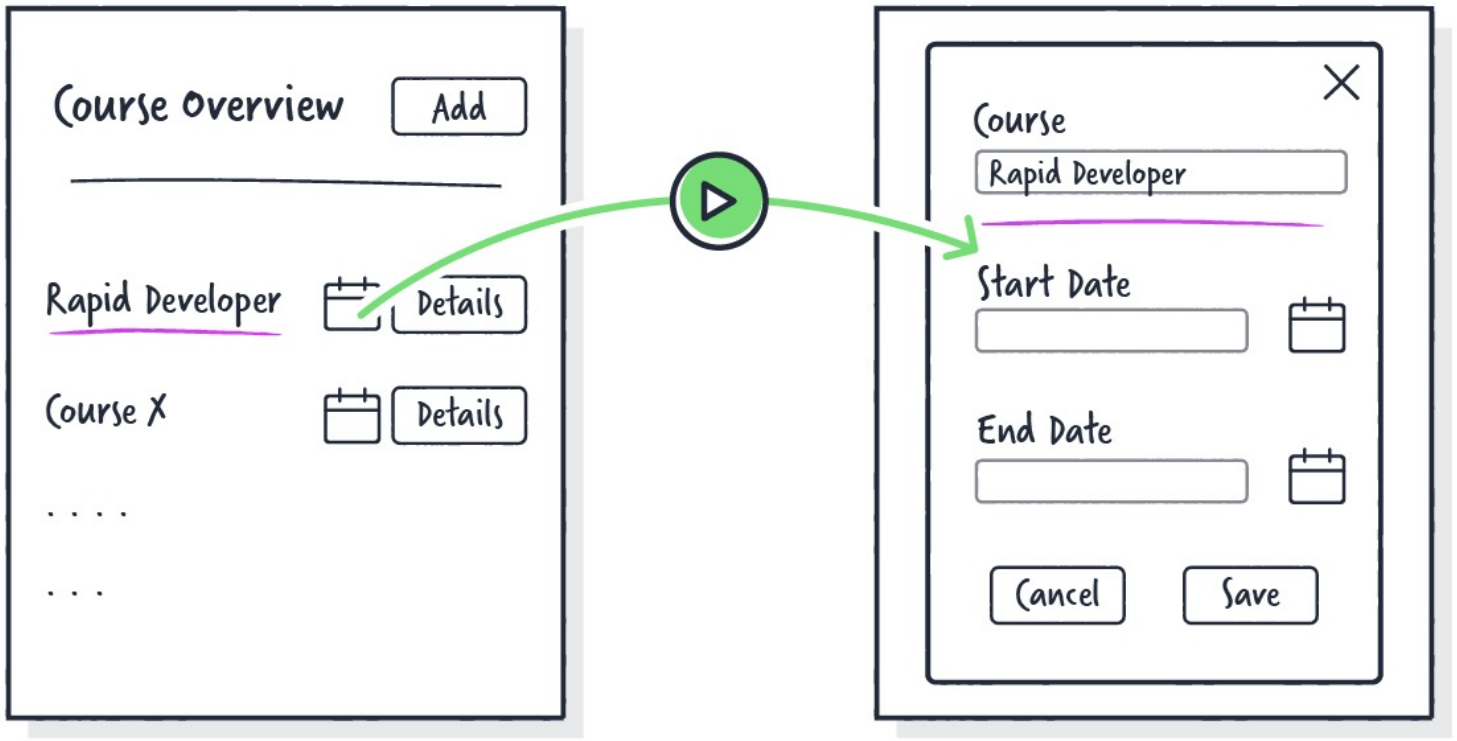
Element	Type	Graphic
Start Event	Event	
End Event	Event	
Sequence Flow	Flow	
Activity	Activity	
Decision	Decision	
Merge	Decision	
Parameter	Artifact	
Annotation	Artifact	
Annotation Flow	Flow	



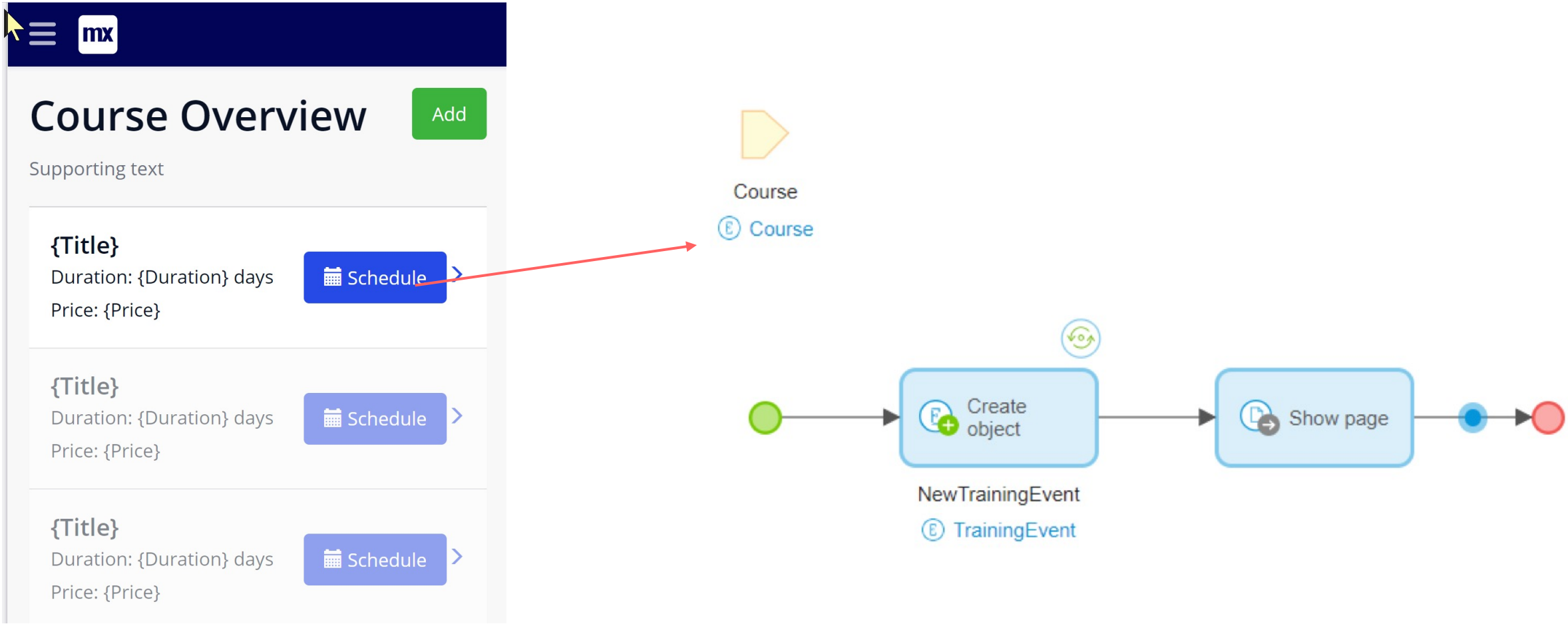
User Story 4

As an administrator, I want to be able to schedule a training event from the course overview page with the course name already selected, so that I spend as little time as possible on this.

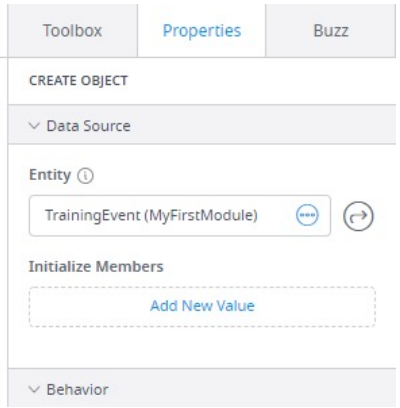
从Course Overview页面创建培训事件(1/3)

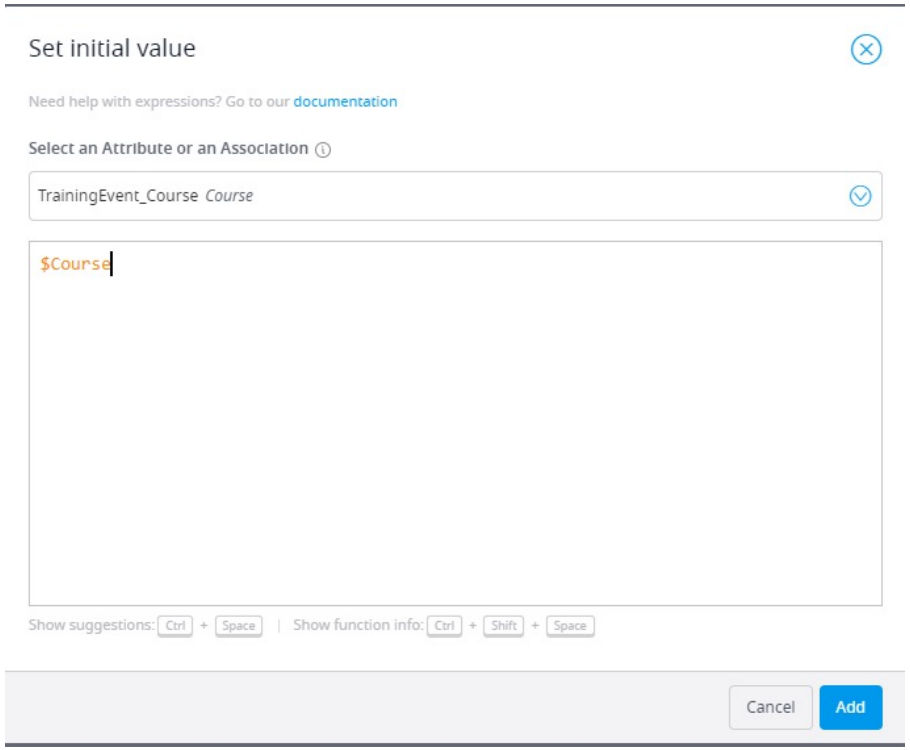


从Course Overview页面创建培训事件 (2/3)



从Course Overview页面创建培训事件(3/3)





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Summary

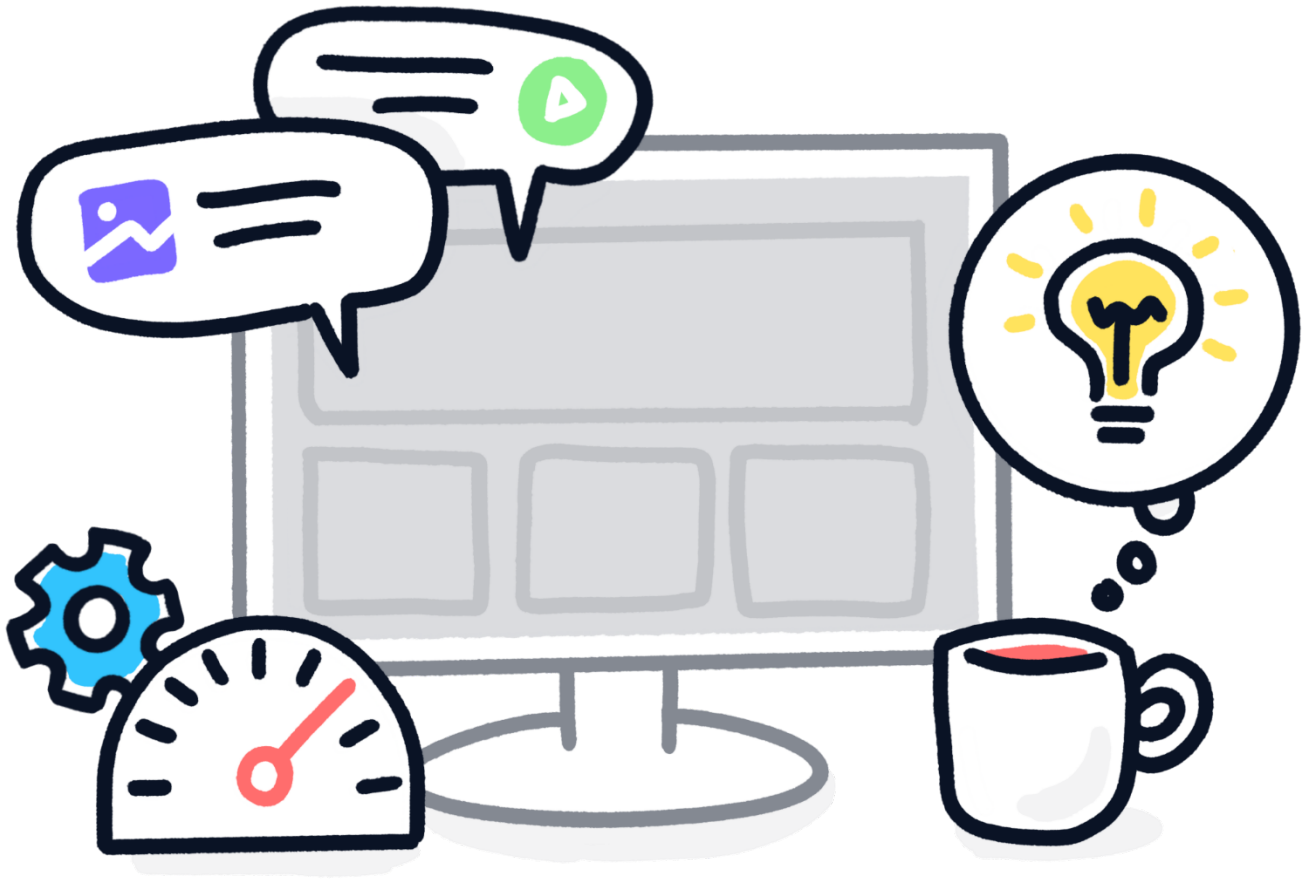
Knowledge checks

Go to kahoot.it

Make it w/ Mendix Studio Pro

学习目标

- 学习使用 Studio Pro
- 了解如何使用 Team Server 协作开发
- 向 Team Server 提交更改
- 使用信息实体
- 使用数据嵌套



Studio 与 Studio Pro

Citizen Developer

Business Analyst

Business Engineer

Full-Stack Developer

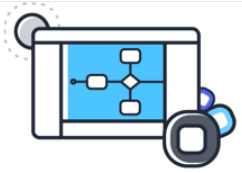
Solutions Focused

BUSINESS

IT

Technology Focused

Mendix Studio

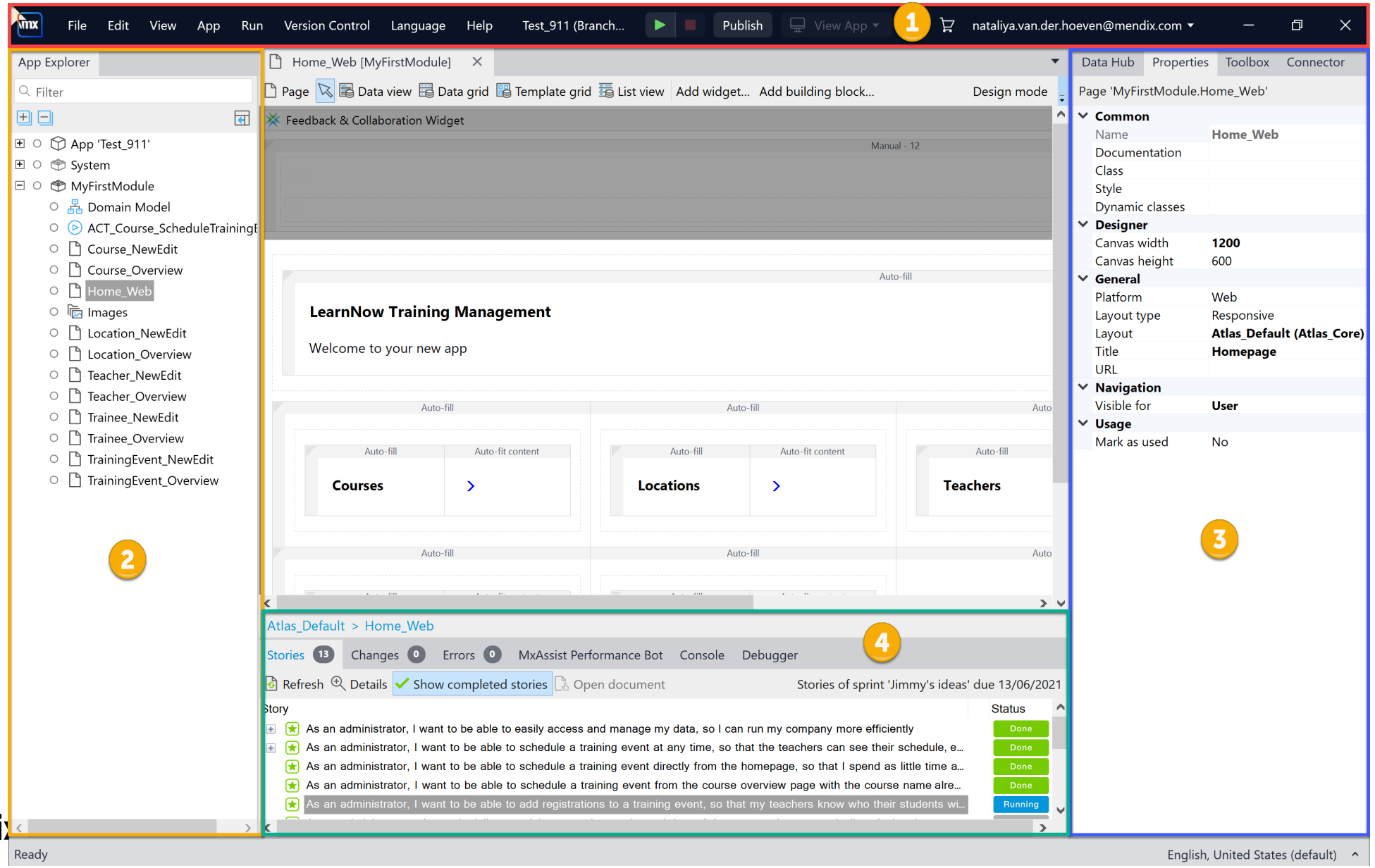


Mendix Studio Pro

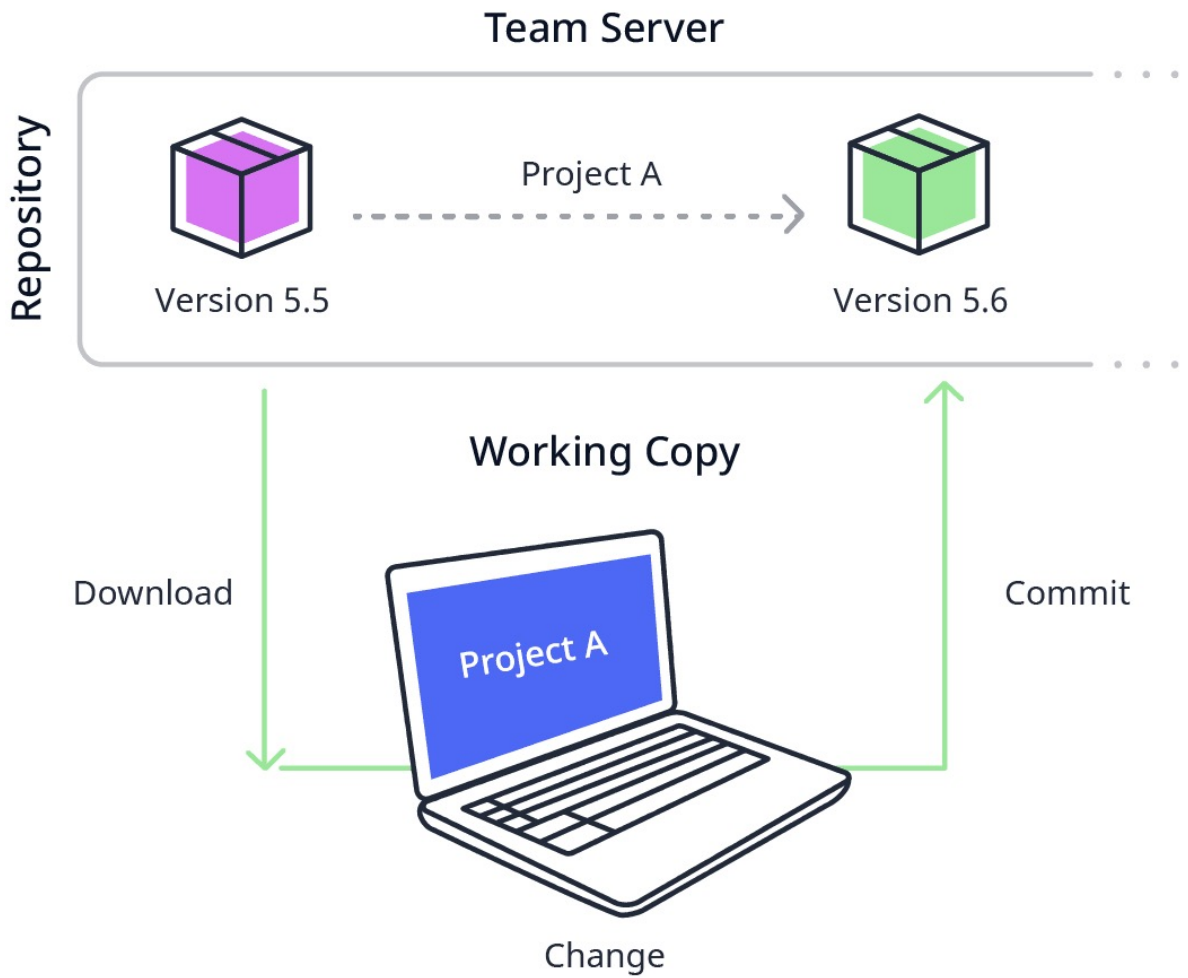
Custom Code

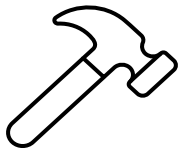
mendix

Studio Pro


File
Edit
View
App
Run
Version Control
Language
Help
Test_911 (Branch...
Publish
View App
1
nataliya.van.der.hoeven@mendix.com
App Explorer
Filter
App 'Test_911'
System
MyFirstModule
Domain Model
ACT_Course_ScheduleTraining
Course_NewEdit
Course_Overview
Home_Web
Images
Location_NewEdit
Location_Overview
Teacher_NewEdit
Teacher_Overview
Trainee_NewEdit
Trainee_Overview
TrainingEvent_NewEdit
TrainingEvent_Overview
2
Home_Web [MyFirstModule]
Page
Data view
Data grid
Template grid
List view
Add widget...
Add building block...
Design mode
Feedback & Collaboration Widget
Manual - 12
Auto-fill
LearnNow Training Management
Welcome to your new app
Auto-fit content
Courses
Locations
Teachers
Atlas_Default > Home_Web
4
Stories 13
Changes 0
Errors 0
MxAssist Performance Bot
Console
Debugger
Refresh
Details
Show completed stories
Open document
Stories of sprint 'Jimmy's ideas' due 13/06/2021
Story
Status
As an administrator, I want to be able to easily access and manage my data, so I can run my company more efficiently
Done
As an administrator, I want to be able to schedule a training event at any time, so that the teachers can see their schedule, e...
Done
As an administrator, I want to be able to schedule a training event directly from the homepage, so that I spend as little time a...
Done
As an administrator, I want to be able to schedule a training event from the course overview page with the course name alre...
Done
As an administrator, I want to be able to add registrations to a training event, so that my teachers know who their students wi...
Running
Data Hub
Properties
Toolbox
Connector
Page 'MyFirstModule.Home_Web'
Common
Name
Home_Web
Documentation
Class
Style
Dynamic classes
Designer
Canvas width
1200
Canvas height
600
General
Platform
Web
Layout type
Responsive
Layout
Atlas_Default (Atlas_Core)
Title
Homepage
URL
Navigation
Visible for
User
Usage
Mark as used
No
3
Ready
English, United States (default)

Team Server


Team Server
Repository
Project A
Version 5.5
Version 5.6
Working Copy
Download
Commit
Project A
Change



在Studio Pro中打开应用

- 打开 Mendix Studio Pro version 9.5.0
- 找到你的应用
- 打开主分支

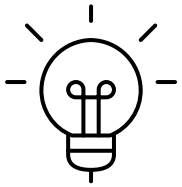
状态与变更

图标	含义
	该元素无变化
	该元素被修改
	新增的元素
	该元素在项目树中被移动
	被删除的元素
	与别人修改了同一个元素，版本有冲突

mx mendix

提交修改

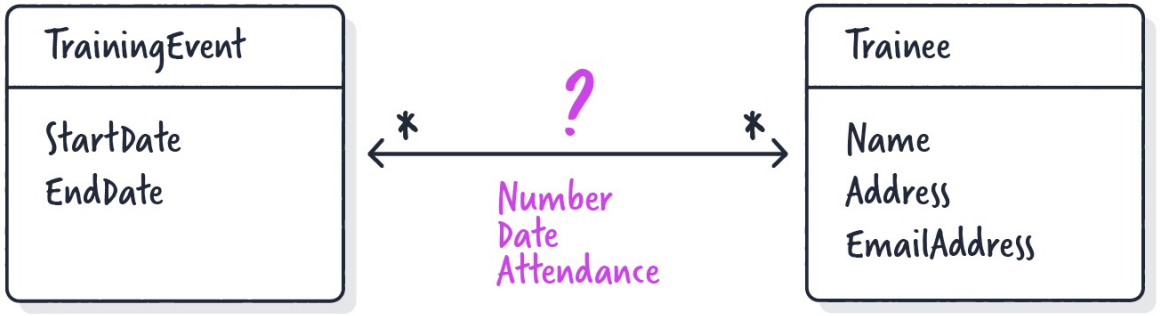
- 将更改发送到存储库称为提交。
- 将小的、一致的工作提交到存储库。
- Studio Pro 会自动检查您的应用程序是否存在您可能遗漏的内容，并提醒您在提交之前检查并修复这些内容。
- 只有当您的工作副本与存储库保持同步时，才可以提交。
- 不要忘记设置故事的状态！

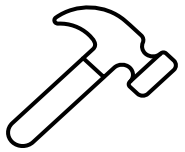


User Story 5

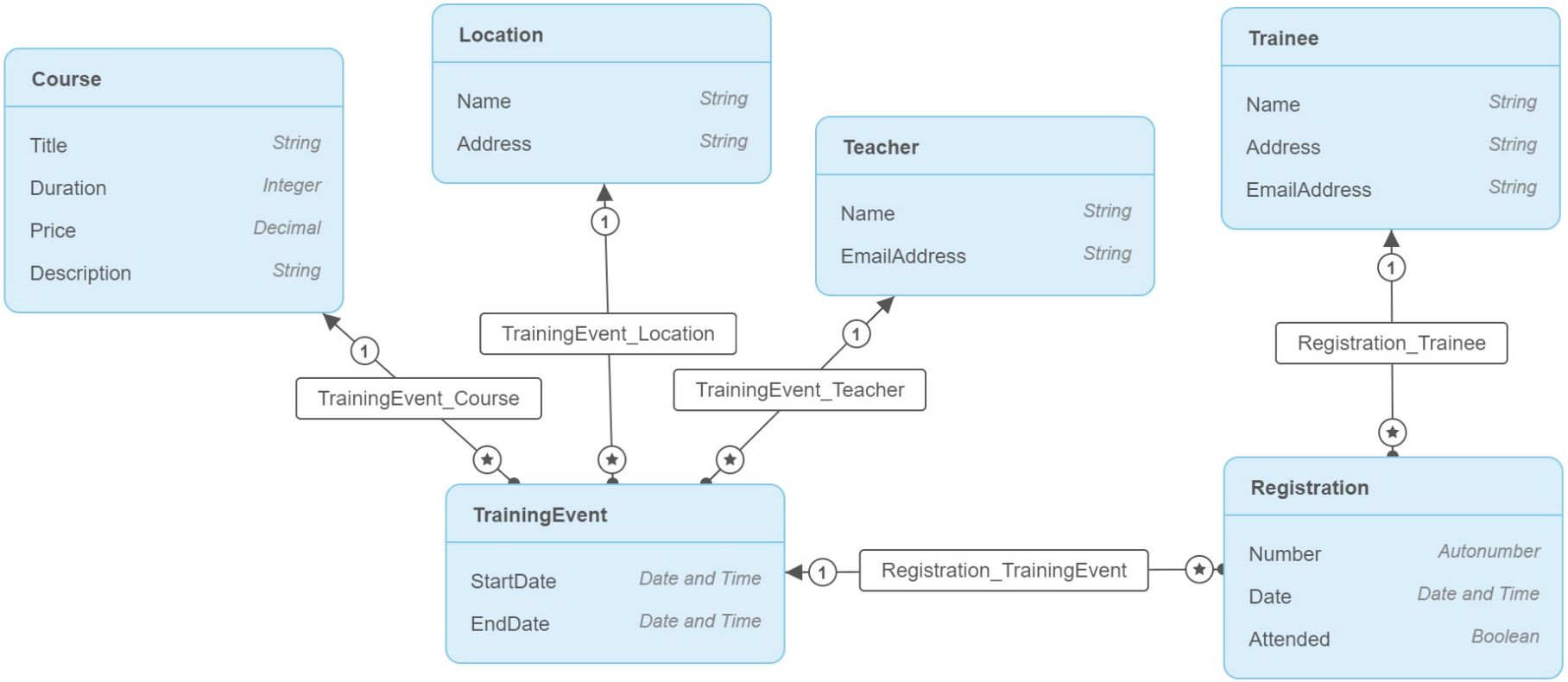
As an administrator, I want to be able to add registrations to a training event, so that my teachers know who their students will be.

信息实体

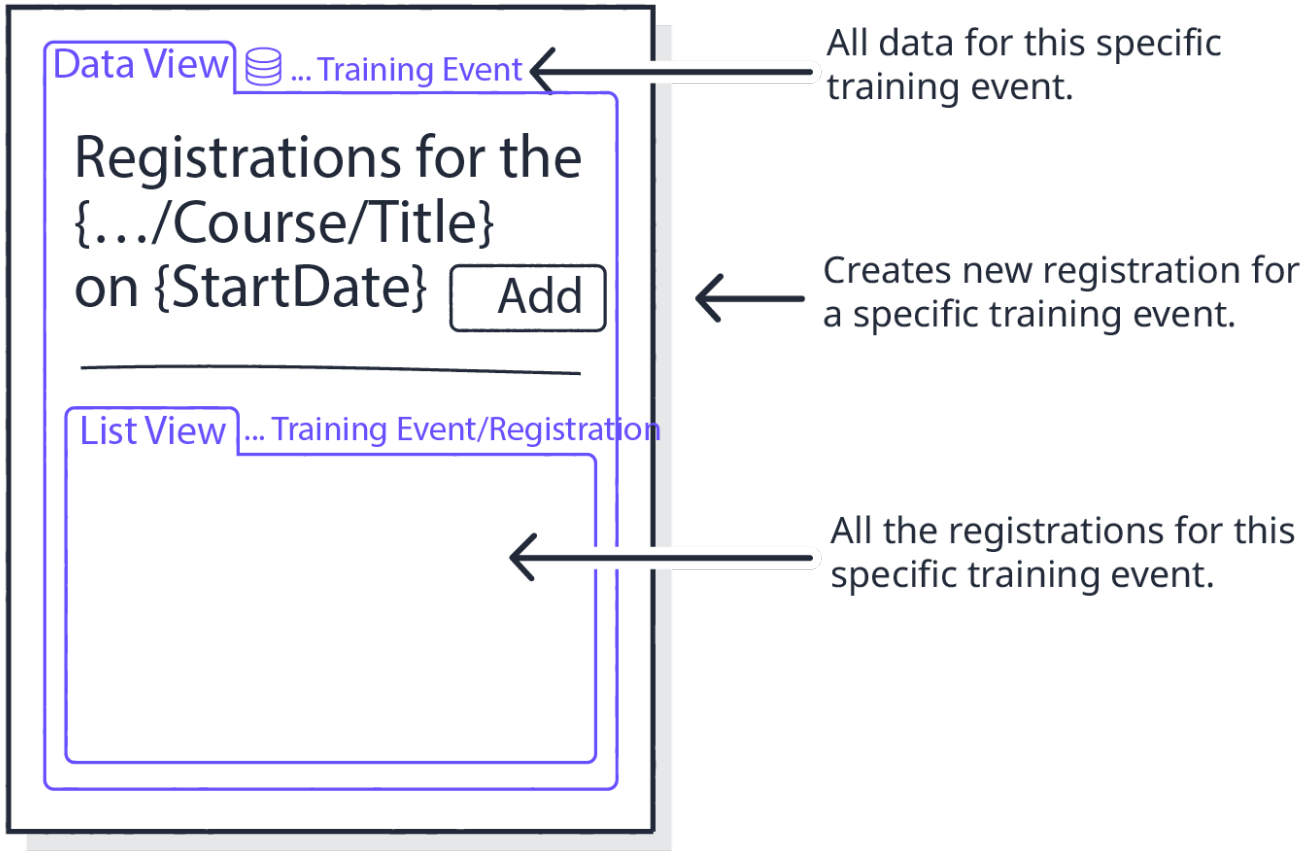

TrainingEvent
StartDate
EndDate
*
?
*
Number
Date
Attendance
Trainee
Name
Address
EmailAddress

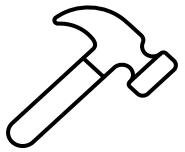


拓展域模型


Course
Title String
Duration Integer
Price Decimal
Description String
Location
Name String
Address String
Teacher
Name String
EmailAddress String
Trainee
Name String
Address String
EmailAddress String
TrainingEvent_Location
TrainingEvent_Course
TrainingEvent_Teacher
Registration_Trainee
TrainingEvent
StartDate Date and Time
EndDate Date and Time
Registration_TrainingEvent
Registration
Number Autonumber
Date Date and Time
Attended Boolean
1
*

数据嵌套

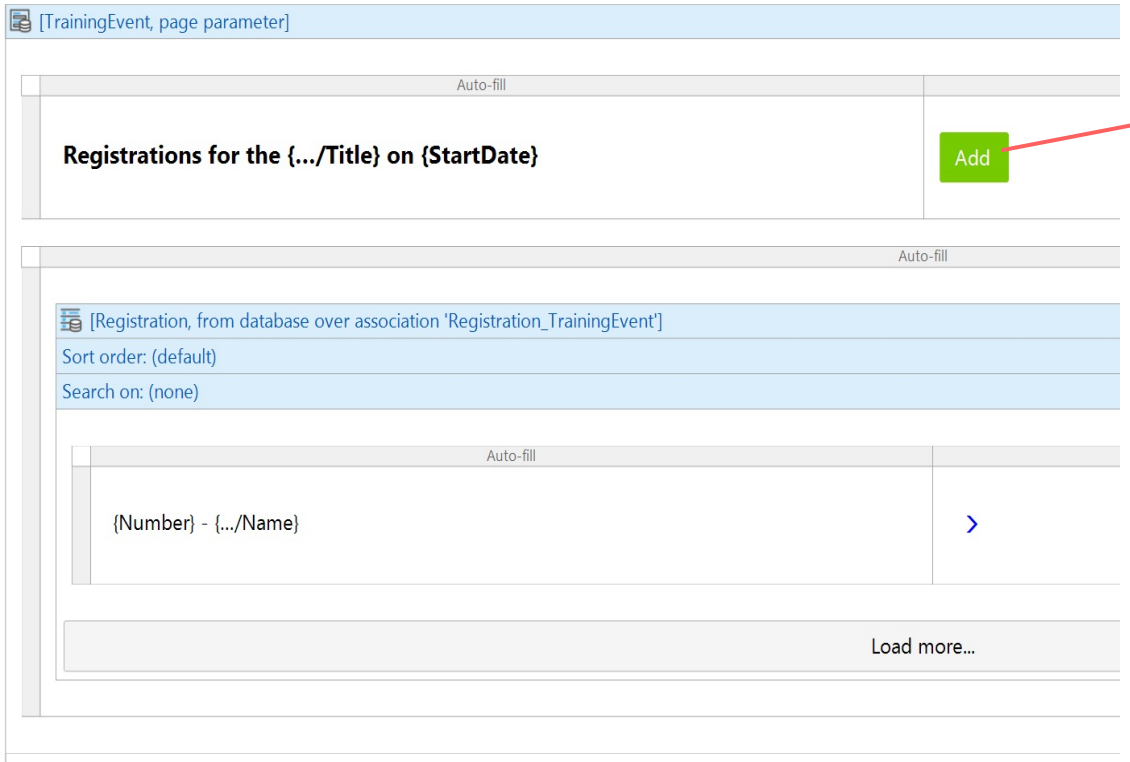

Data View
... Training Event
Registrations for the {.../Course/Title} on {StartDate}
Add
List View
... Training Event/Registration
All data for this specific training event.
Creates new registration for a specific training event.
All the registrations for this specific training event.

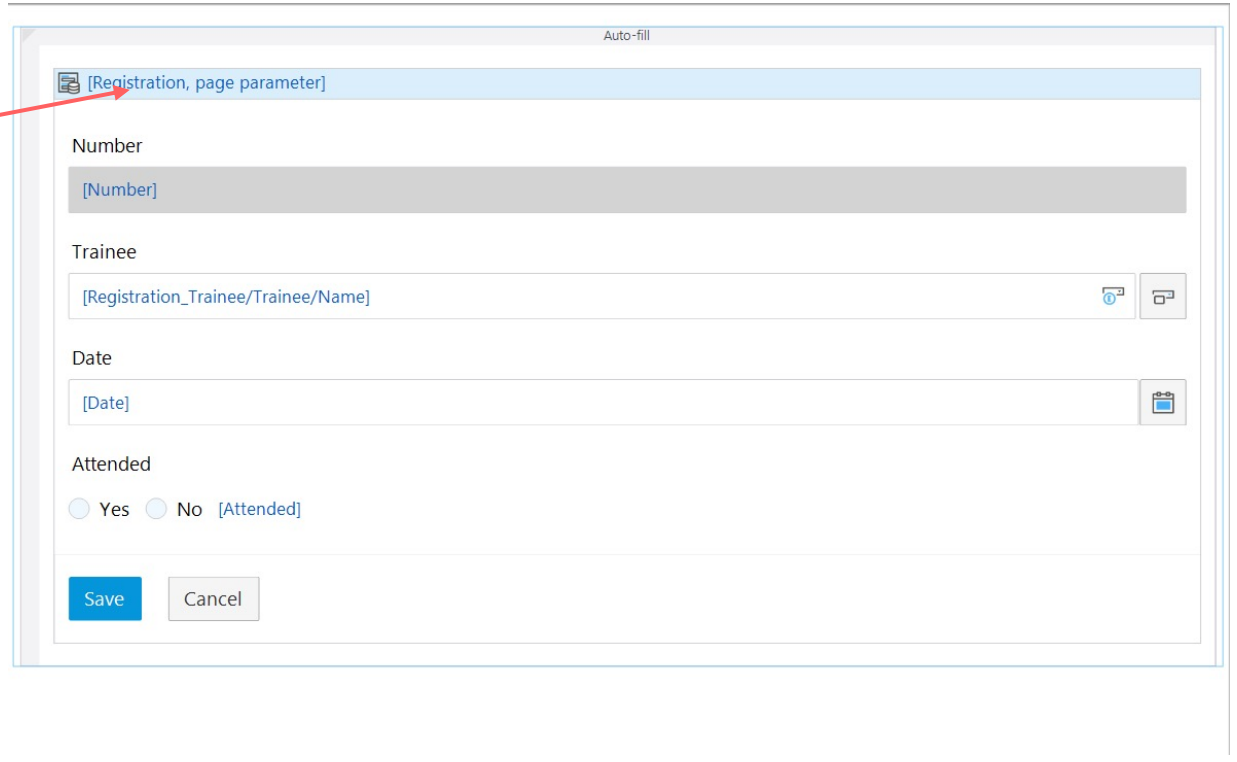


创建注册功能

- 在 TrainingEvent_Overview 页面中创建一个新的“注册（Registration）”按钮。
- 使用 Atlas Default 布局的空白模板创建新页面， 将其命名为 TrainingEvent_Registration_Overview 并链接到该按钮。
- 在 layout grid 上方添加数据视图（data view）并连接实体 TrainingEvent 数据源上下文
- 向其中添加 Pageheader Controls 构建块并删除 Edit 和 Delete 按钮。
- 将原始 layout grid 移动到 data view 内，位于Pageheader Controls下方。
- 在该layout grid内添加一个 List single line 构建块，并显示属性 Number 和 Trainee Name。
- 创建添加按钮以打开新的 Registration_NewEdit 页面。
- 使用 > 按钮也可以转到 NewEdit 页面。
- 使 < 返回按钮关闭页面。

预览并完善


[TrainingEvent, page parameter]
Auto-fill
Registrations for the {.../Title} on {StartDate}
Add
Auto-fill
[Registration, from database over association 'Registration_TrainingEvent']
Sort order: (default)
Search on: (none)
Auto-fill
{Number} - {.../Name}
Load more...


Auto-fill
[Registration, page parameter]
Number
[Number]
Trainee
[Registration_Trainee/Trainee/Name]
Date
[Date]
Attended
Yes
No
[Attended]
Save
Cancel

Summary

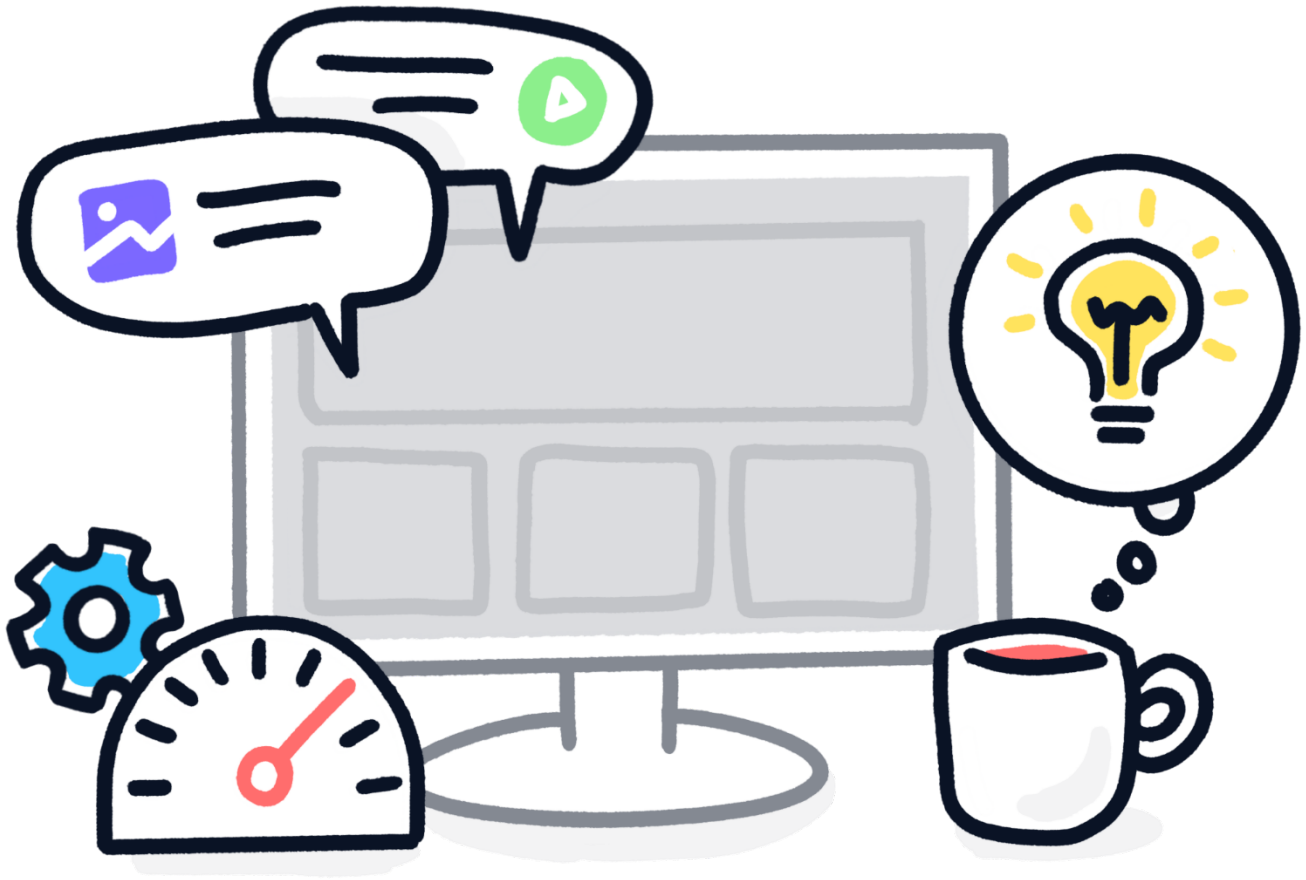
Knowledge checks

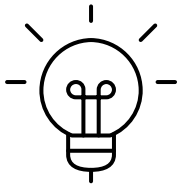
Go to kahoot.it

Make it smart

学习目标

- 使用小部件事件调用微流
- 使用各种微流动作来自动计算
- 了解微流的范围
- 了解两种类型的检索
- 了解存储属性和计算属性之间的区别
- 使用对象事件调用微流

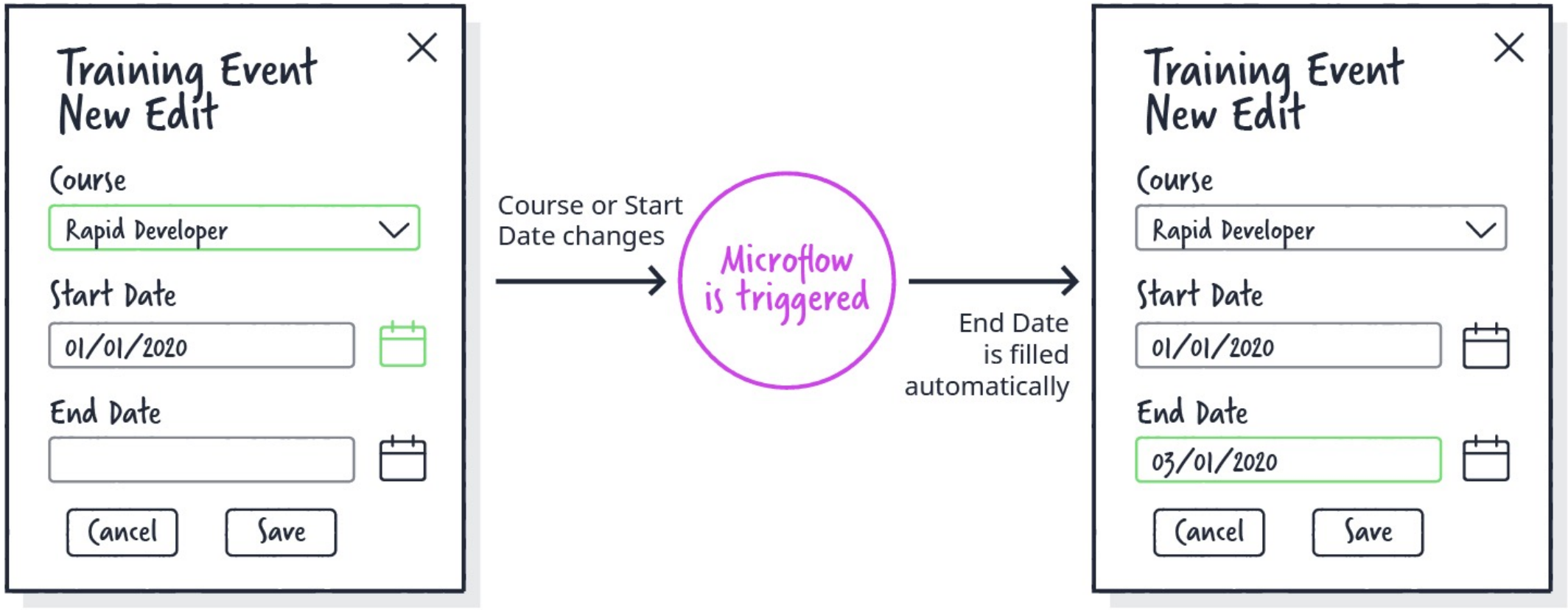




User Story 6

As an administrator, when scheduling a training event I want the end-date of the event to be automatically calculated, preventing me from making calculation errors.

自动填充培训事件结束日期

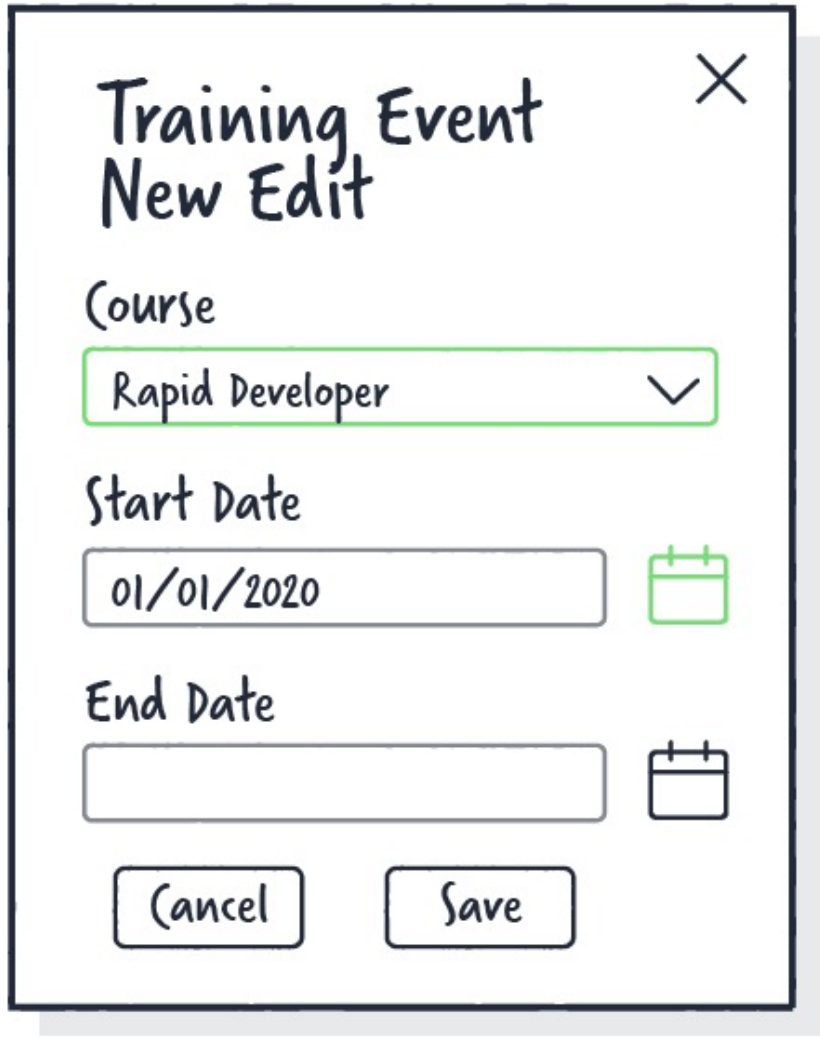


5个步骤

1. 触发微流
2. 填写计算的结束日期
3. 部署和测试
4. 分析错误并调整微流
5. 提交你的工程

从输入控件触发微流

- On enter: when the user enters (clicks on) the input widget
- On change: when the user leaves the input widget after making a change
- On leave: when the user leaves (closes) the input widget (no matter whether they changed the value of the widget or not)
- On enter ： 当用户光标进入（点击）控件时
- On change ： 当用户在进行更改后离开控件时
- On leave ： 当用户光标离开（关闭）控件时（无论他们是否改变了控件的值）

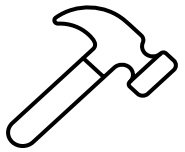


微流表达式

元素	示例
方法	FunctionName (Ingredient 1, Ingredient 2)
变量	$Trainee/EmailAddress
环境变量	[%CurrentDateTime%]

通用表达式

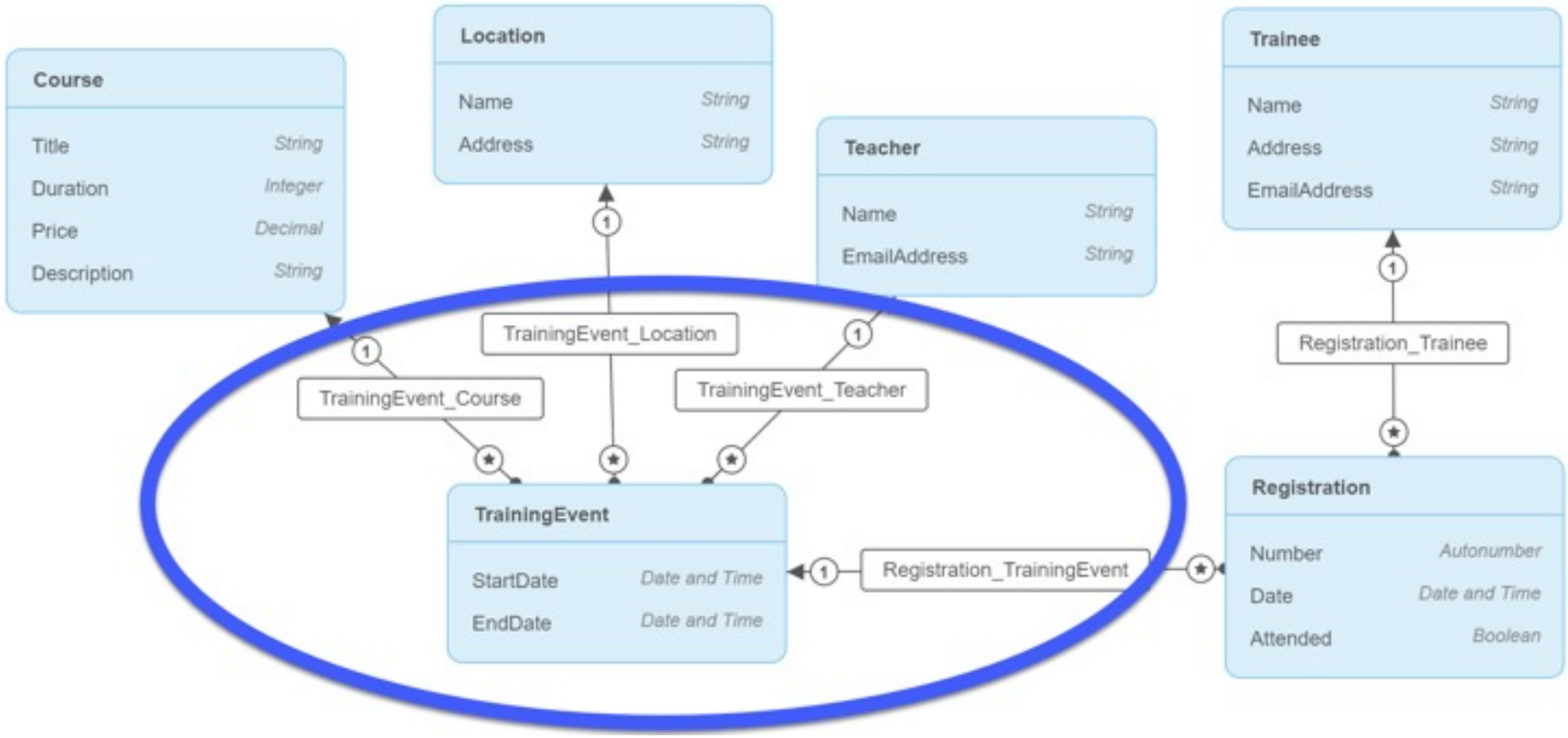
类型	表达式
算数	* : + -
关系	< > <= >= = !=
特殊	empty isNew
逻辑	and or not
条件	If then else



创建微流

1. Retrieve associated Course
2. Calculate the EndDate
   - addDays(*DateTime*, *Integer*)
     - DateTime = StartDate (TrainingEvent)
     - Integer = Duration (Course)
3. Set the newly calculated EndDate
   - Change Object activity, change the TrainingEvent
   - Commit: No
   - Refresh client: Yes

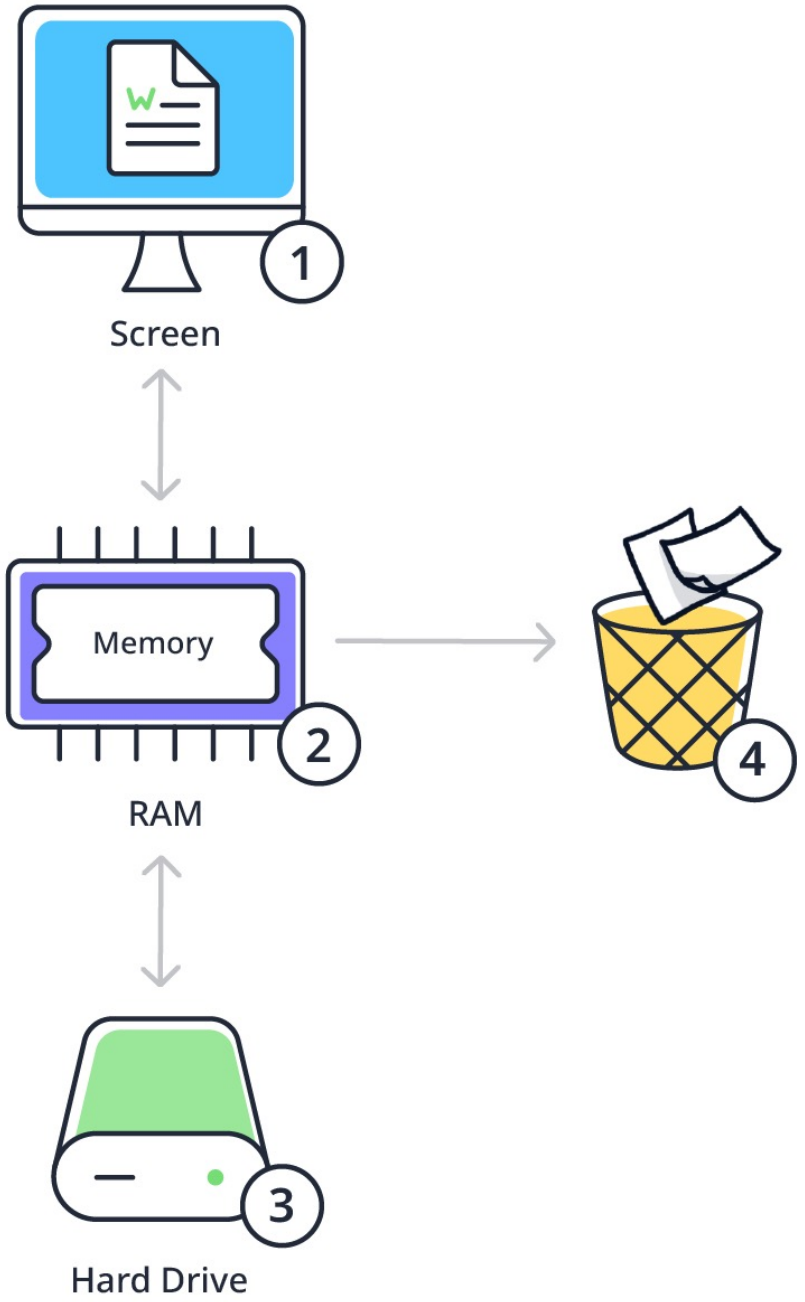
微流的数据读取范围


Course
Title String
Duration Integer
Price Decimal
Description String
Location
Name String
Address String
Teacher
Name String
EmailAddress String
Trainee
Name String
Address String
EmailAddress String
TrainingEvent_Location
TrainingEvent_Course
TrainingEvent_Teacher
Registration_Trainee
TrainingEvent
StartDate Date and Time
EndDate Date and Time
Registration_TrainingEvent
Registration
Number Autonumber
Date Date and Time
Attended Boolean

获取数据

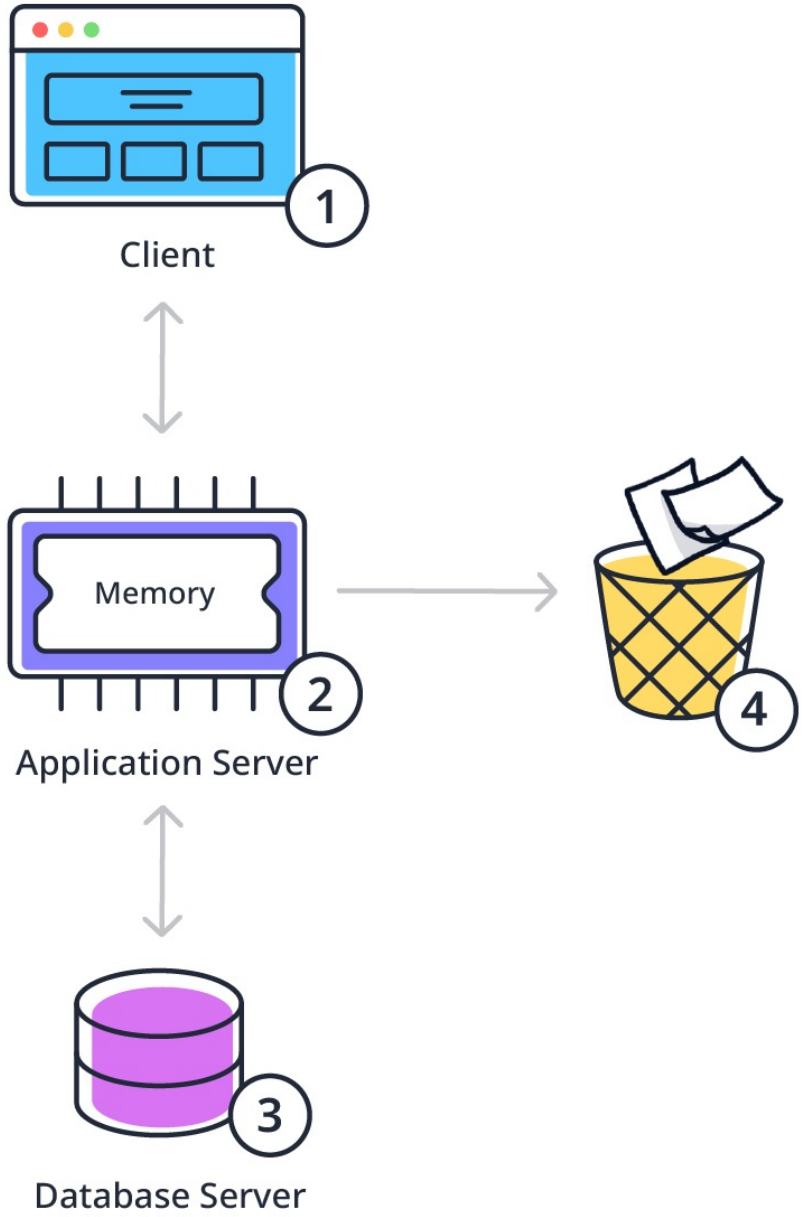
Example:

When writing a text document



获取数据

When using Mendix



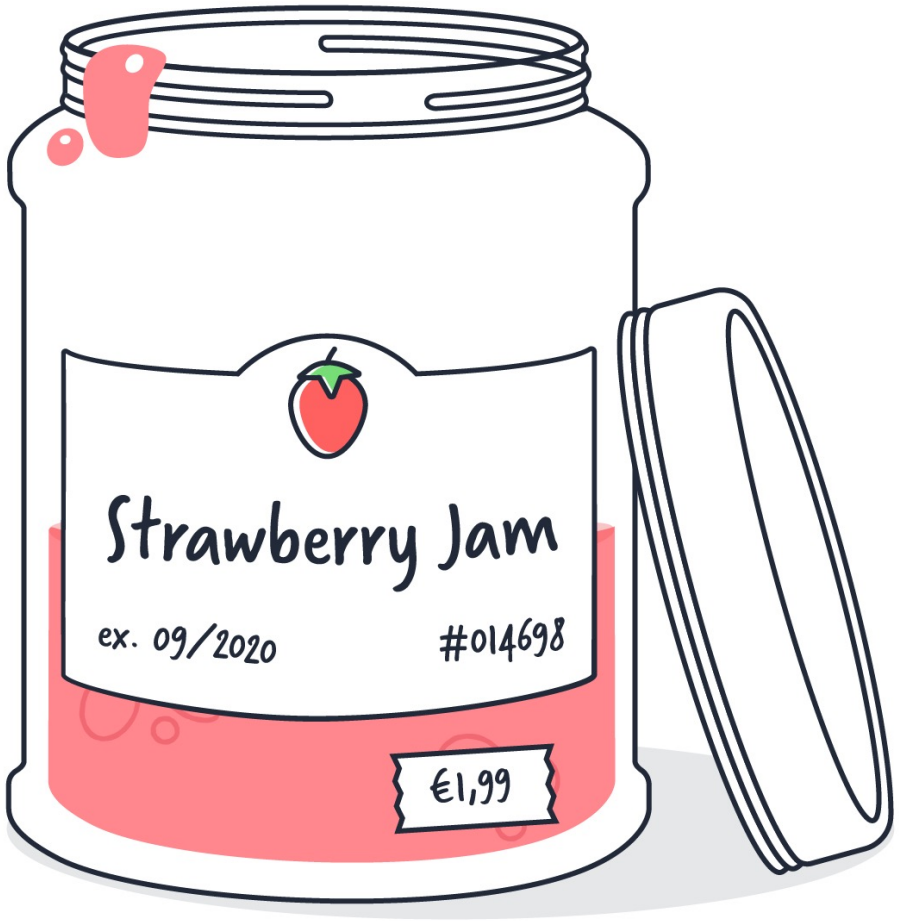
由关联获取数据

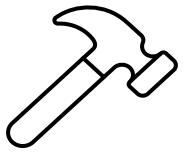
Doing a retrieve from memory is called ‘’By Association Retrieve”.

Benefits:

- Faster (no connection to the database is needed)
- Information not in the database yet

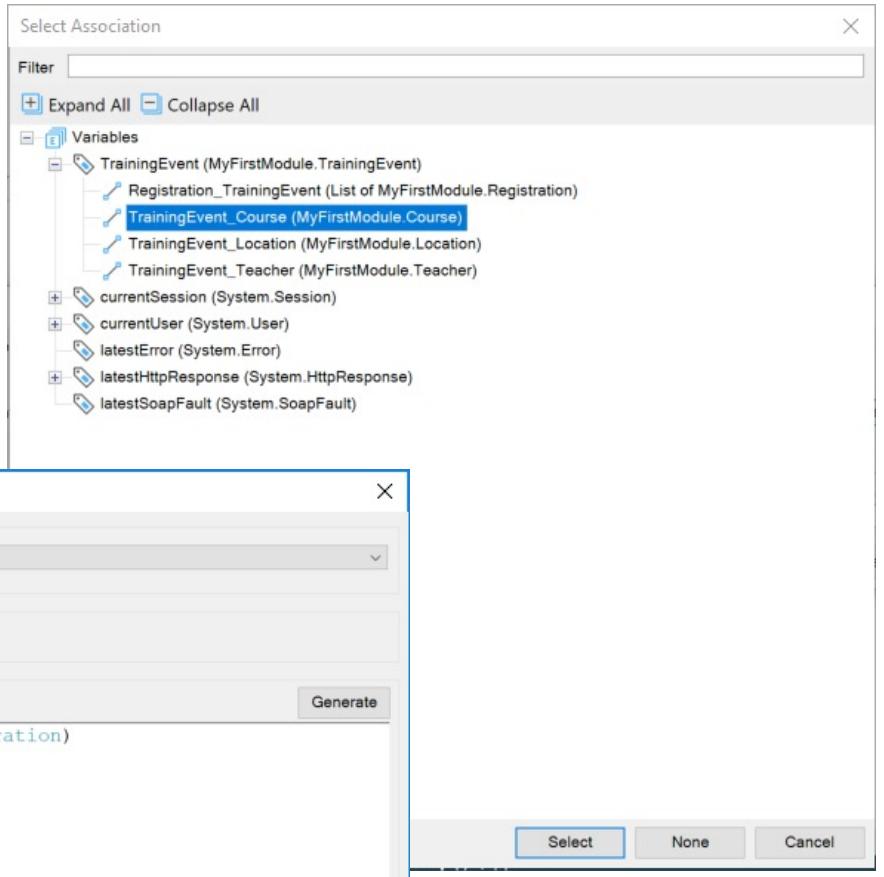
Transient objects

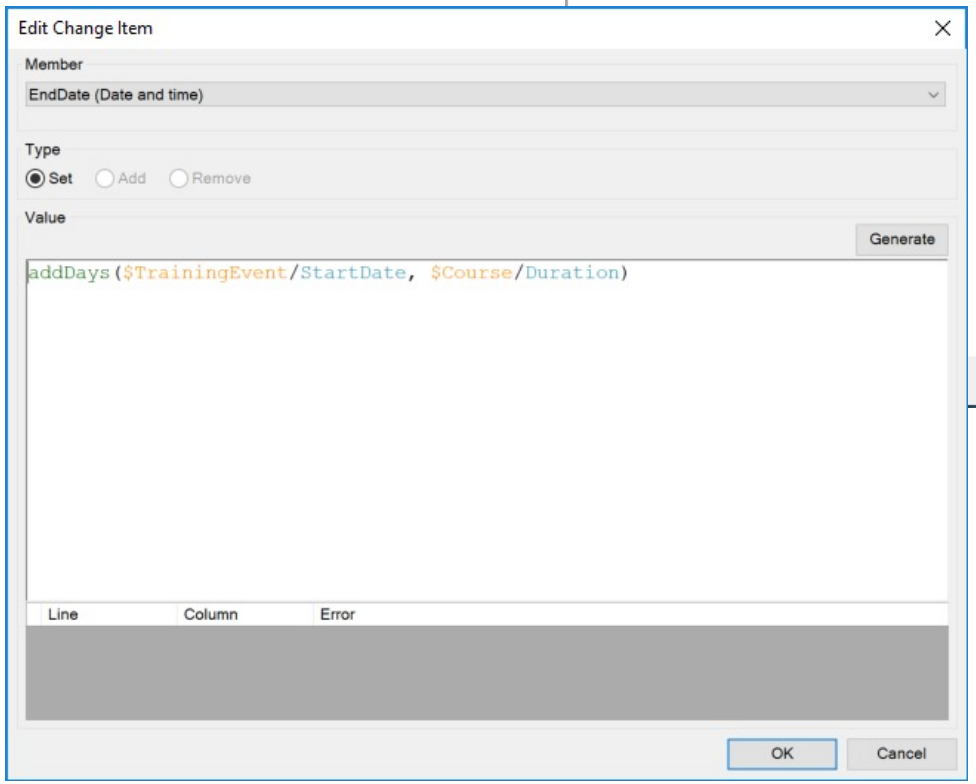




完善你的微流

1) Retrieve your data
2) Complete the microflow expression
3) Run Locally and Crash!

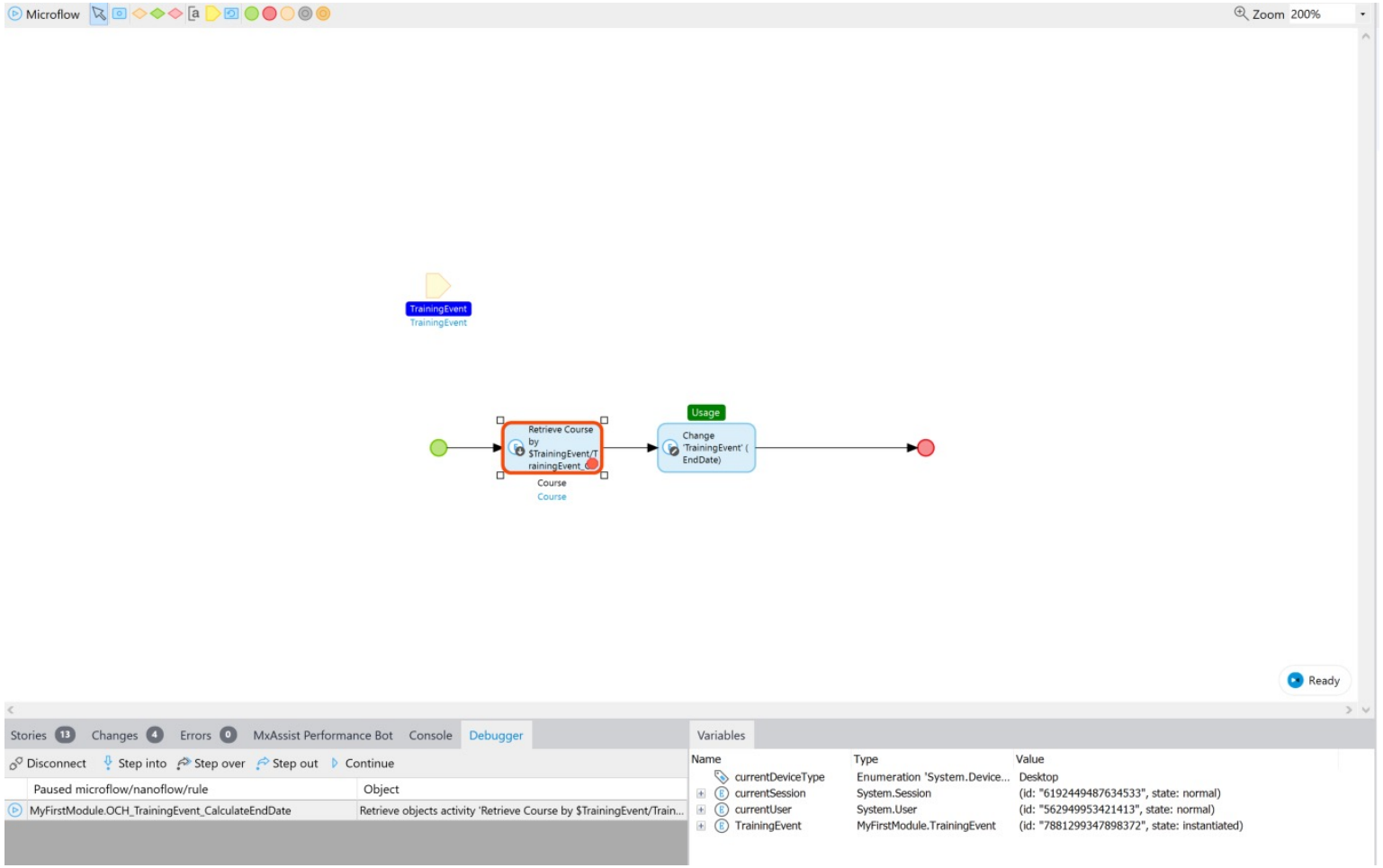




mx mendix

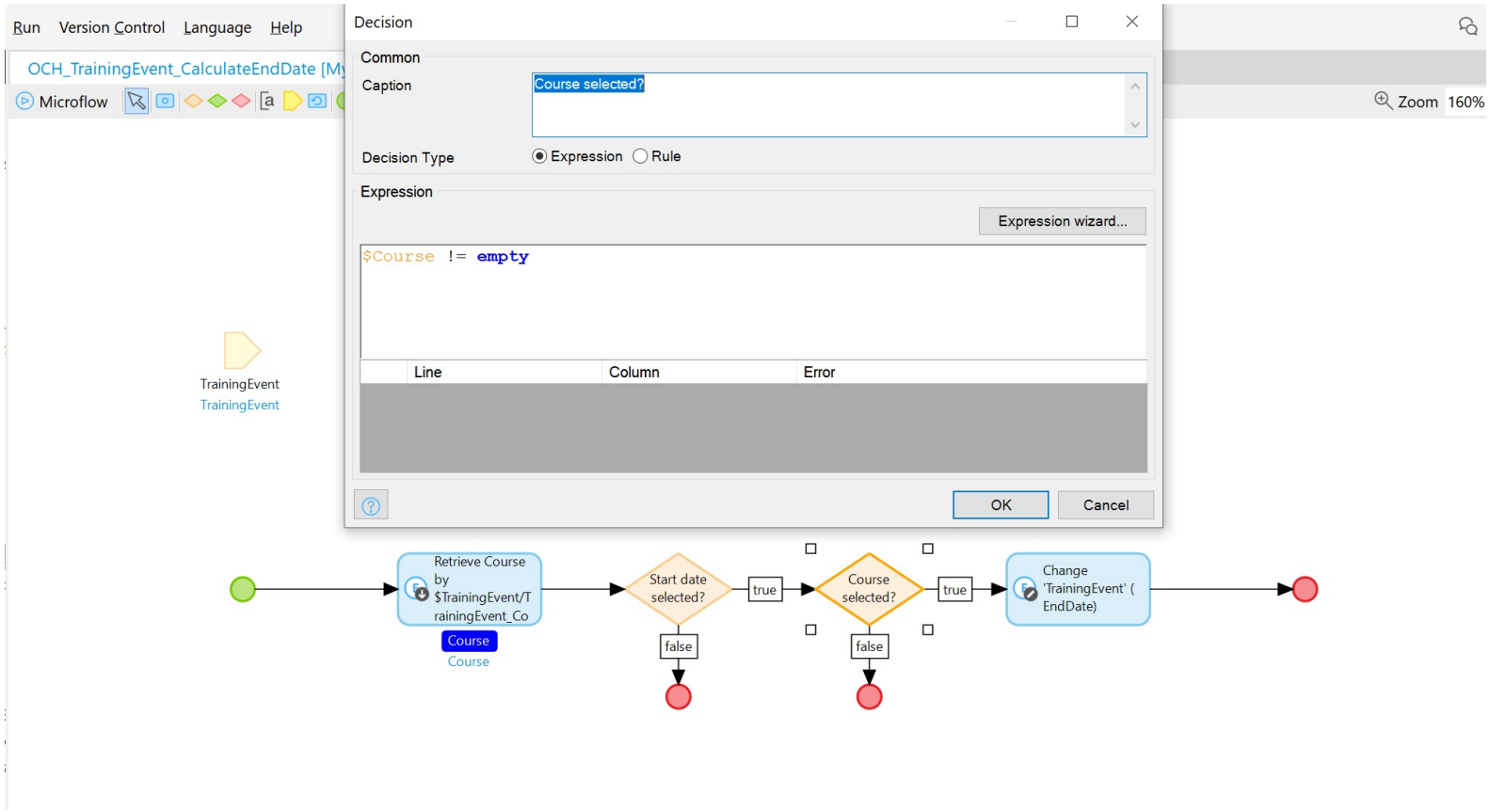
检查错误

Add breakpoint on the OCH_TrainingEvent_CalculateEndDate microflow

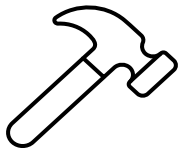


使用判定

Add two Decisions to check if the start date and course are selected.

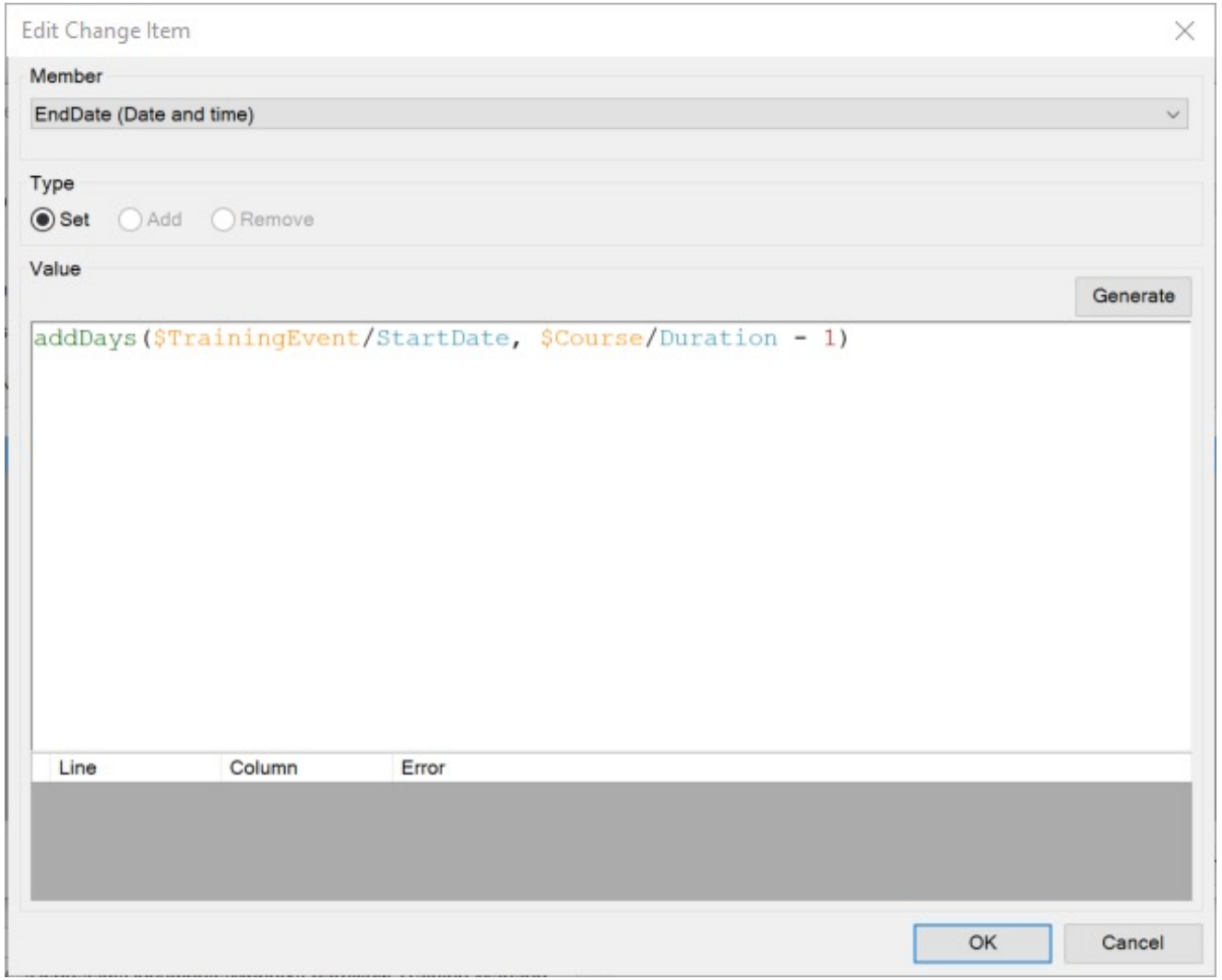


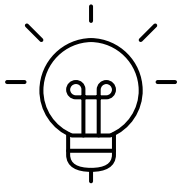
mx mendix



完成微流并提交

1) Remove breakpoint
2) Run Locally
3) Find bug & fix
4) Commit





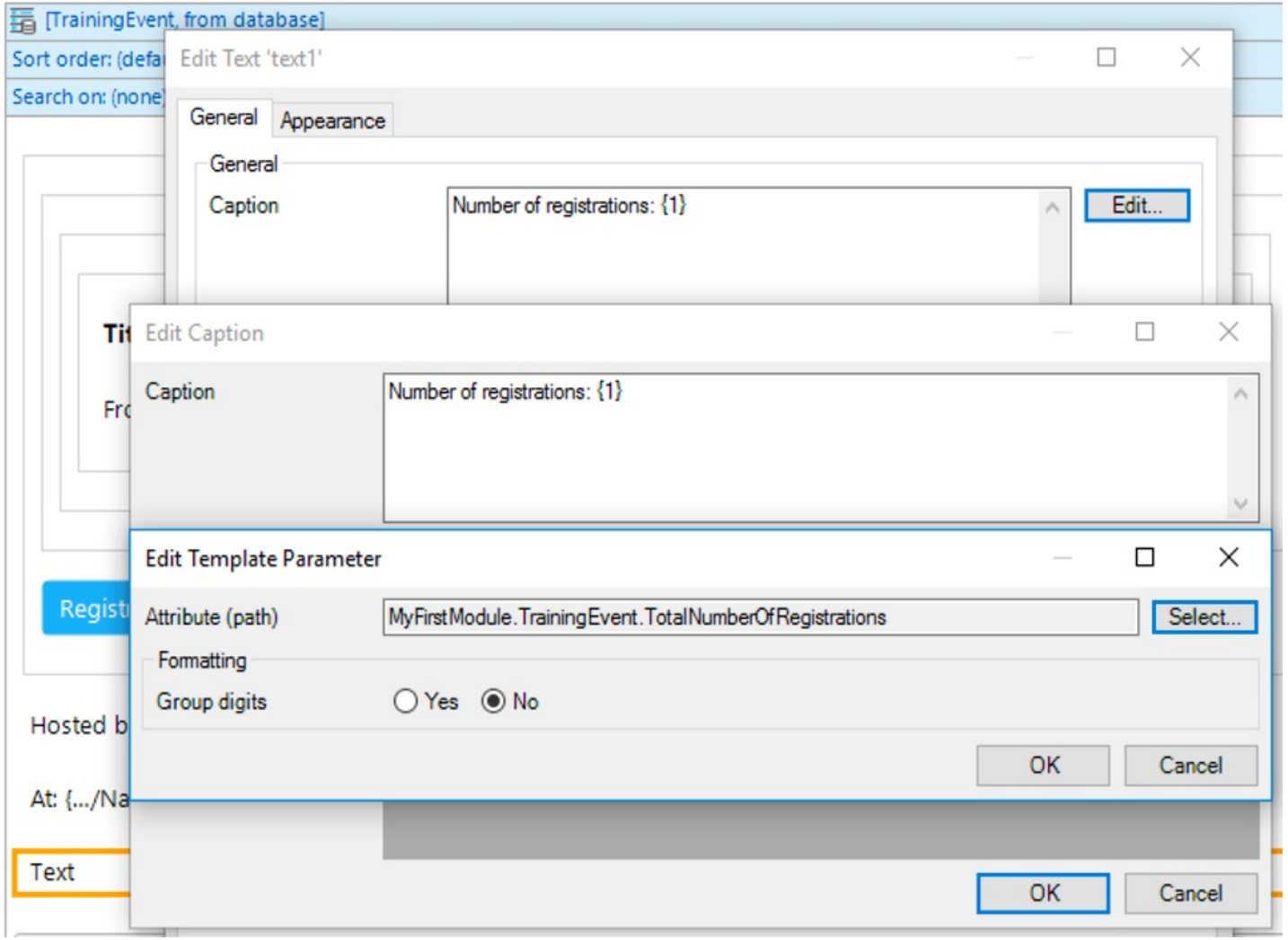
User Story 7

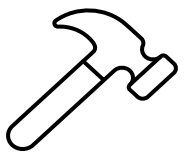
As a teacher, I want to be able to see the number of trainees attending a training event at any time, so that I know what resources I need.

添加新属性

Stored or Calculated Attribute?

1) New attribute
2) Text widget
3) Parameter
4) Edit caption



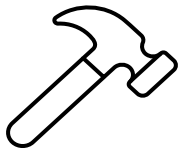


添加对象事件触发器

Prefixes for object event handlers:

	Before	**After**
Create	BCR	ACR
Commit	BCO	ACO
Rollback	BRO	ARO
Delete	BDE	ADE

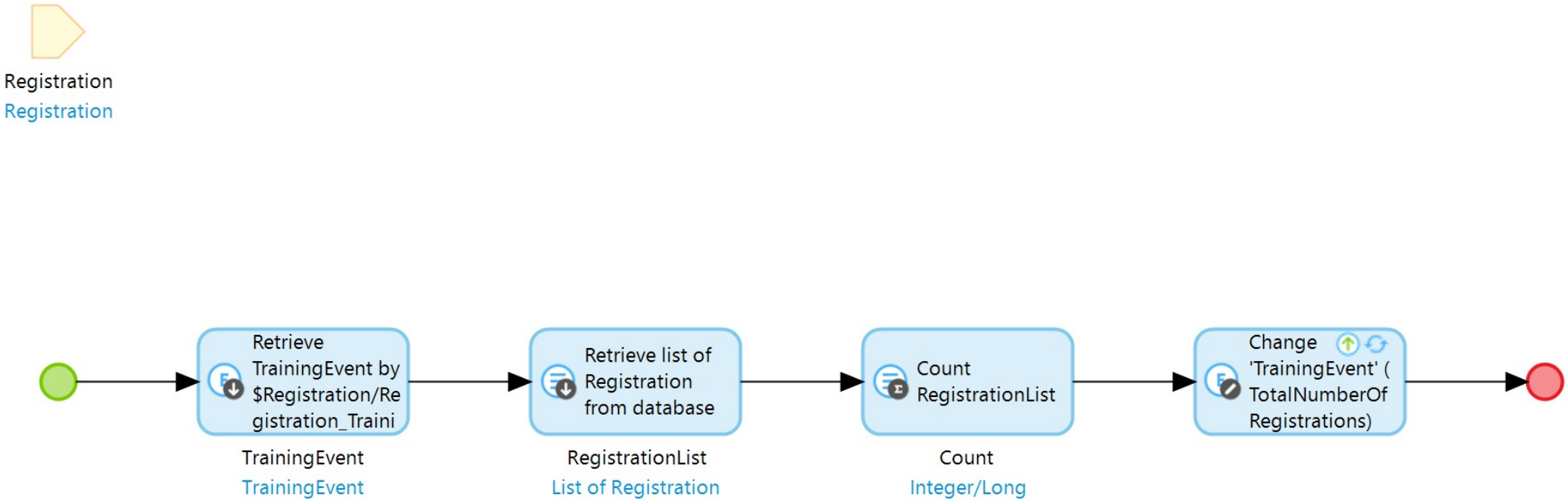
In our case: ACO_ADE_Registration_SetTotalNumberOfRegistrations



计算注册人数

1. Retrieve the associated **TrainingEvent**
2. Retrieve the Registrations that belong to the **TrainingEvent**
3. Count the list of Registrations
4. Set the total number of Registrations as the new value
   - **Change Object** activity, change the **TrainingEvent**
   - Commit: **Yes**
   - Refresh client: **Yes**

计算注册人数


Registration
Registration
Retrieve TrainingEvent by $Registration/Registration_Traini
TrainingEvent
TrainingEvent
Retrieve list of Registration from database
RegistrationList
List of Registration
Count RegistrationList
Count
Integer/Long
Change 'TrainingEvent' (TotalNumberOf Registrations)

Summary

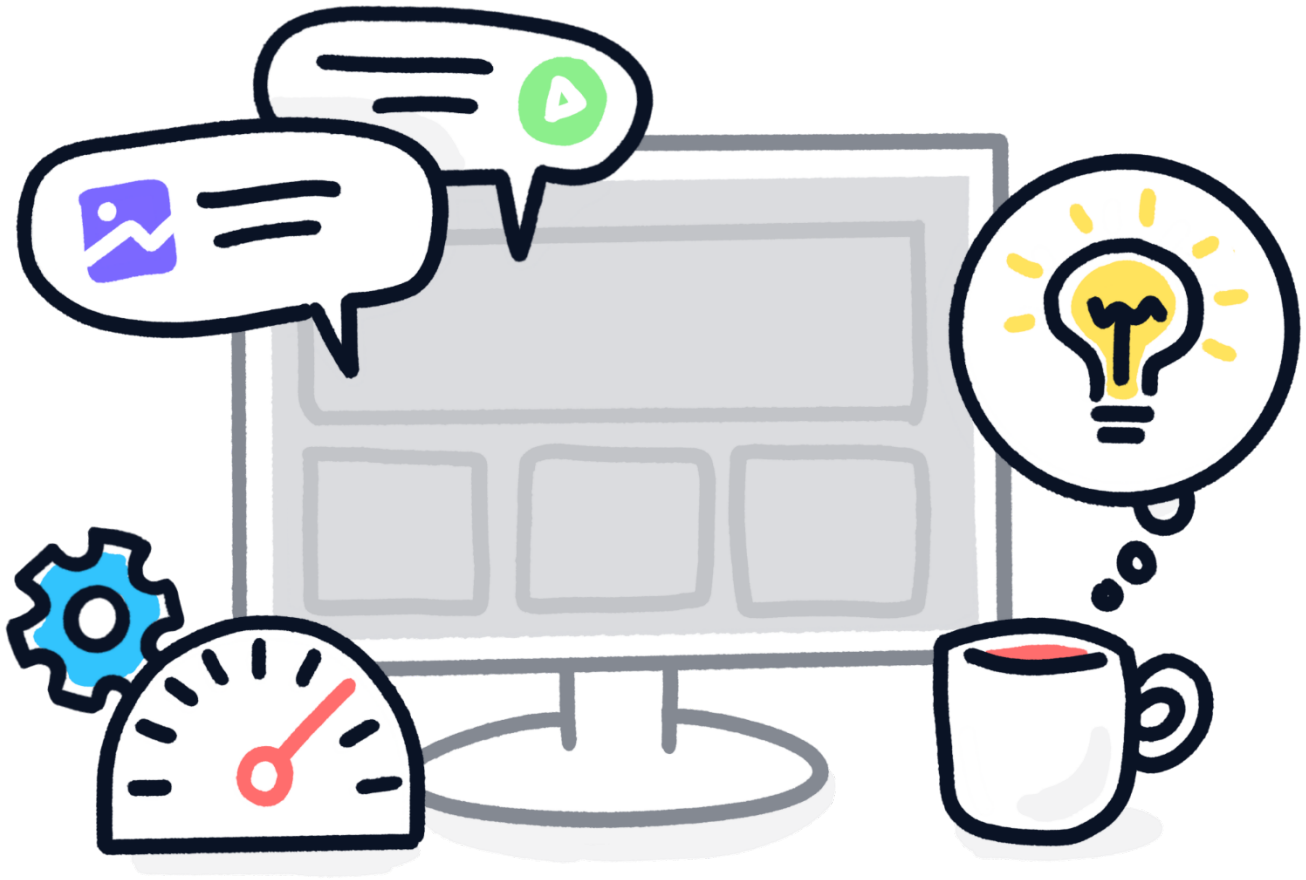
Knowledge checks

Go to kahoot.it

Make it valid & consistent

学习目标

- 了解拥有有效且一致的数据的重要性
- 识别不同类型的验证
- 使用微流应用验证
- 防止删除好的数据
- 清理过时的数据



数据校验为何重要？

不同类型的错误	如何预防？
空记录	校验规则
非法数据	正则表达式
重要数据被删除	删除保护
垃圾数据	级联删除

数据验证

验证是在对象存储在数据库中之前应该满足的条件。

您可以将验证添加到：

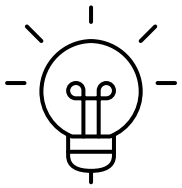
- 领域模型
- 微流
- 页面

数据验证的类型

类型	描述	示例
Required	属性不能为空	课程描述
Unique	属性值必须唯一	课程名称
Equals	属性值必须等于特定值	重复输入密码
Range	属性值必须处于某个范围内	课程时长
Regular expression	属性值需满足某个正则表达式	电子邮件地址 (user@something.com)
Maximum length	属性值最大长度	邮编

如何处理错误的数据？

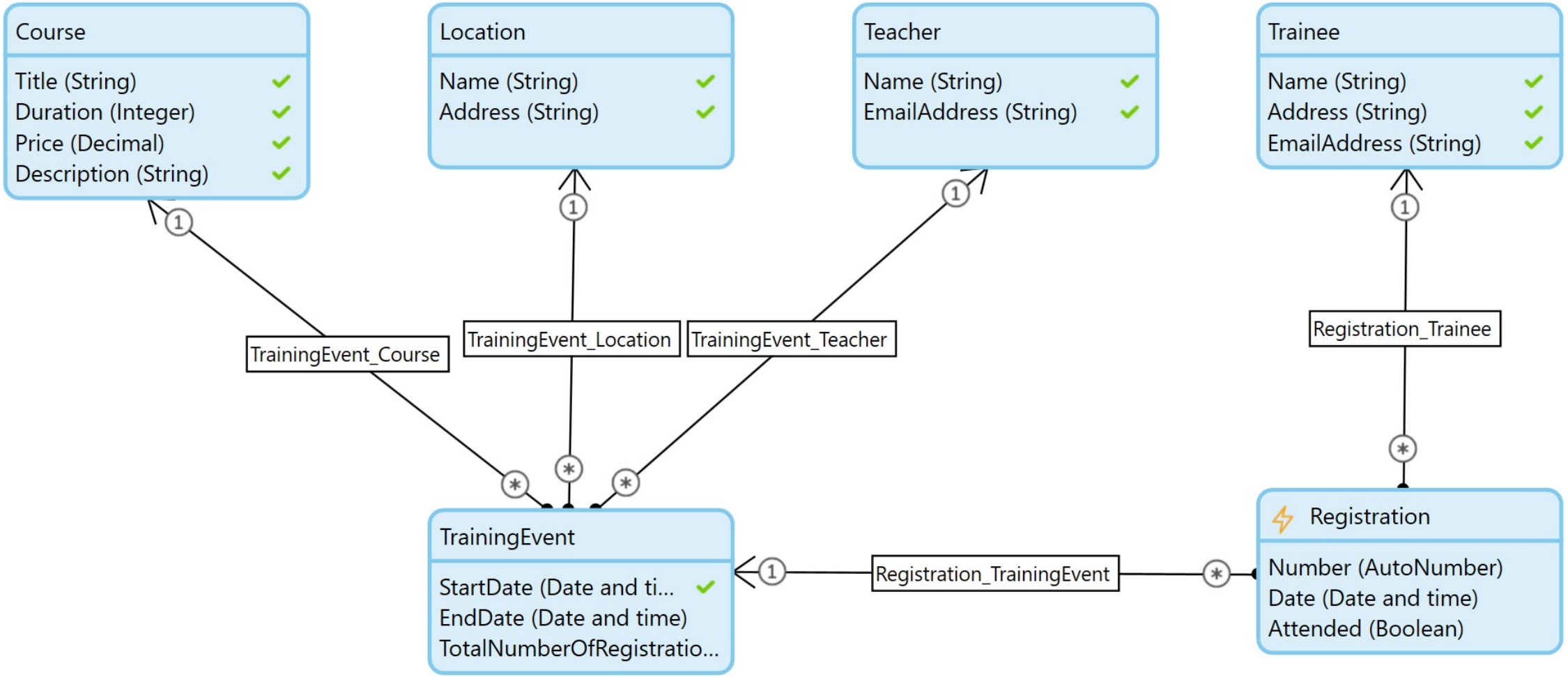
在何处触发校验？	反馈形式
表单页面 (有输入控件)	在输入控件下方显示错误信息
页面 (无输入控件)	弹出错误信息对话框
系统	日志中的错误信息



User Story 8

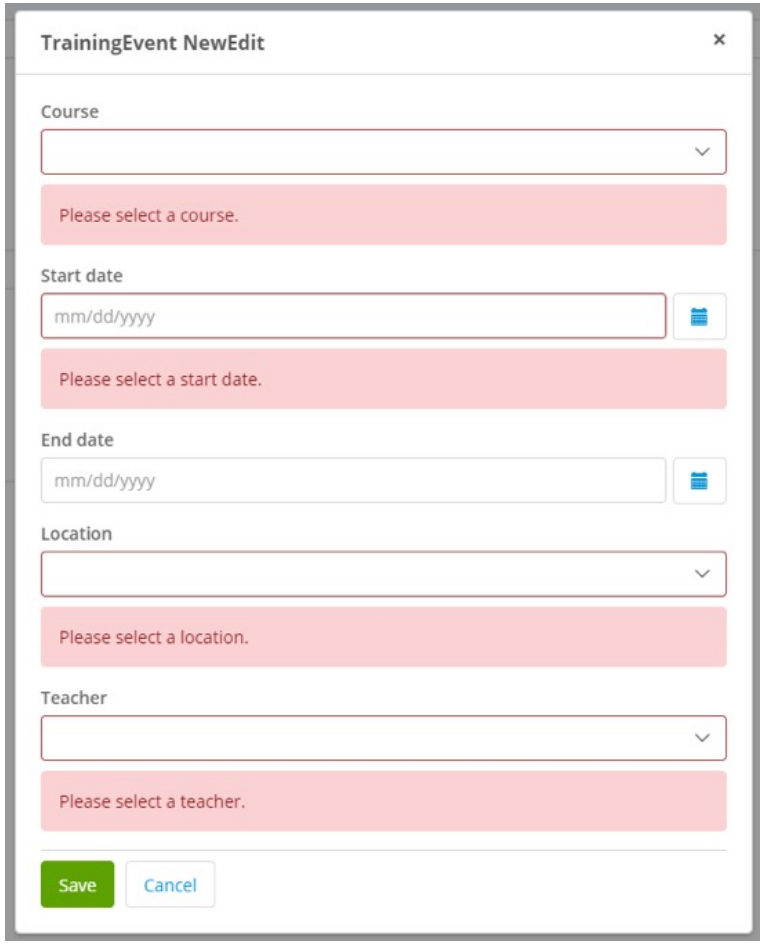
作为管理员，我希望数据有效且一致，
所以我的数据库不会变得混乱。

我们的域模型



mx mendix

在微流中验证

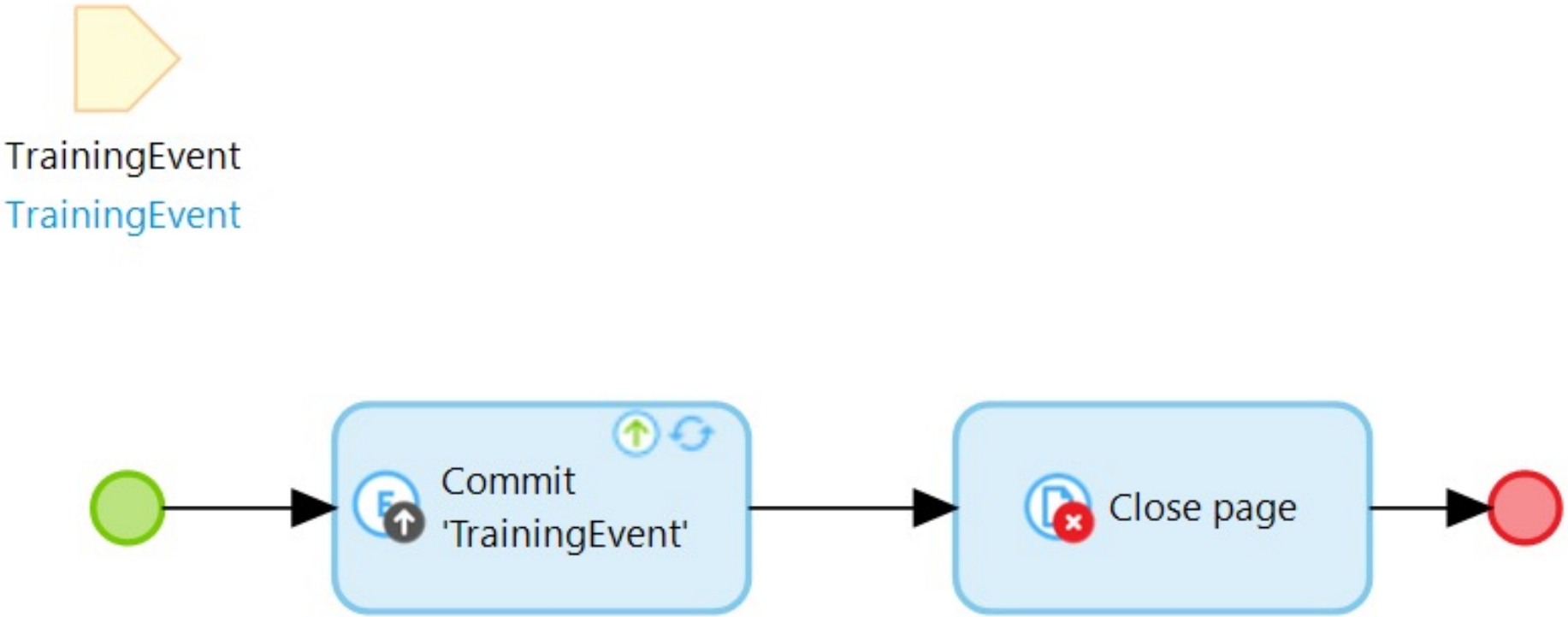


实体	属性或关联	验证规则
TrainingEvent	StartDate	Required
	Teacher selection	Required
	Course selection	Required
	Location selection	Required

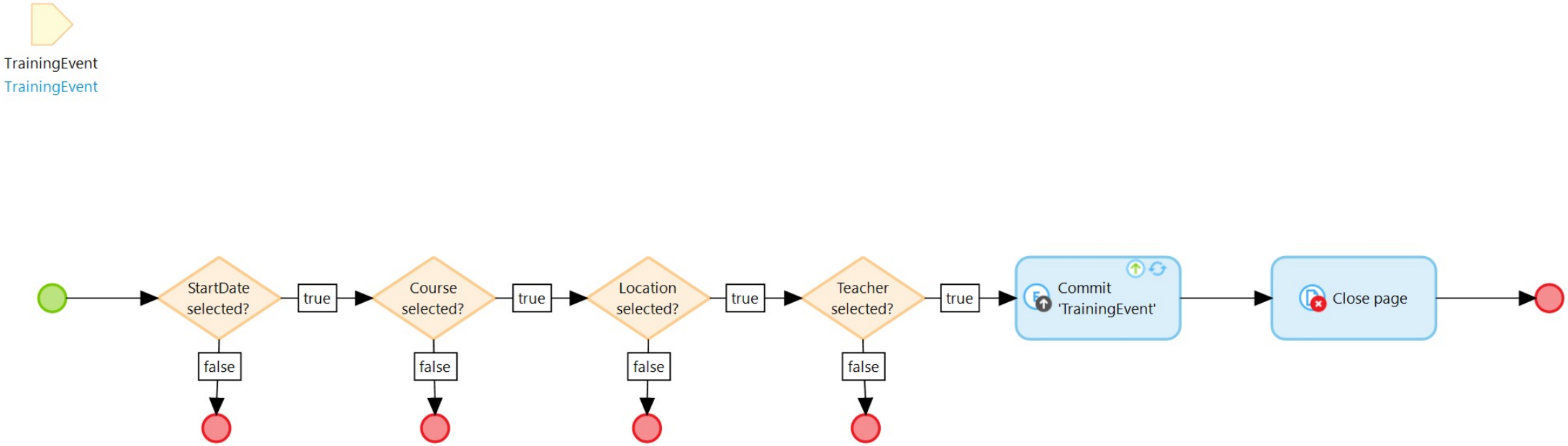
1. 将保存按钮更改为微流按钮
2. 模仿默认保存行为
3. 创建所有验证检查
4. 创建每个字段的验证反馈消息
5. 向用户一次性展示所有反馈

步骤 1 & 2: 创建基本微流

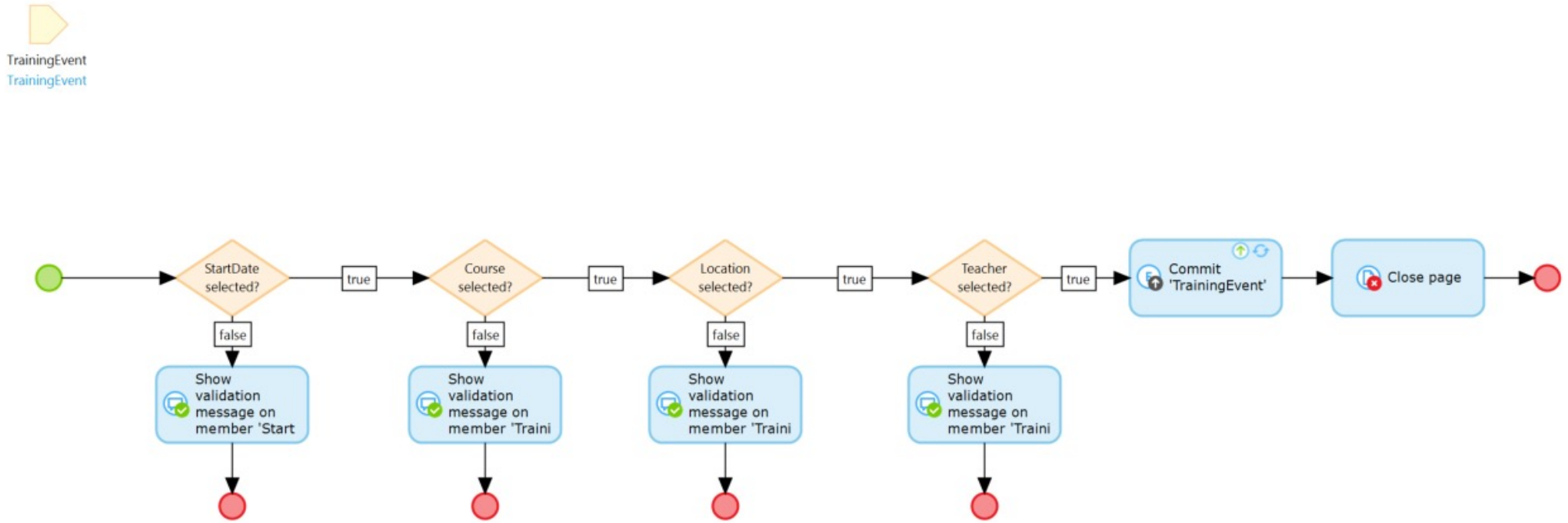
确保 Save 按钮触发验证微流：**ACT_TrainingEvent_Save**



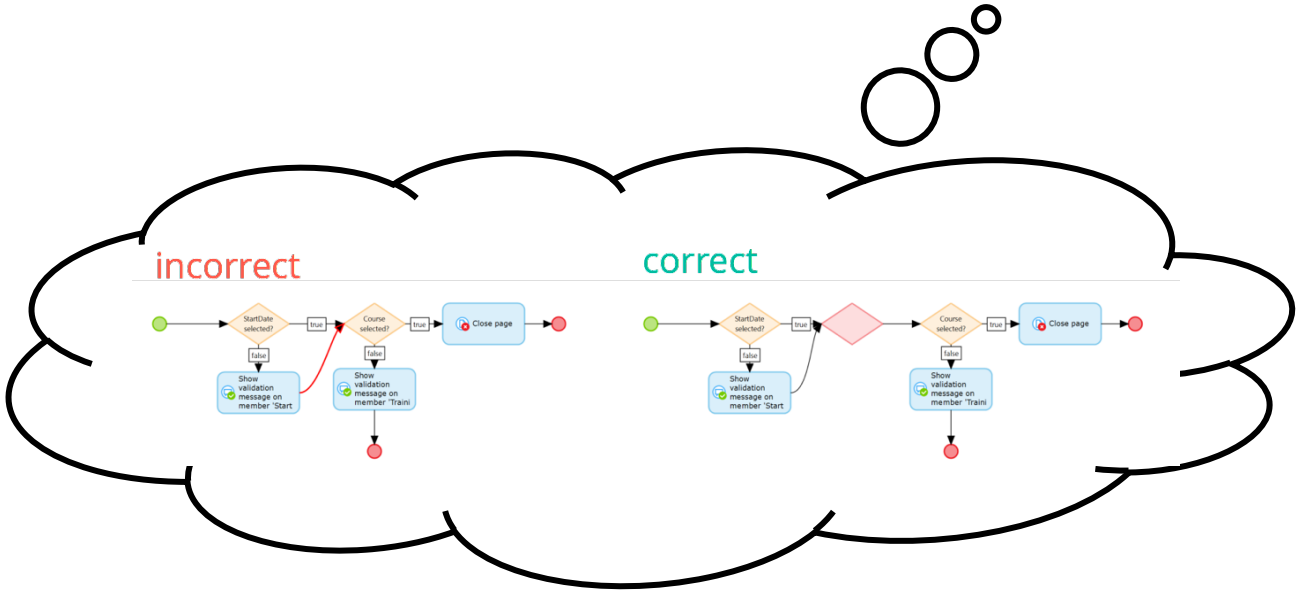
步骤 3: 添加数据验证


TrainingEvent
TrainingEvent
StartDate selected?
true
Course selected?
true
Location selected?
true
Teacher selected?
true
Commit 'TrainingEvent'
Close page
false
false
false
false

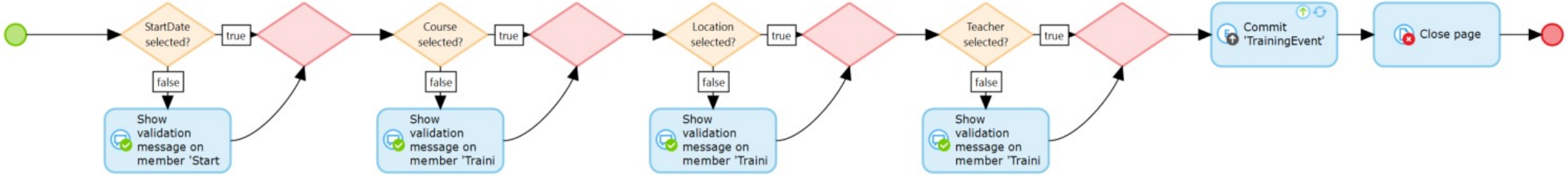
步骤 4: 添加验证反馈


TrainingEvent
TrainingEvent
StartDate selected?
true
Course selected?
true
Location selected?
true
Teacher selected?
true
Commit 'TrainingEvent'
Close page
false
Show validation message on member 'Start
false
Show validation message on member 'Traini
false
Show validation message on member 'Traini
false
Show validation message on member 'Traini

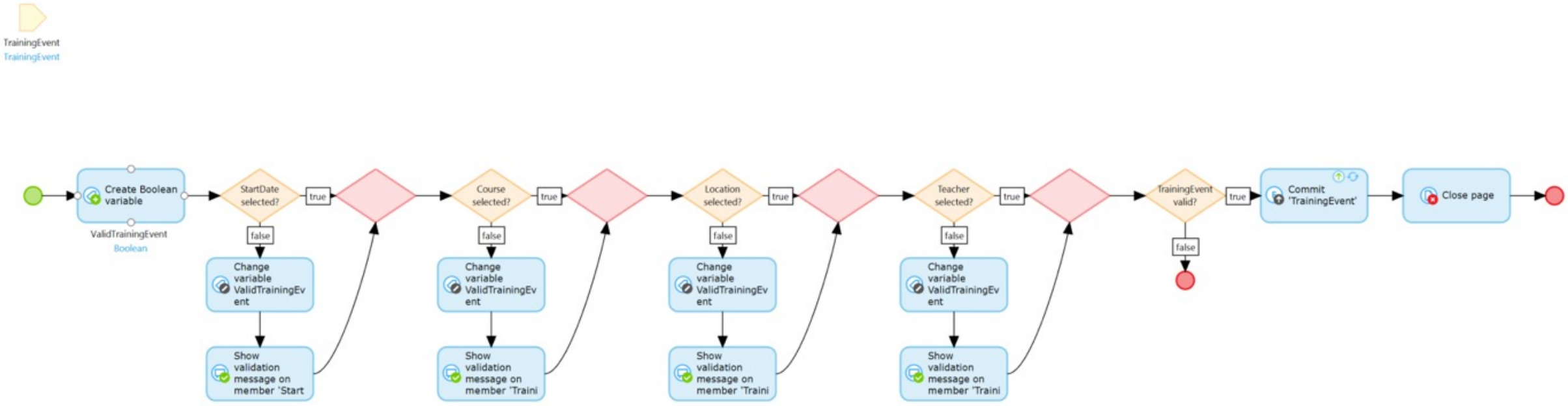
步骤 5: 合并判定分支

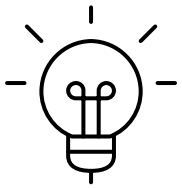


TrainingEvent
TrainingEvent



步骤6: 添加终止标记

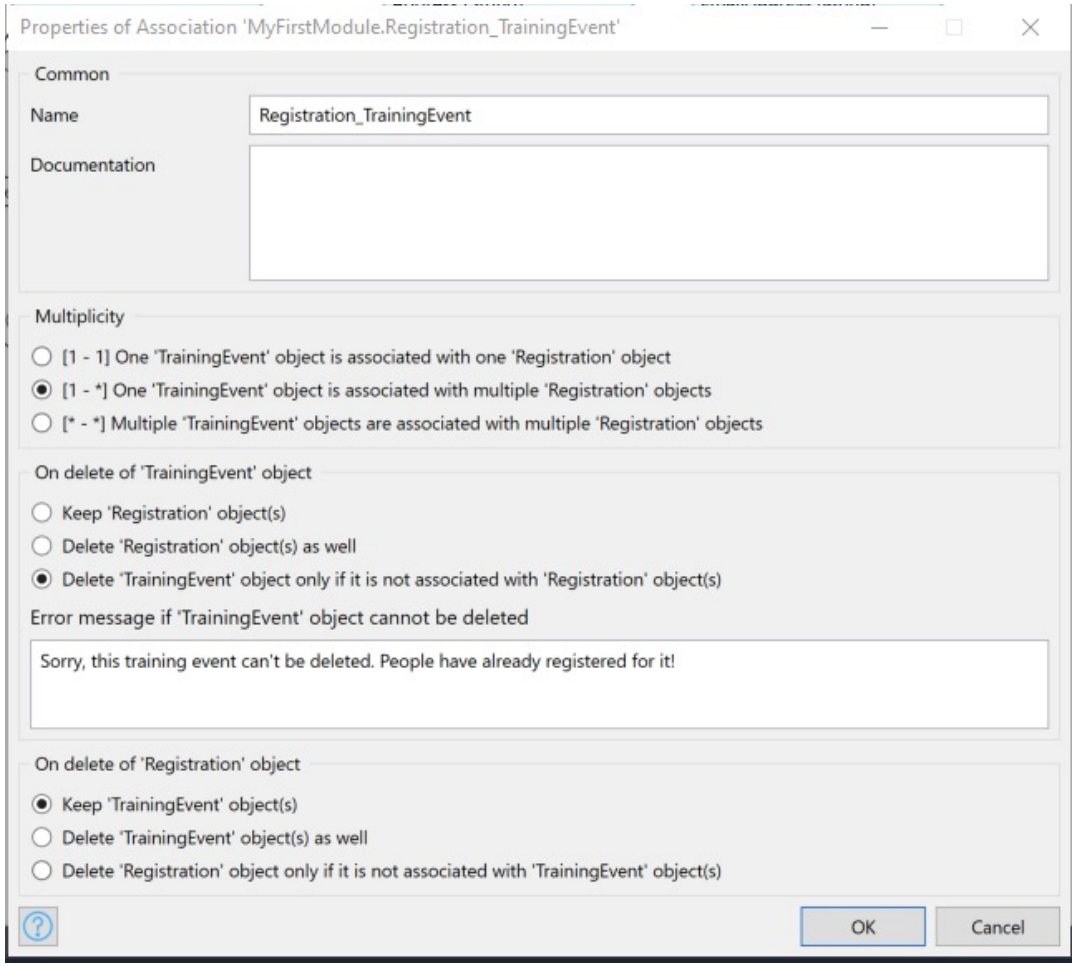

TrainingEvent
TrainingEvent
Create Boolean variable
ValidTrainingEvent
Boolean
StartDate selected?
true
false
Change variable ValidTrainingEvent
Show validation message on member 'Start
Course selected?
true
false
Change variable ValidTrainingEvent
Show validation message on member 'Traini
Location selected?
true
false
Change variable ValidTrainingEvent
Show validation message on member 'Traini
Teacher selected?
true
false
Change variable ValidTrainingEvent
Show validation message on member 'Traini
TrainingEvent valid?
true
false
Commit 'TrainingEvent'
Close page



User Story 9

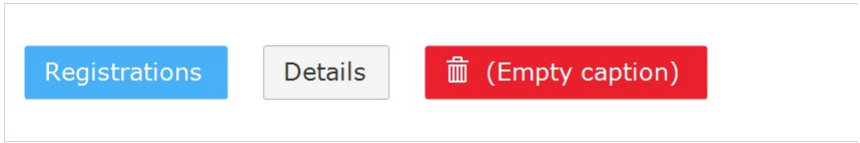
作为管理员，我希望能够删除没有注册的培训活动，以防我意外删除人们已经付费参加的培训活动。

删除保护

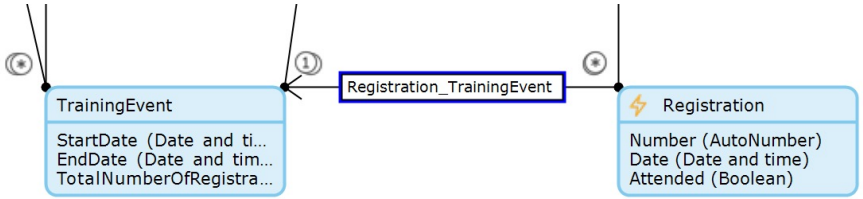

Properties of Association 'MyFirstModule.Registration_TrainingEvent'
Common
Name
Registration_TrainingEvent
Documentation
Multiplicity
[1 - 1] One 'TrainingEvent' object is associated with one 'Registration' object
[1 - *] One 'TrainingEvent' object is associated with multiple 'Registration' objects
[* - *] Multiple 'TrainingEvent' objects are associated with multiple 'Registration' objects
On delete of 'TrainingEvent' object
Keep 'Registration' object(s)
Delete 'Registration' object(s) as well
Delete 'TrainingEvent' object only if it is not associated with 'Registration' object(s)
Error message if 'TrainingEvent' object cannot be deleted
Sorry, this training event can't be deleted. People have already registered for it!
On delete of 'Registration' object
Keep 'TrainingEvent' object(s)
Delete 'TrainingEvent' object(s) as well
Delete 'Registration' object only if it is not associated with 'TrainingEvent' object(s)
OK
Cancel

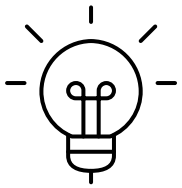
删除保护

步骤 1: 添加删除按钮



步骤 2: 设置删除行为

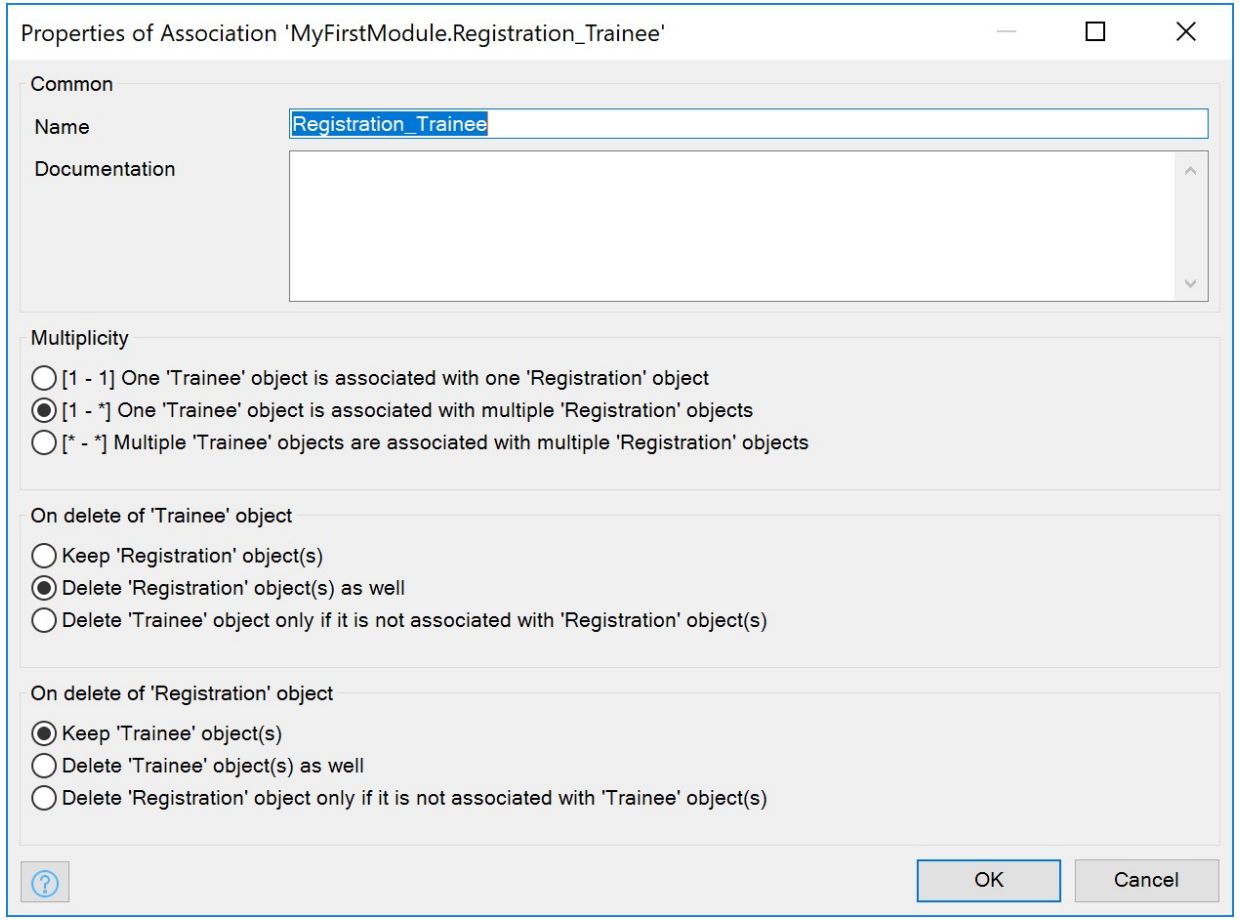




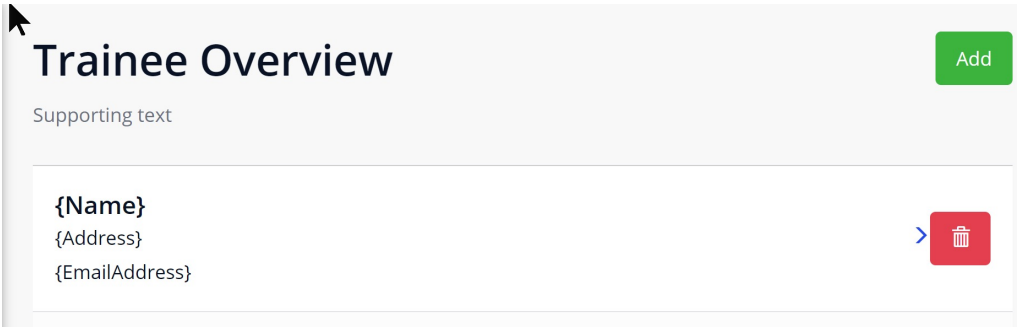
User Story 10

作为管理员，我希望能够删除学员及其所有注册信息，以便在他们不再希望成为 LearnNow 学生时将其从系统中删除。

级联删除

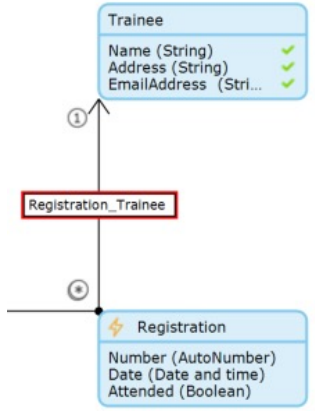

Properties of Association 'MyFirstModule.Registration_Trainee'
Common
Name
Registration_Trainee
Documentation
Multiplicity
[1 - 1] One 'Trainee' object is associated with one 'Registration' object
[1 - *] One 'Trainee' object is associated with multiple 'Registration' objects
[* - *] Multiple 'Trainee' objects are associated with multiple 'Registration' objects
On delete of 'Trainee' object
Keep 'Registration' object(s)
Delete 'Registration' object(s) as well
Delete 'Trainee' object only if it is not associated with 'Registration' object(s)
On delete of 'Registration' object
Keep 'Trainee' object(s)
Delete 'Trainee' object(s) as well
Delete 'Registration' object only if it is not associated with 'Trainee' object(s)
OK
Cancel

级联删除



步骤 1: 添加删除按钮，Style: Danger

步骤 2: 设置删除行为



Summary

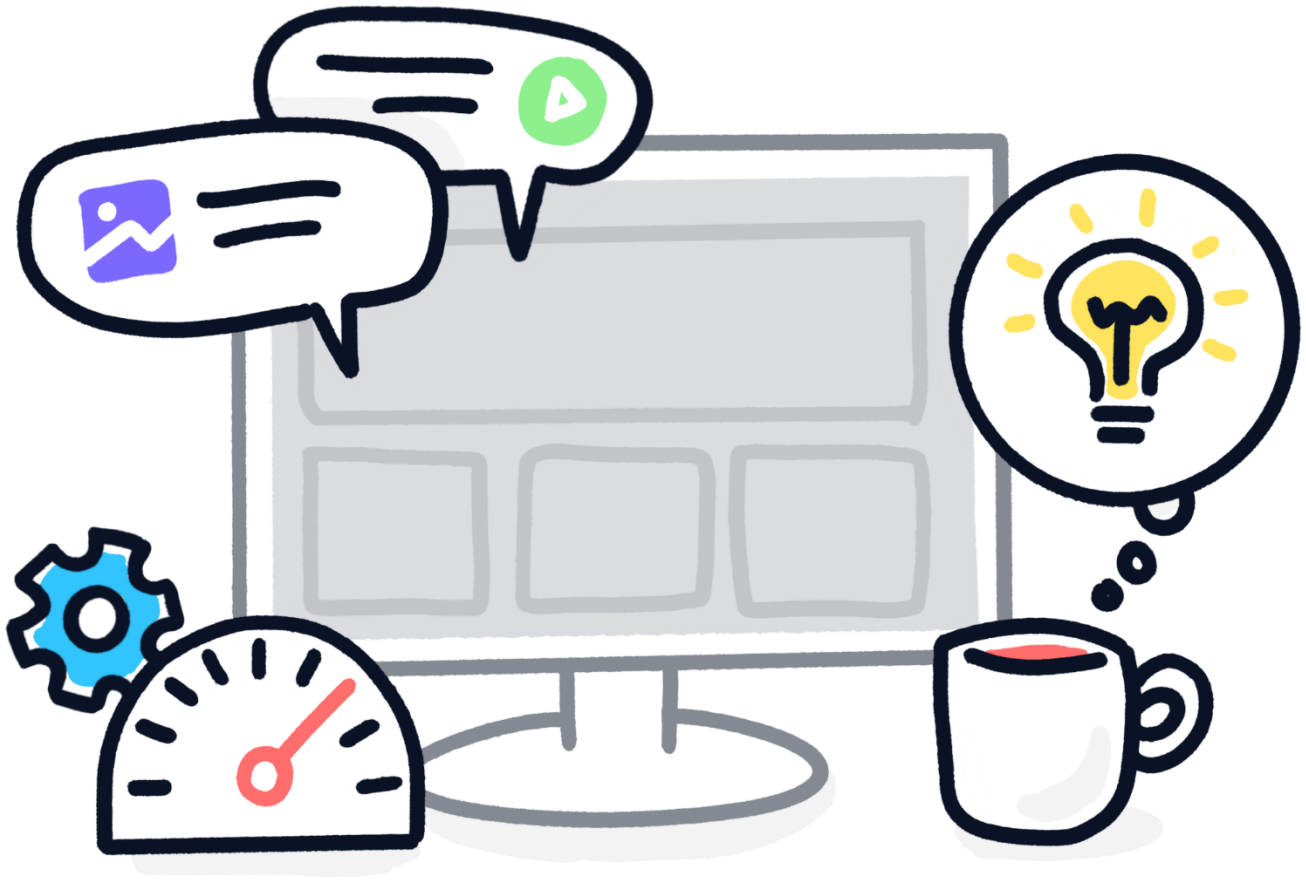
Knowledge checks

Go to kahoot.it

Make it secure

学习目标

- 了解保护应用程序的重要性
- 了解三个安全级别
- 了解两个安全位置
- 设置模块和项目安全
- 将用户角色连接到模块角色
- 设置页面、微流和实体访问权限
- 使用条件可见性来定制页面和实体访问权限



让应用更安全

- 为何重要？

- 保护对象
  - App安全
  - 模块安全

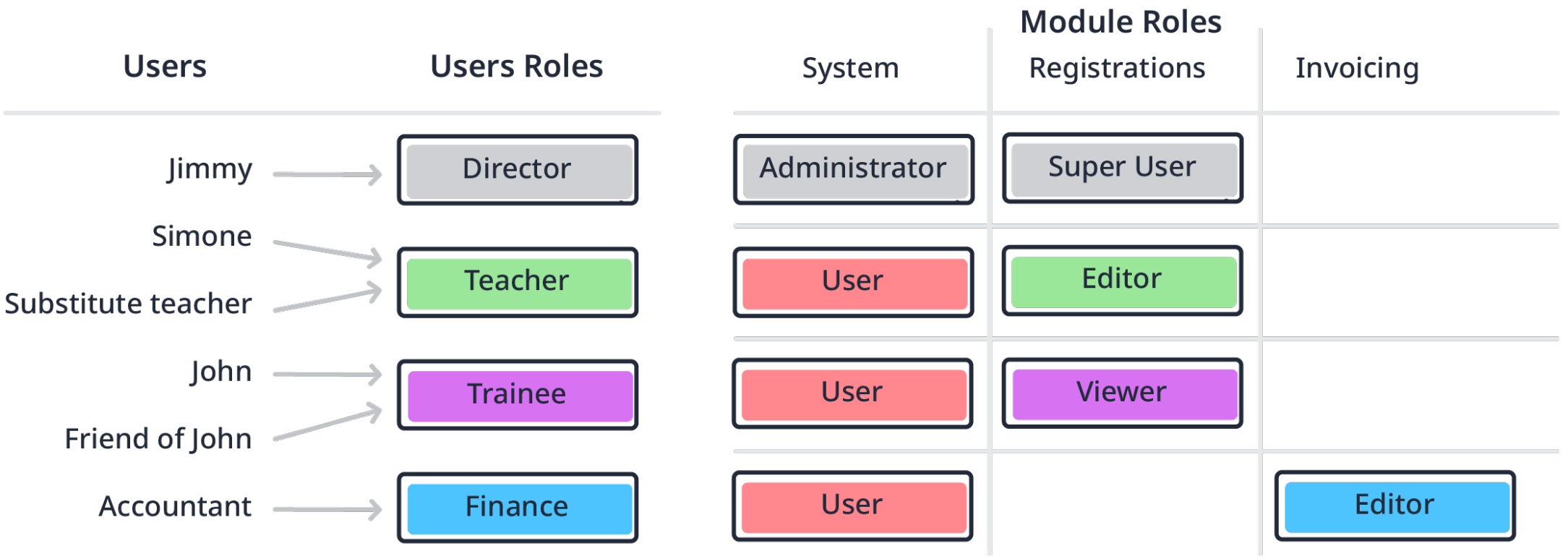
- 安全级别
  - Off
  - Prototype/Demo
  - Production

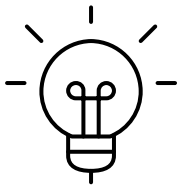
概念

Restroom
Kitchen
Can not
Access
Anything
CEO's office
Lunch Area
Can access
Everything
Employees
CEO
Cook

mx mendix

用户角色与模块角色

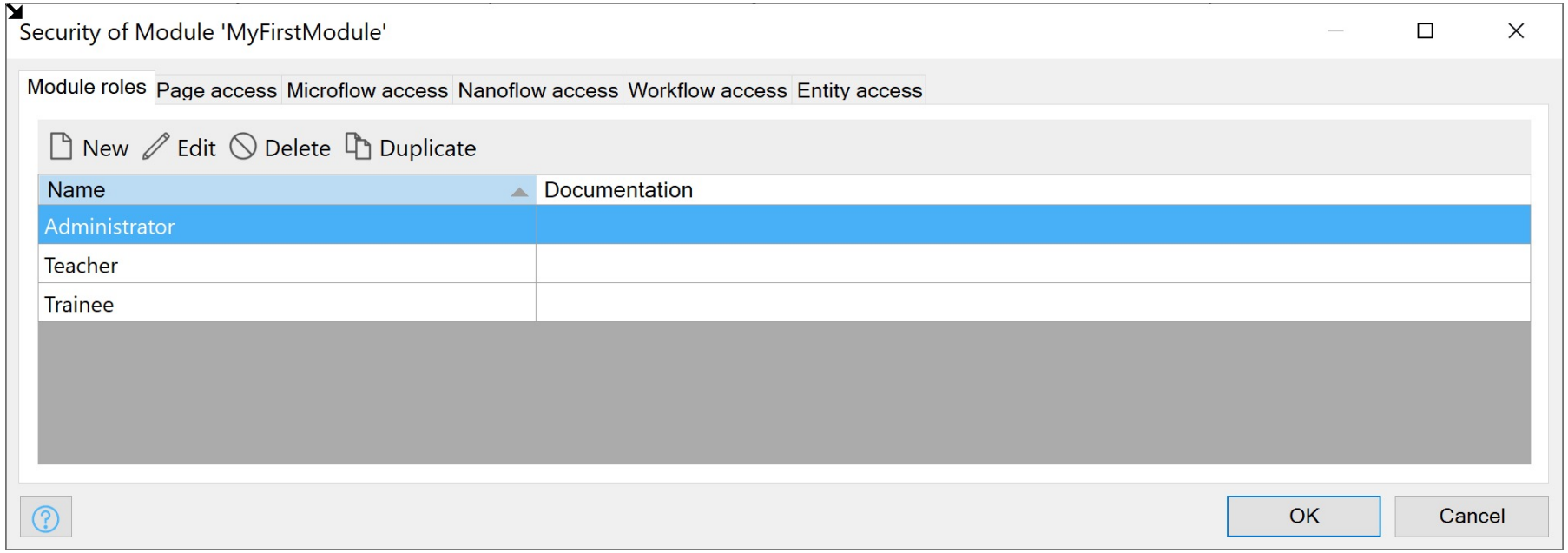

Users
Users Roles
Module Roles
System
Registrations
Invoicing
Jimmy
Director
Administrator
Super User
Simone
Substitute teacher
Teacher
User
Editor
John
Friend of John
Trainee
User
Viewer
Accountant
Finance
User
Editor



User Story 11

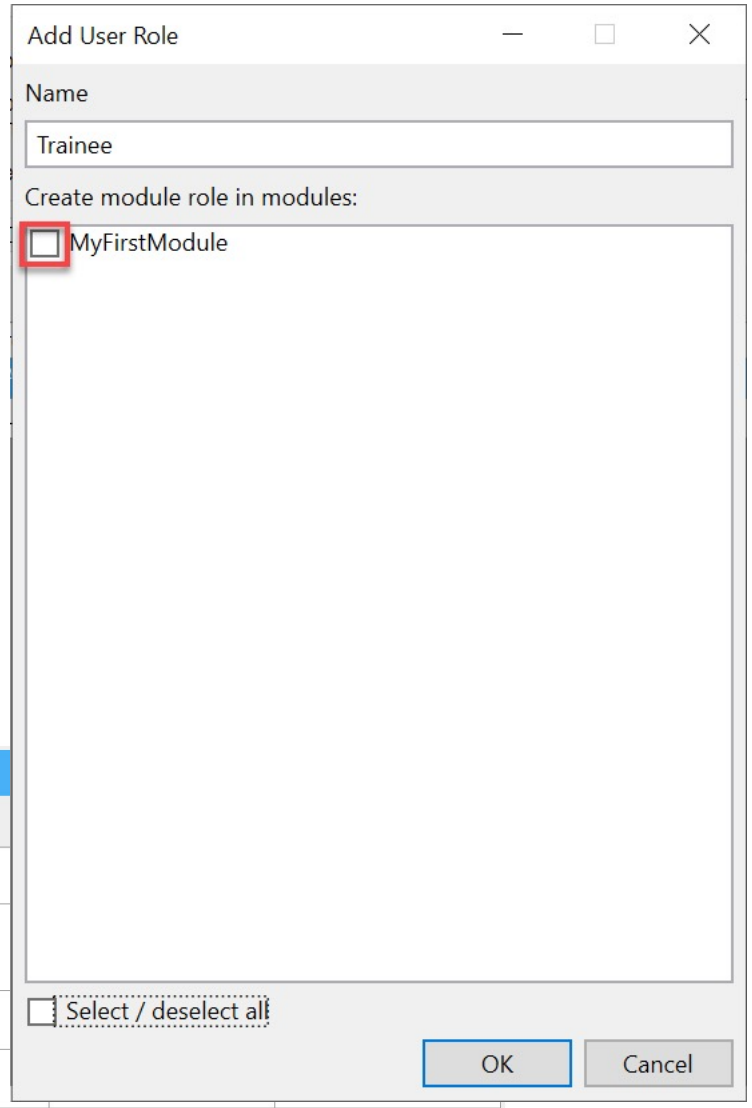
作为管理员，我希望应用程序是安全的，以便我遵守公司数据保护规则。

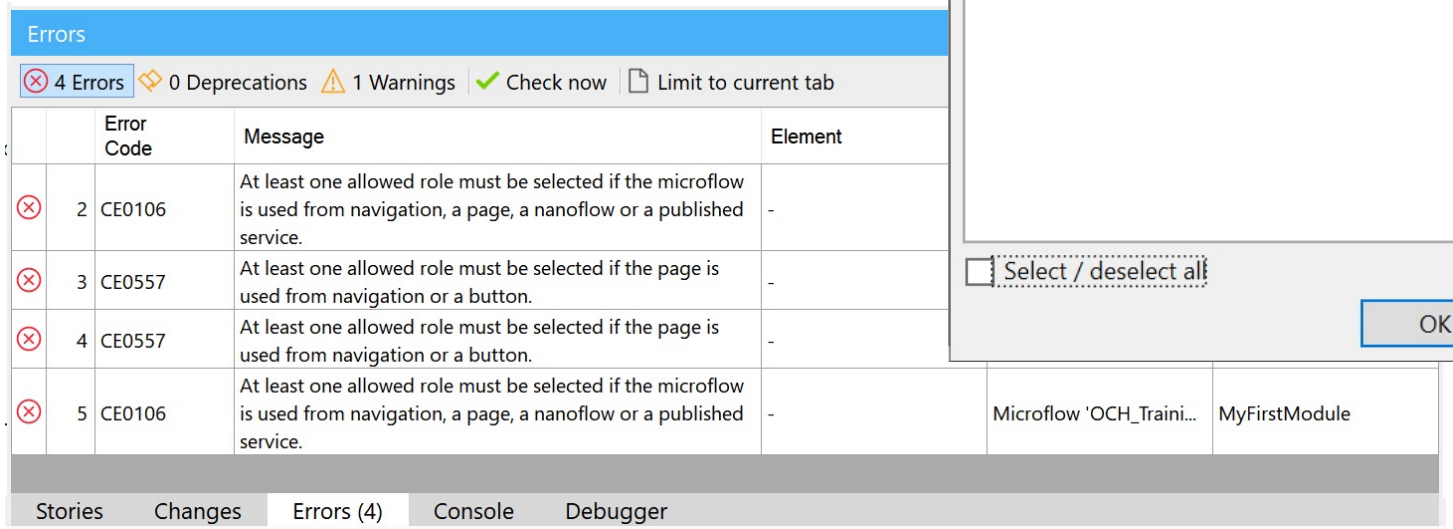
创建模块角色


Security of Module 'MyFirstModule'
Module roles
Page access
Microflow access
Nanoflow access
Workflow access
Entity access
New
Edit
Delete
Duplicate
Name
Documentation
Administrator
Teacher
Trainee
OK
Cancel

创建用户角色

1) App Security: Prototype/Demo
2) ‘User’ 用户角色 → ‘Teacher’
3) 新建用户角色 ‘Trainee’
4) 检查错误





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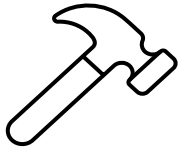


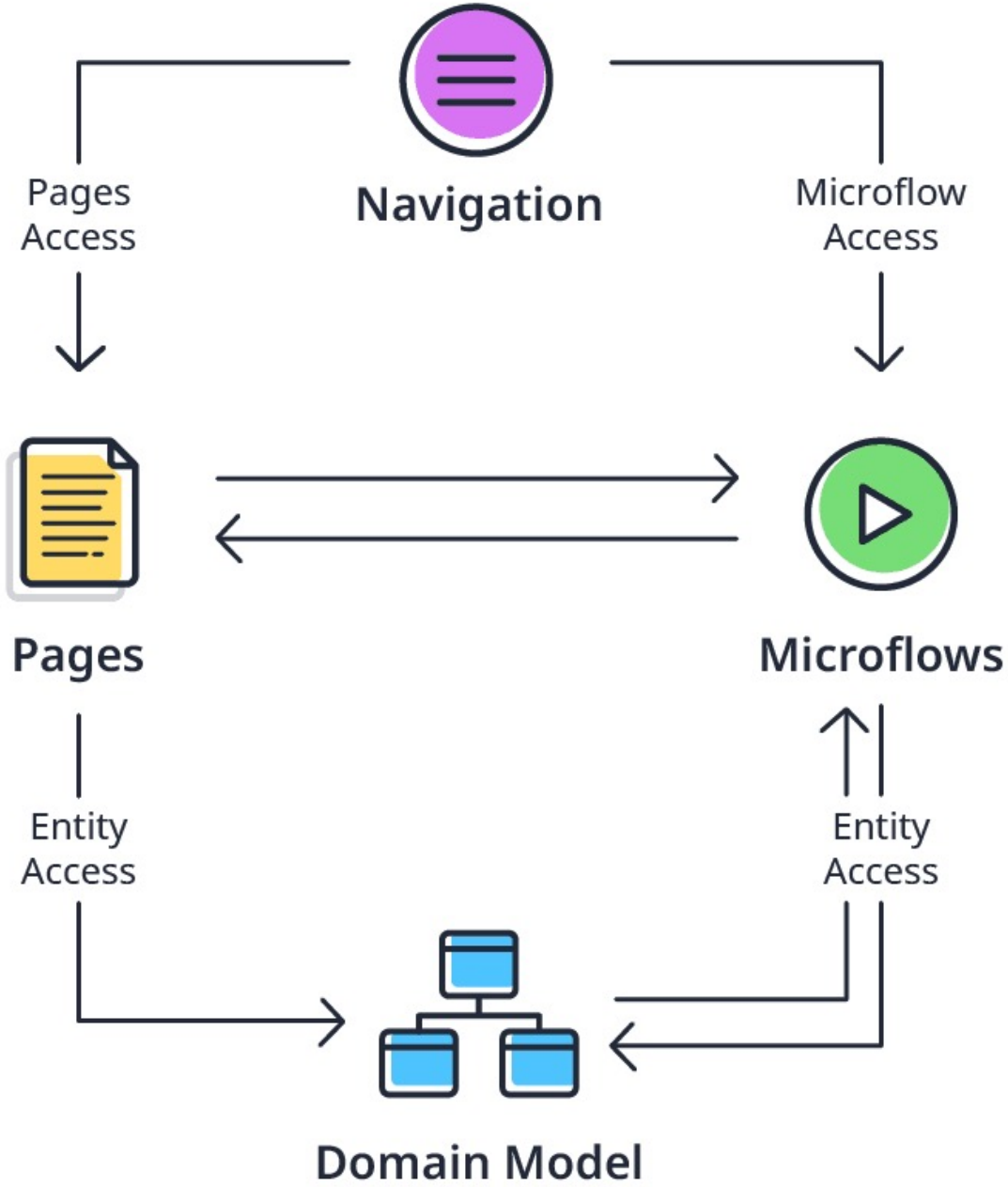
为用户角色分配模块角色

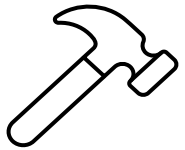
New Edit Delete

Name	Module roles
Administrator	Administration.Administrator, System.Administrator, MyFirstModule.Administrator
Teacher	Administration.User, System.User, MyFirstModule.Teacher
Trainee	Administration.User, System.User, MyFirstModule.Trainee

访问权限

- 页面访问
- 微流访问
- 实体访问



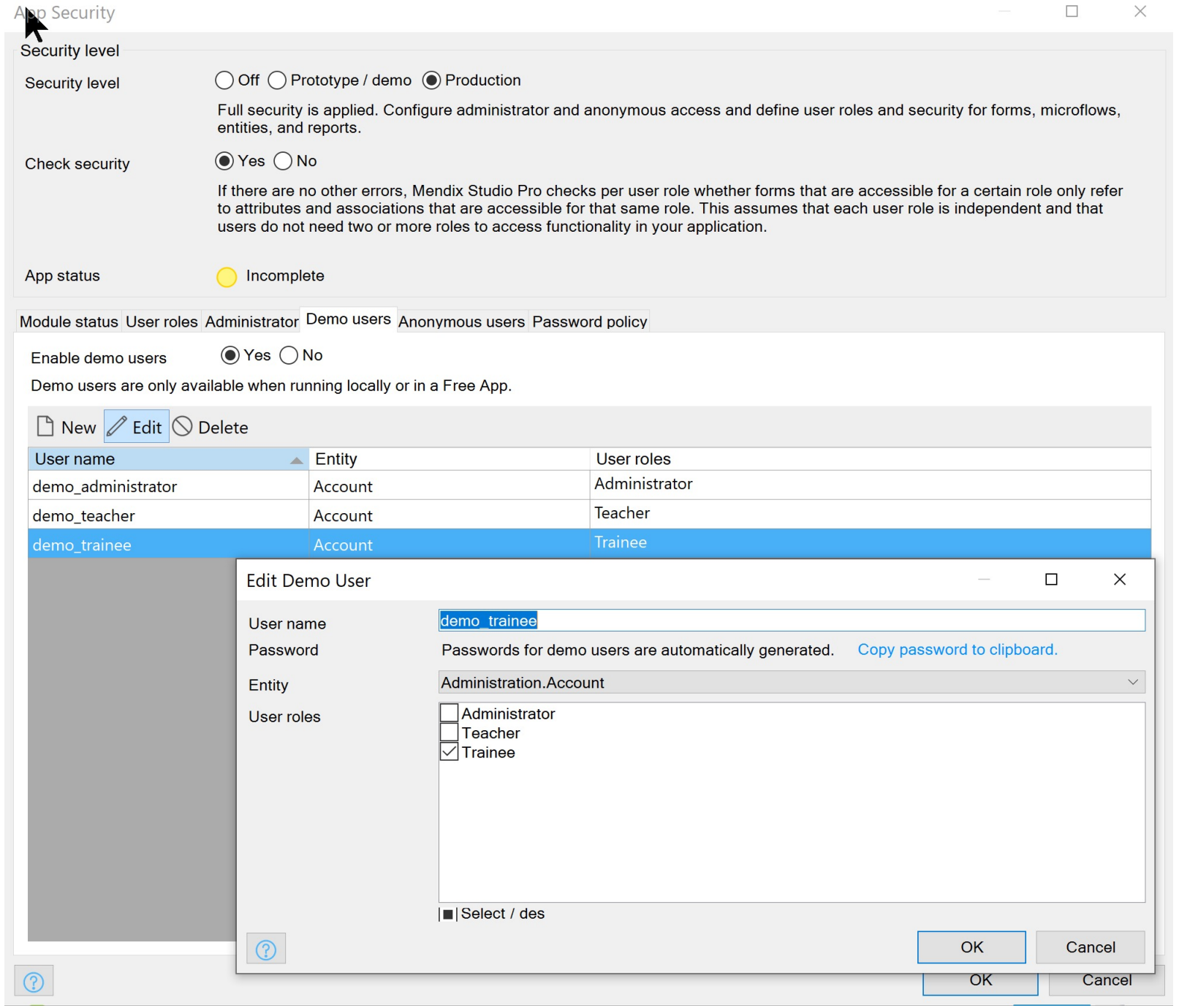


设定页面与微流访问权限

- 只有管理员才能创建、删除和编辑培训活动。
- 教师和学员不应访问这些功能。

Page	Administrator	Teacher	Trainee
Course			
• NewEdit	Y	N	N
• Overview	Y	Y	N
Home	Y	Y	N
Location			
• NewEdit	Y	N	N
• Overview	Y	Y	N
Registration			
• NewEdit	Y	N	N
Teacher			
• NewEdit	Y	N	N
• Overview	Y	Y	N
Trainee			
• NewEdit	Y	N	N
• Overview	Y	Y	N
TrainingEvent			
• NewEdit	Y	N	N
• Overview	Y	Y	Y
• Registrations	Y	Y	N

设置demo用户



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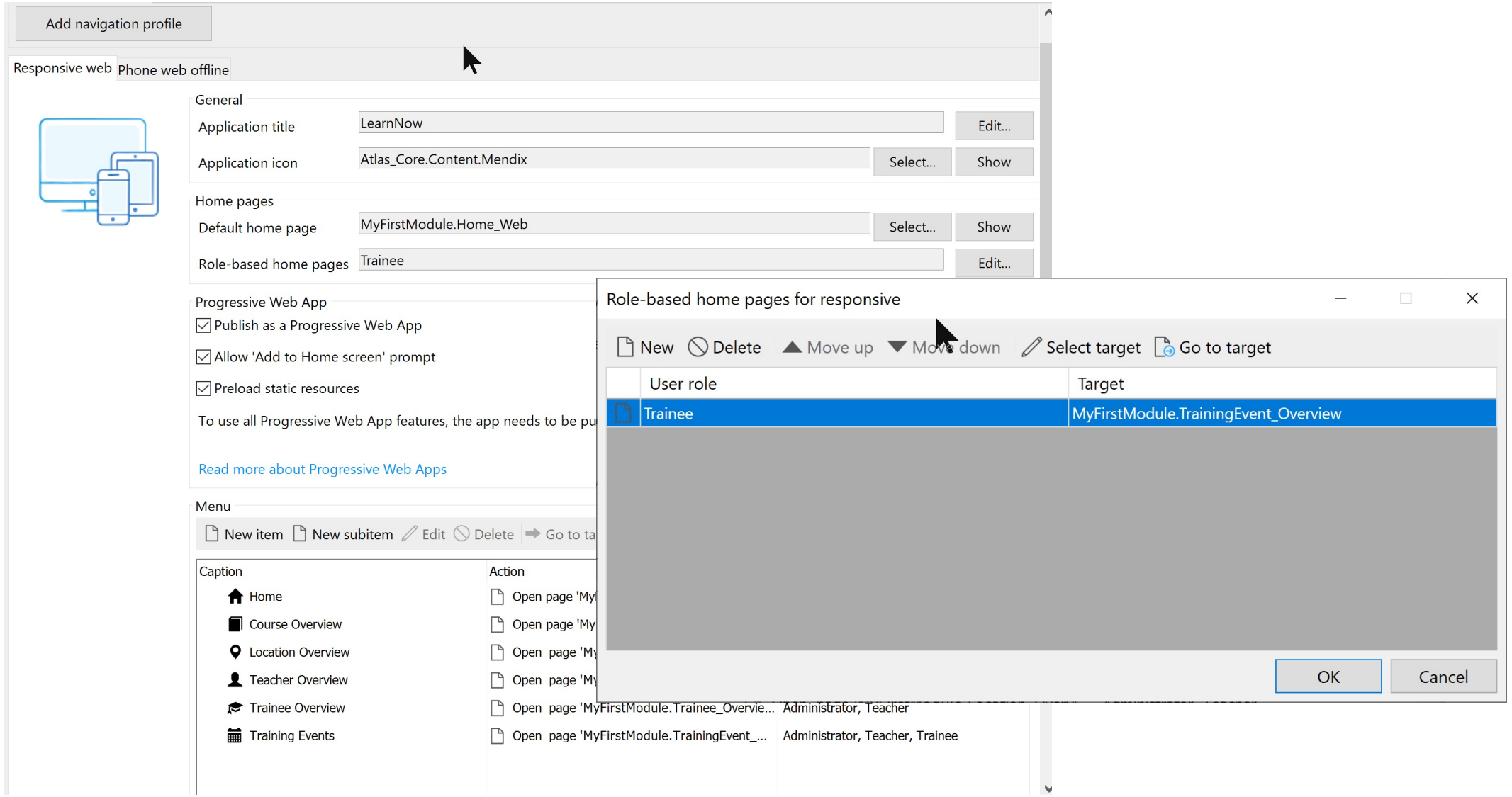
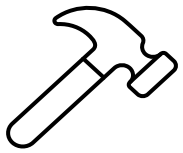
基于不同角色的首页



mx mendix



设置实体访问权限

Module Security Type 'Security'

Module roles | Page access | Nanoflow access | Microflow access | Entity access

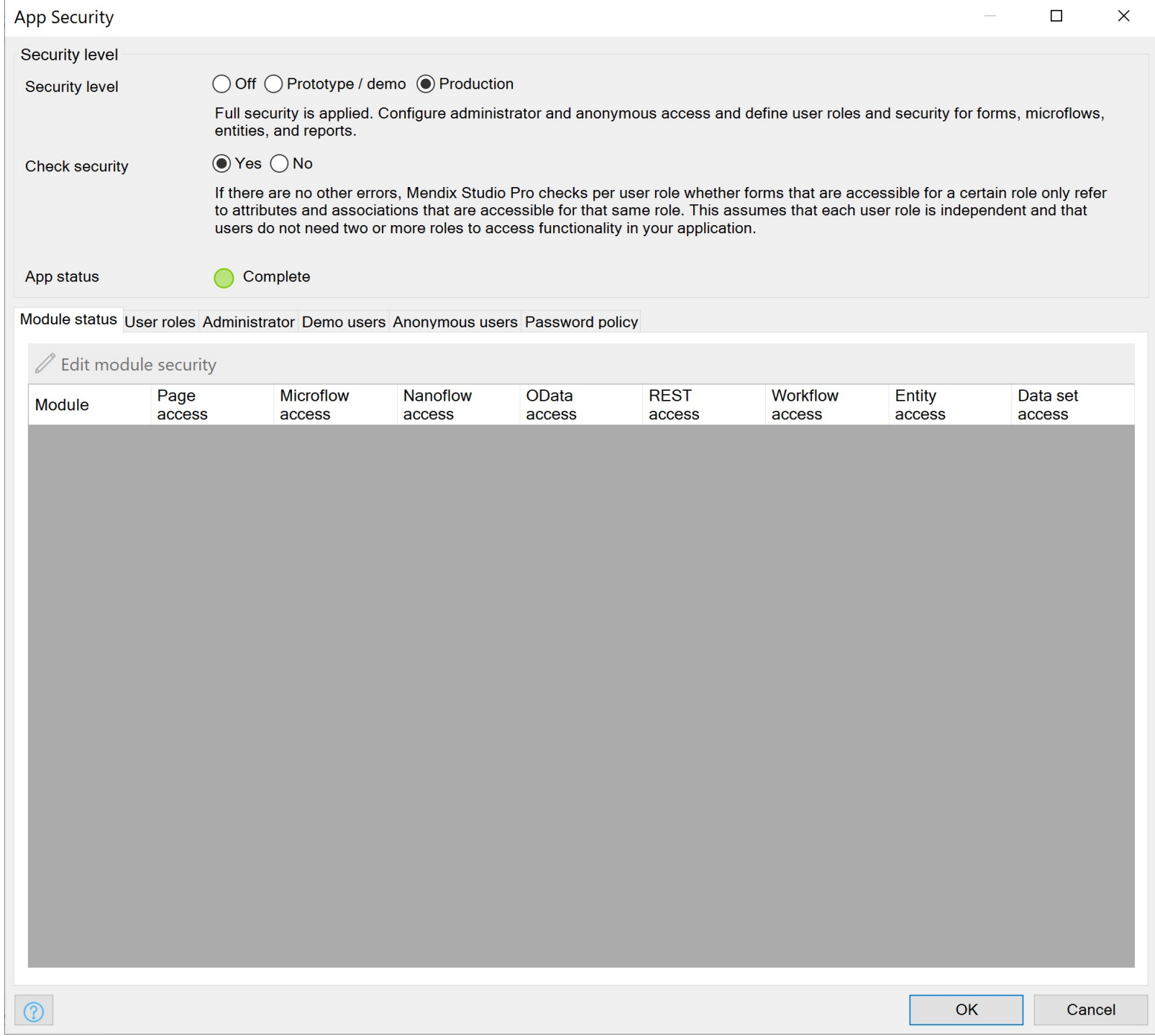
Note: Changes you make here modify the domain model.

New | Edit | Delete | Duplicate

Entity	Module roles	Create	Delete	Member access
Course	Administrator	Yes	Yes	Full Read, Full Write
Course	Teacher	No	No	Full Read, No Write
Course	Trainee	No	No	Limited Read, No Write
Location	Administrator	Yes	Yes	Full Read, Full Write
Location	Teacher	No	No	Full Read, No Write
Location	Trainee	No	No	Limited Read, No Write
Registration	Teacher	No	No	Full Read, No Write
Registration	Administrator	Yes	Yes	Full Read, Full Write
Teacher	Administrator	Yes	Yes	Full Read, Full Write
Teacher	Trainee	No	No	Limited Read, No Write
Teacher	Teacher	No	No	Full Read, No Write
Trainee	Teacher	No	No	Full Read, No Write
Trainee	Administrator	Yes	Yes	Full Read, Full Write
TrainingEvent	Teacher	No	No	Full Read, No Write
TrainingEvent	Trainee	No	No	Limited Read, No Write
TrainingEvent	Administrator	Yes	Yes	Full Read, Full Write

应用安全性设置

- Administrator 标签页
- Demo Users 标签页
- Anonymous Users 标签页
- Password Policy 标签页



mx mendix

Summary

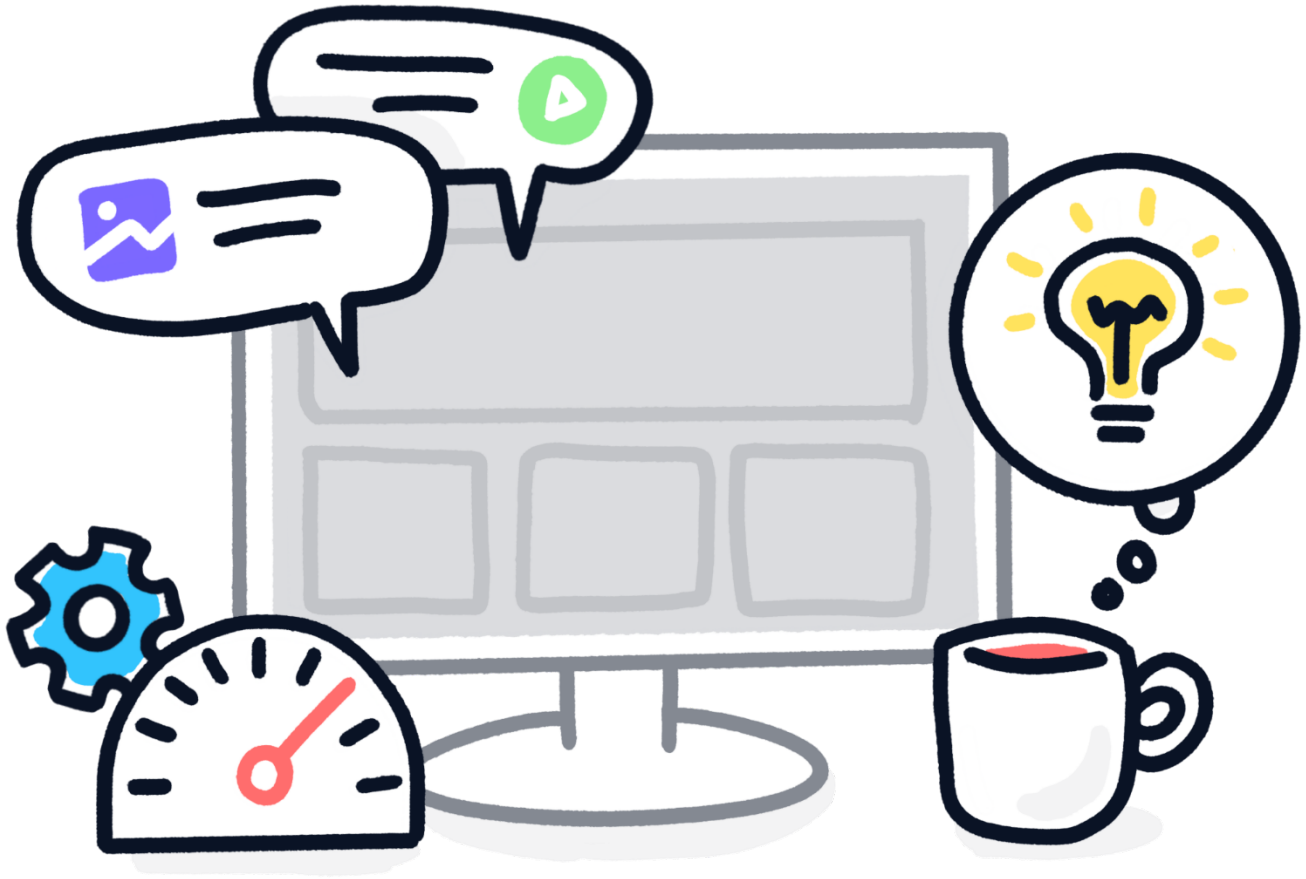
Knowledge checks

Go to kahoot.it

Make it Mobile

学习目标

- 了解移动应用程序的价值
- 创建特定于移动设备的页面
- 学习使用纳流
- 设置基于角色的主页



响应式, 原生, 与渐进式（PWA）移动应用

AppStore-based

Native Mobile
Optimal user experience, best device integrations & security options

Hybrid
Leverage large libraries of existing web capabilities

Browser-based

PWA
Native like, user adoption without AppStore dependencies

Responsive Web
Web apps (not optimized for mobile)

为什么使用 PWA?

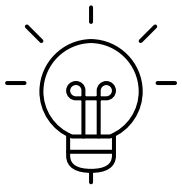
- 可安装
- 可靠
- 功能强大

移动应用

您需要面向移动设备的解决方案吗？

移动应用专有功能：

- 导航Profile
- 移动页面布局
- （原生）移动组件



User Story 12

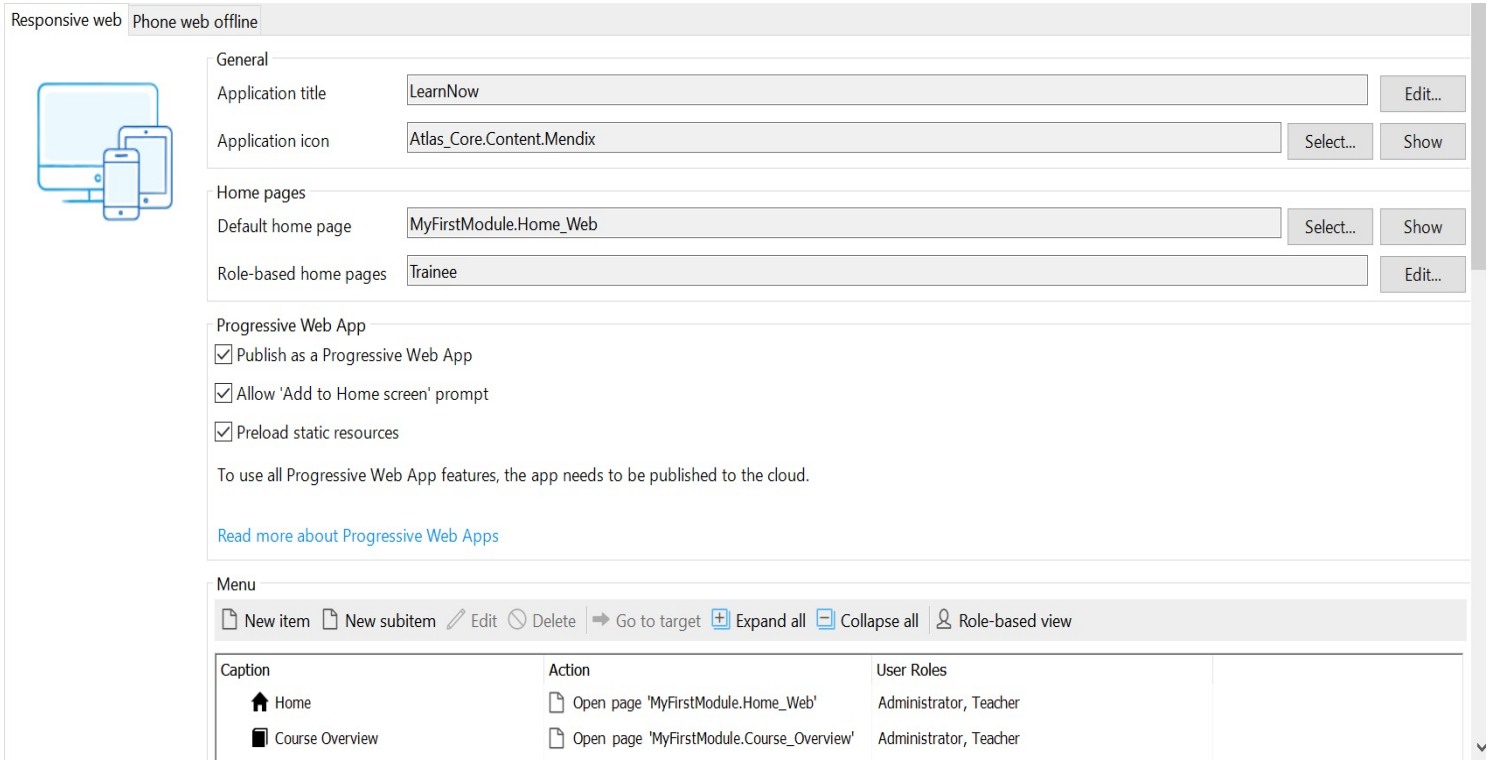
作为一名学员，我想查看即将举行的培训活动，包括他们的地理位置，以便我可以选择最接近的。

方法

- **导航**:
  - 新建 PWA 导航 profile.
  - 指定默认首页.
  - 为 Trainee 配置基于角色的首页，展示培训事件列表（包括地点）
- **布局**: Jimmy 希望为移动设备优化应用.
- **原生功能**: Jimmy 希望应用能使用手机上的地图.

添加Responsive Web navigation profile

- 在 App Explorer 中打开导航
- 选中 Progressive Web App 下的三个框。
- 将应用程序标题更改为 LearnNow。



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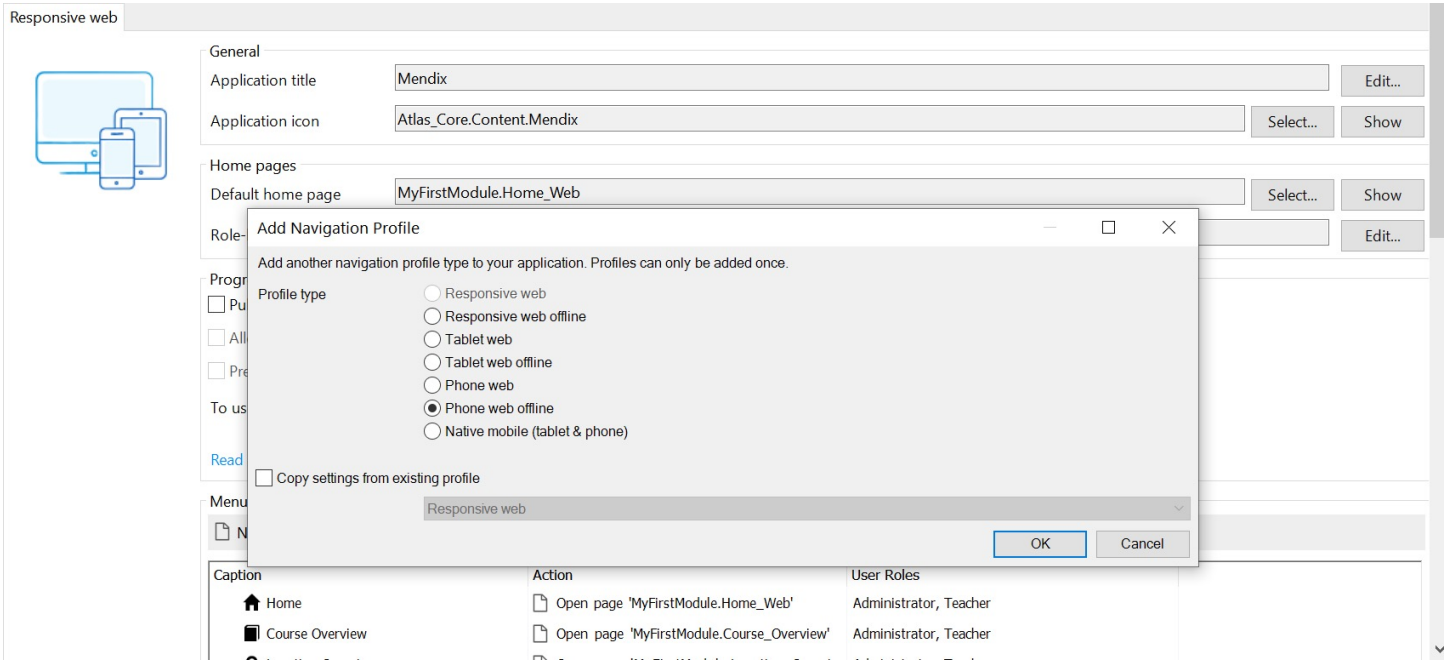
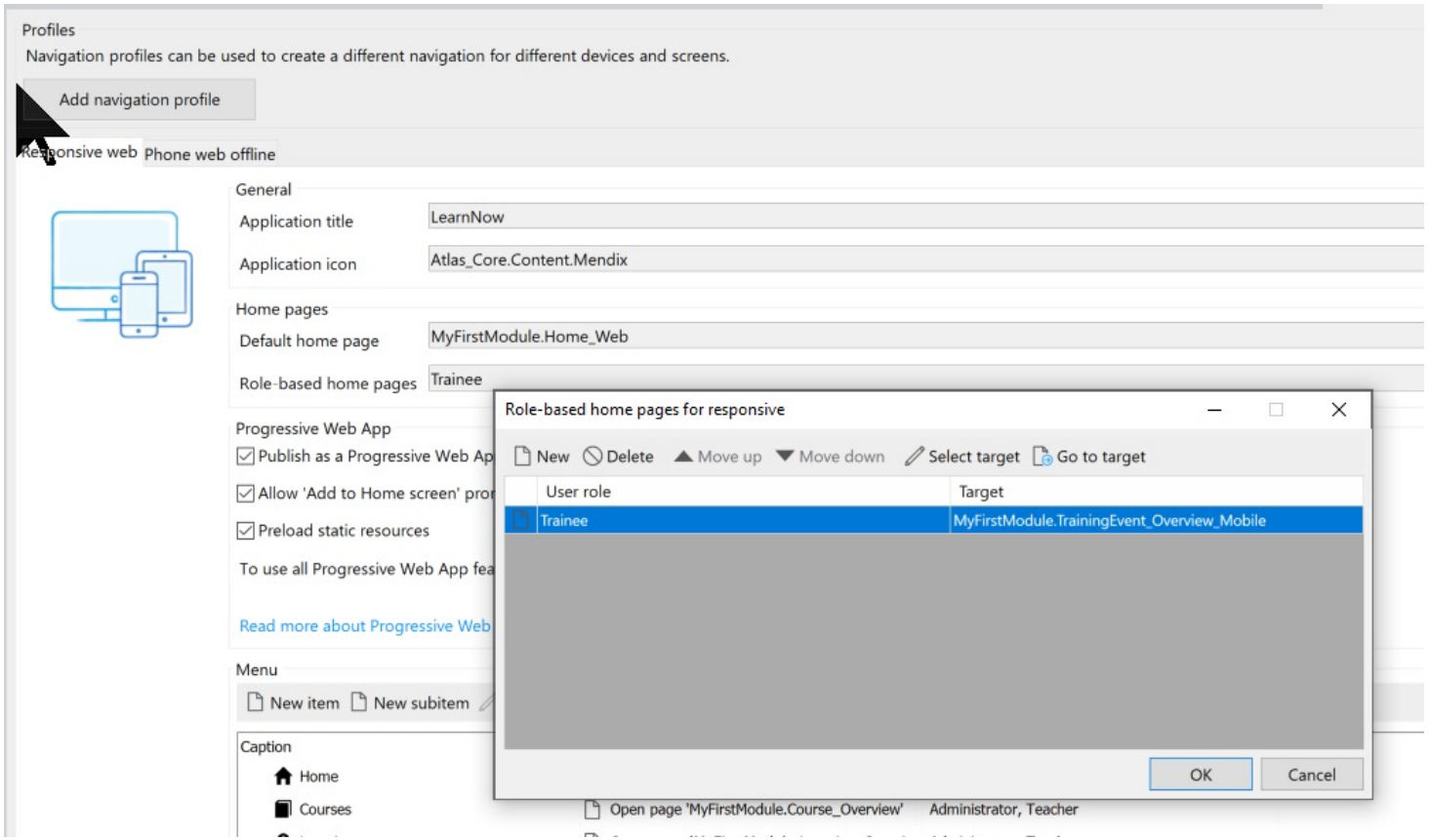
添加 Phone Web Offline navigation profile

- 添加导航配置文件：Phone web offline
- 选中允许“添加到主屏幕”提示框
- 将默认主页设置为新页面 TrainingEvent_Overview_Mobile
  1. 布局选项：Phone (Web)
  2. 模板：List Double Line.
  3. 导航布局：Phone_Topbar。



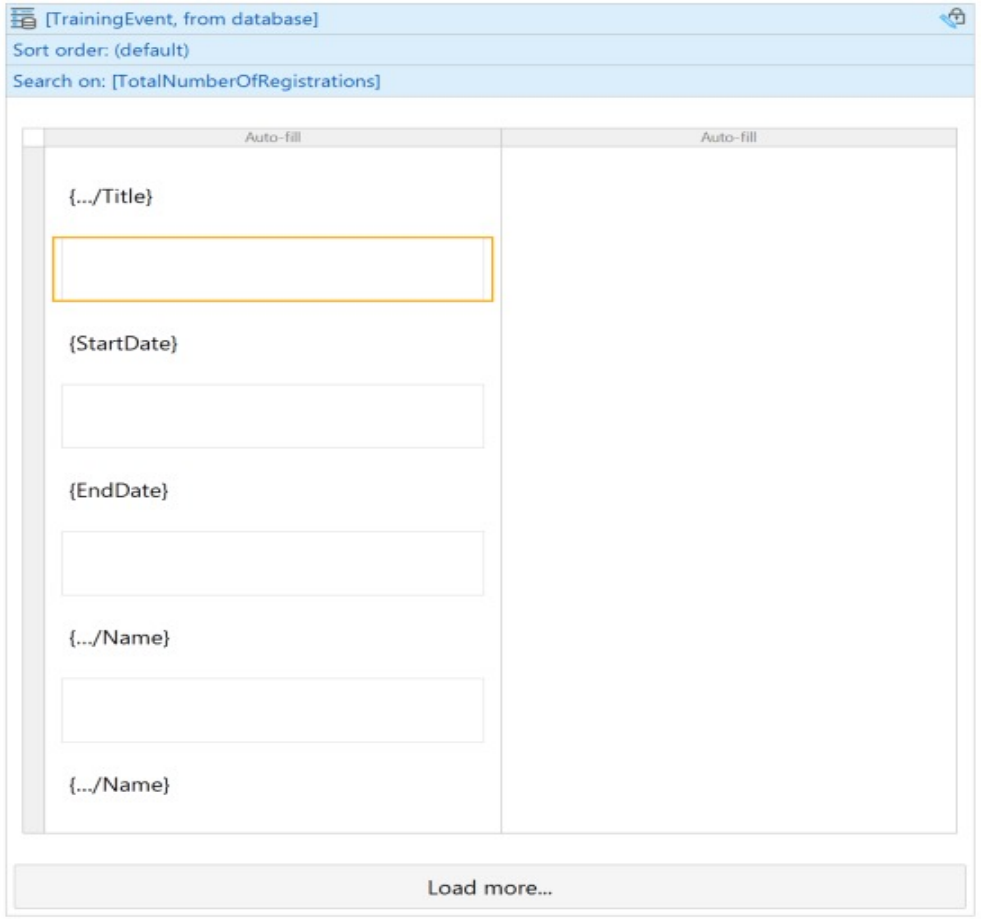
完善 Responsive Web navigation profile

- 为学员设置基于角色的首页以打开 TrainingEvent_Overview_Mobile 页面。



配置移动页面

- 页面名称： TrainingEvents_Overview_Mobile
- 使用 Properties 窗格将页面标题设置为 Training Events
- 将列表视图连接到 TrainingEvent 实体
- 是否要自动填充列表视图的内容？ – 选择是
- 添加具有两列的布局网格小部件来构建页面
- 将文本小部件移动到左列
- 在文本小部件之间添加容器组件
- 删除列表视图中的搜索约束

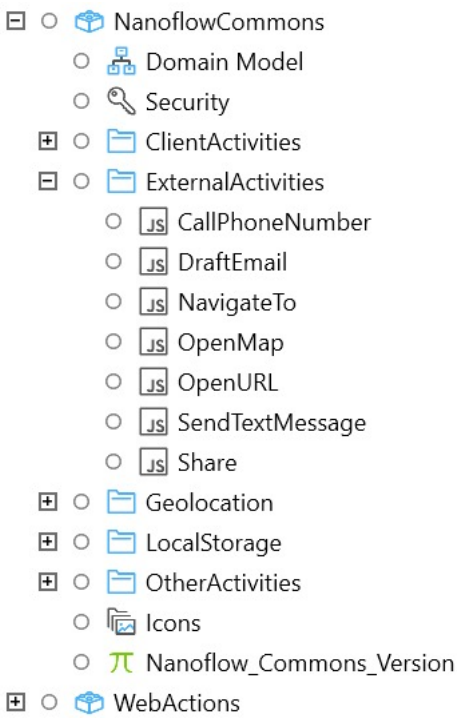


什么是纳流(Nanoflow)?

- 允许表达您的应用程序的逻辑

- 移动端优势：
  - 直接在浏览器/设备上运行（速度优势）
  - 可以在离线应用程序中使用

Nanoflow Commons 模块



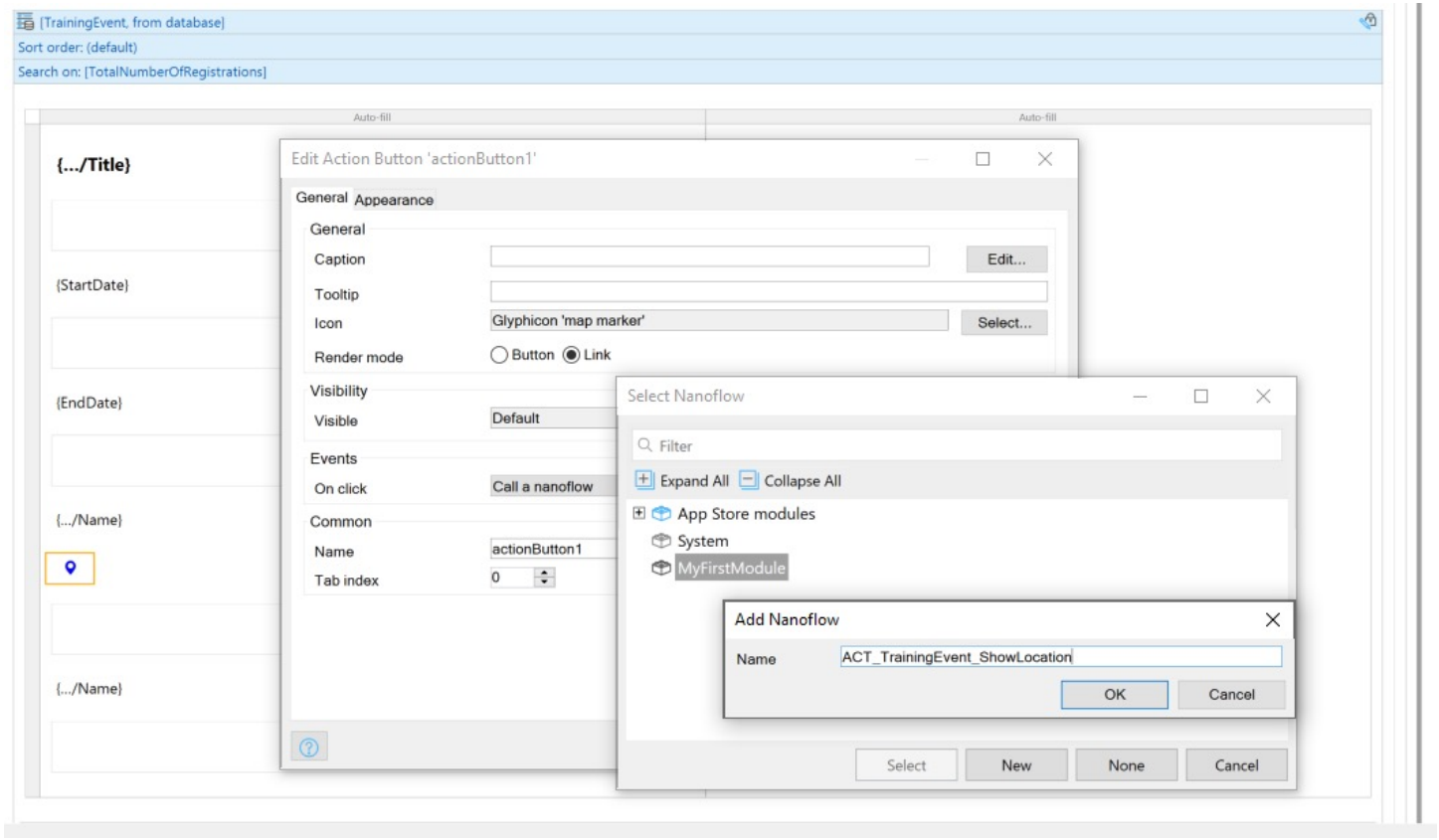
添加地点图标与展示地点的纳流

- 添加按钮:

  标题: empty

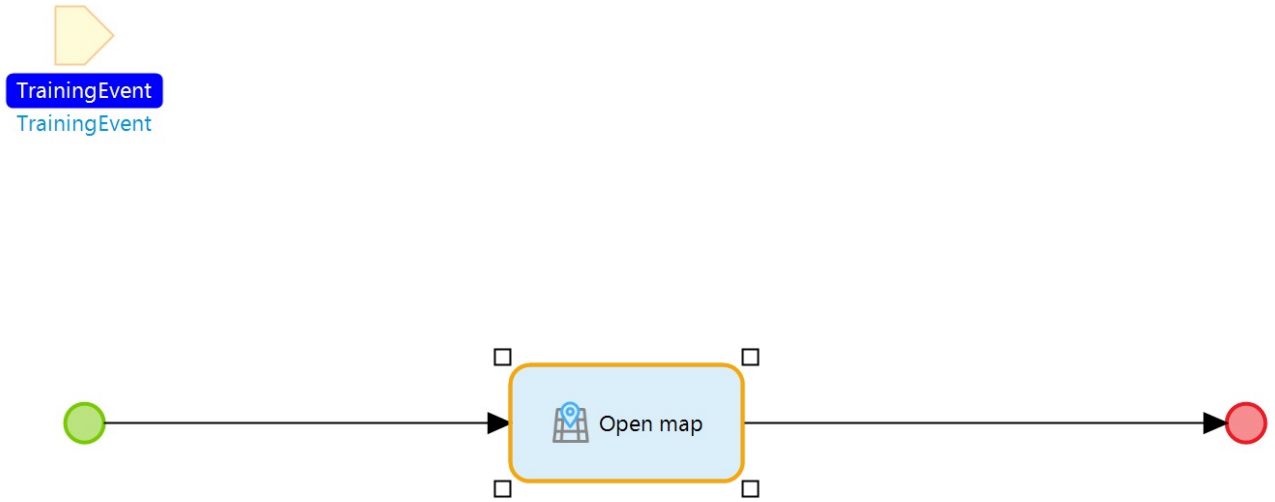
  图标: Map

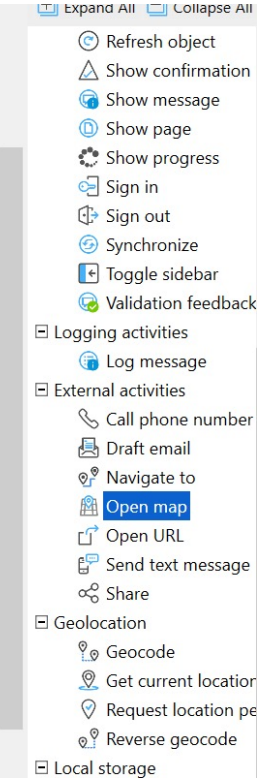
- 连接到纳流 ACT_TrainingEvent_ShowLocation



配置 ACT_TrainingEvent_ShowLocation 纳流

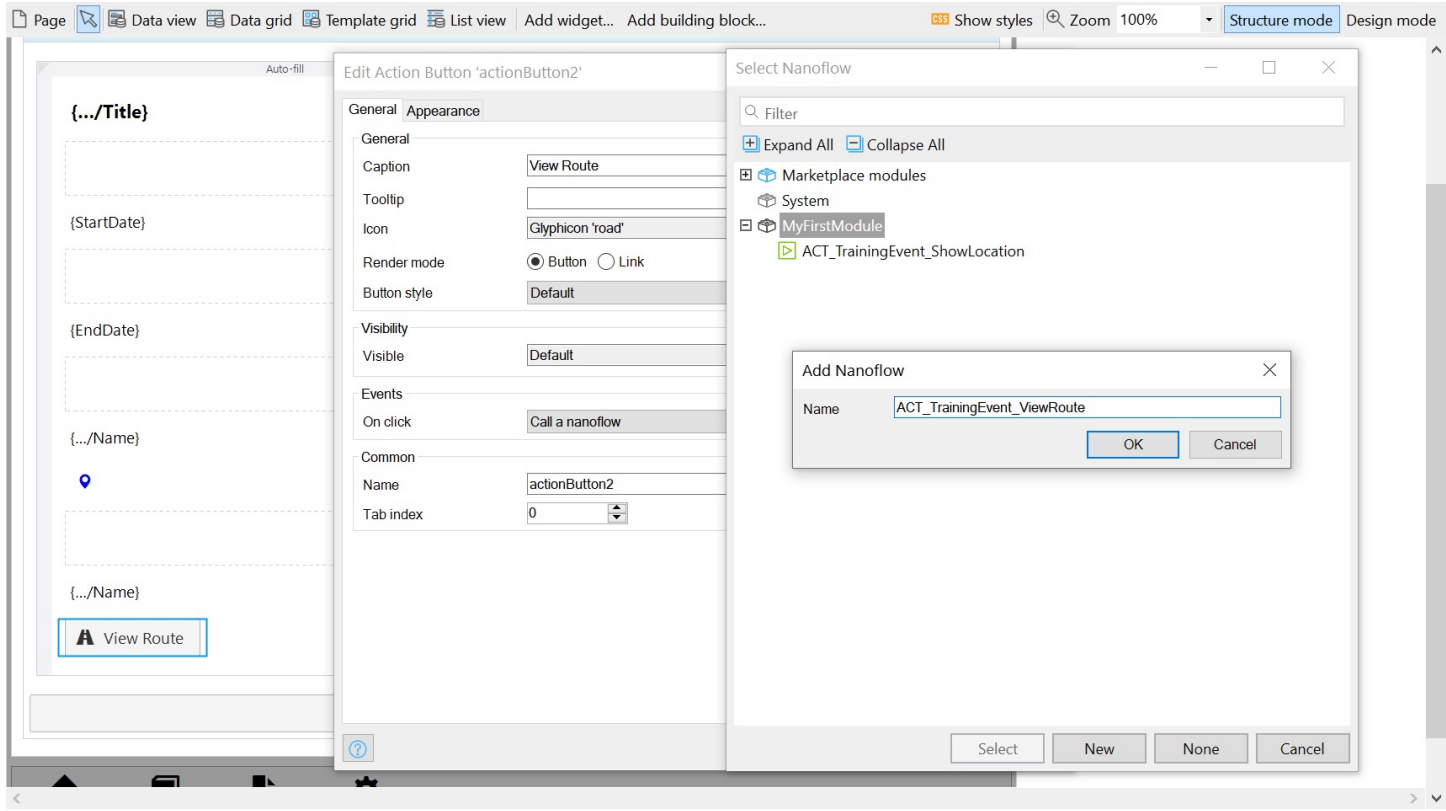
- 将 Location 设置为 **$TrainingEvent/MyFirstModule.TrainingEvent_Location/MyFirstModule.Location/Address**





添加显示路线按钮并绑定纳流

- 添加按钮:
  Caption: Show Route
  Icon: Road
  Style: Primary
- 连接到纳流
  ACT_TrainingEvent_ViewRoute



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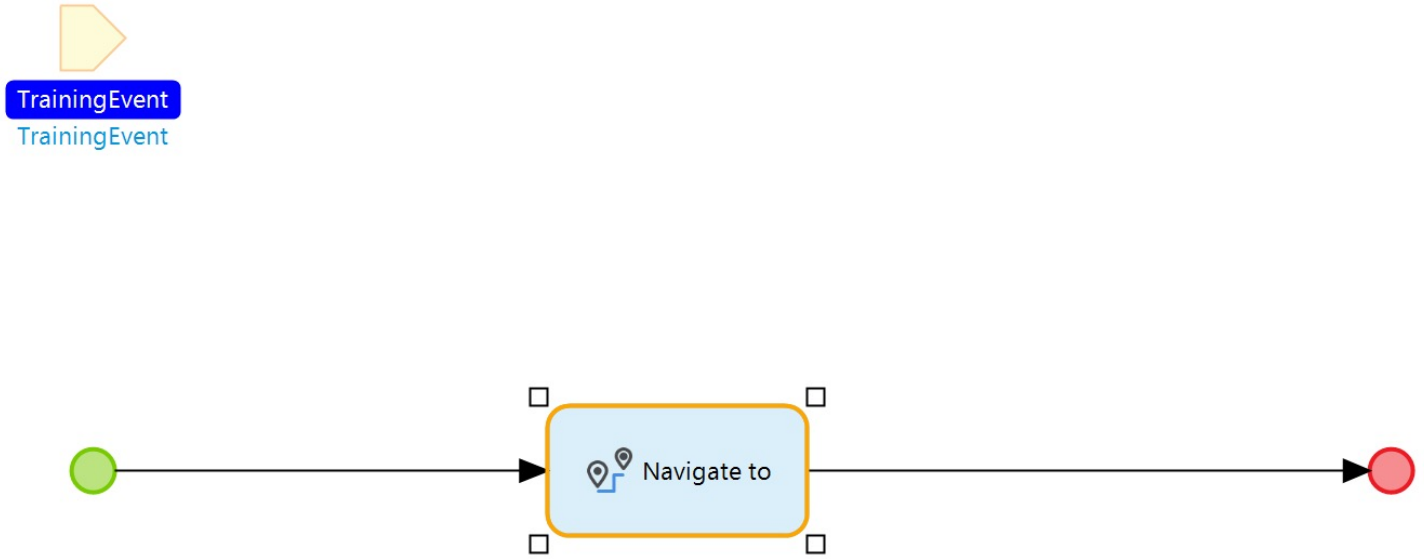
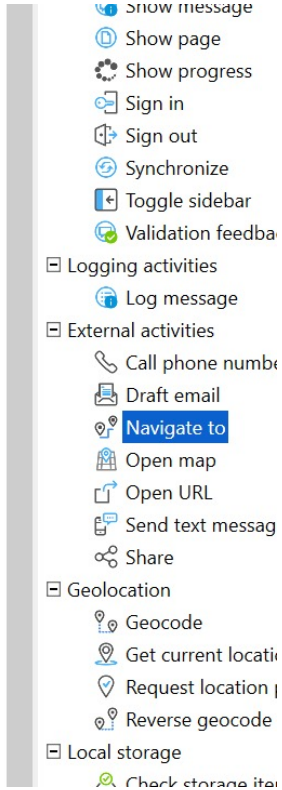
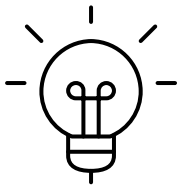
配置 ACT_TrainingEvent_ShowRoute 纳流

- 设置 **Location** 参数为：
  $TrainingEvent/MyFirstModule.TrainingEvent_Location/MyFirstModule.Location/Address





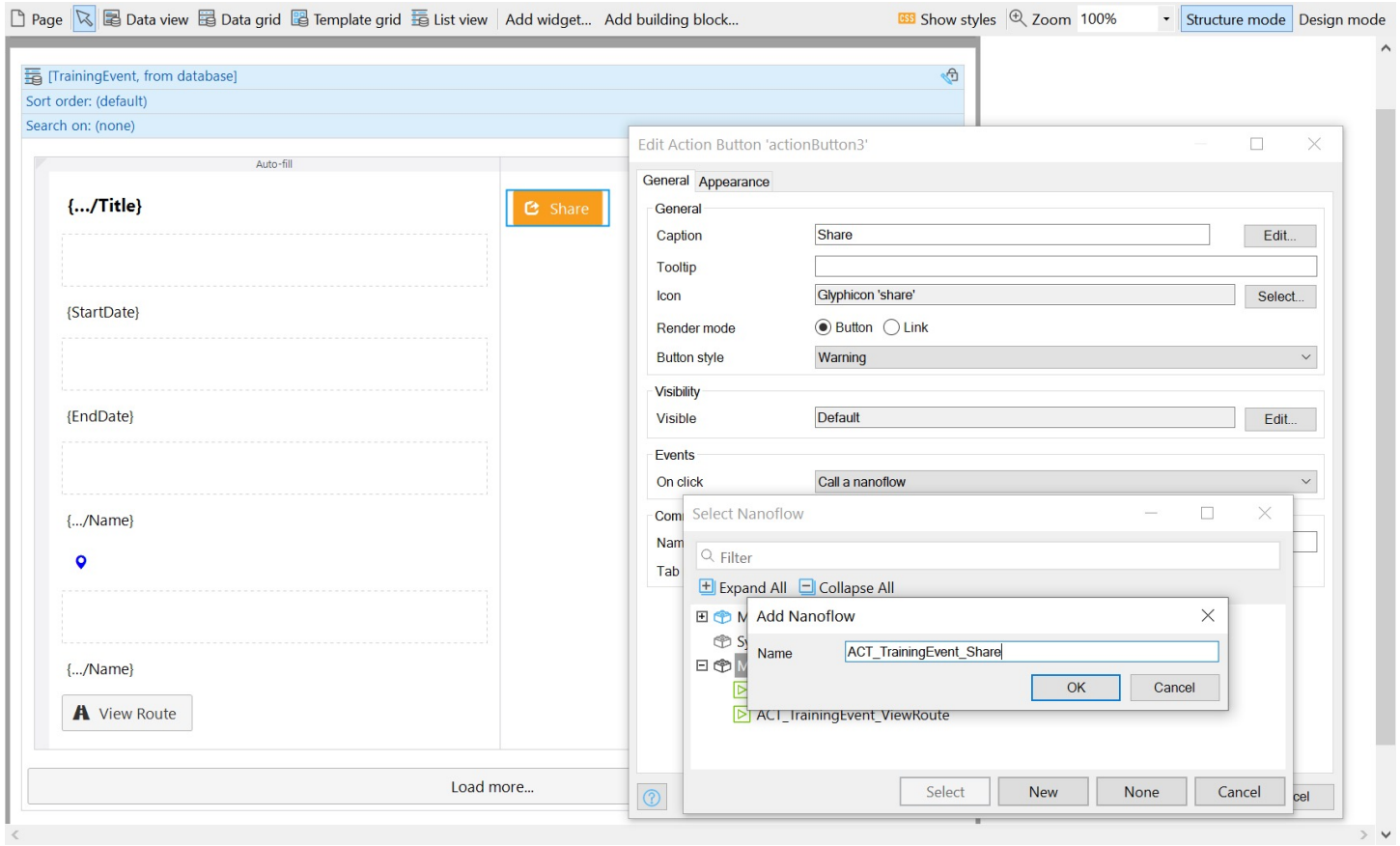


User Story 13

作为管理员，我希望学员能够分享有关培训活动的信息，以推广 LearnNow 应用程序的产品。

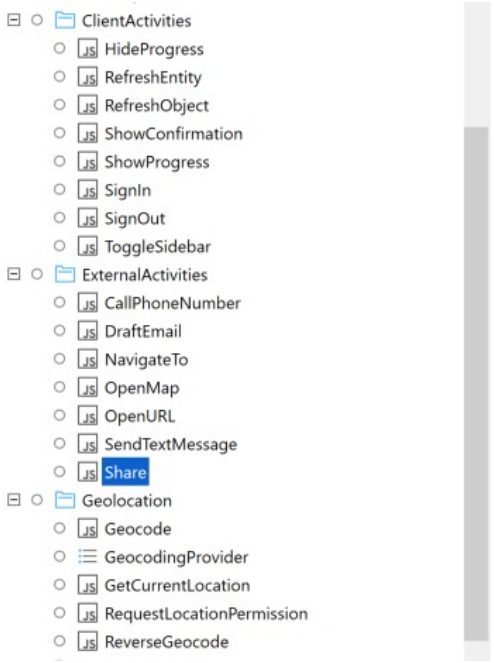
添加分享按钮并绑定纳流

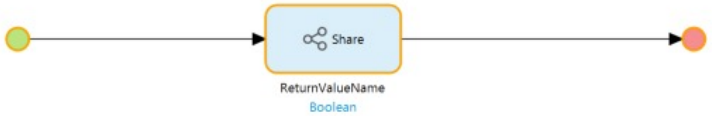
- 添加按钮:
  - Caption: Share
  - Icon: Share
- 连接到纳流:
  ACT_TrainingEvent_Share



配置 ACT_TrainingEvent_Share 纳流

- 设置 Url 为 `'https://academy.mendix.com/link/path/31/Become-a-Rapid-Developer/'`
- 设置 Text 为 `'Check out the offerings from the Mx Academy!'`
- 设置 Title 为 `'Mendix Academy'`

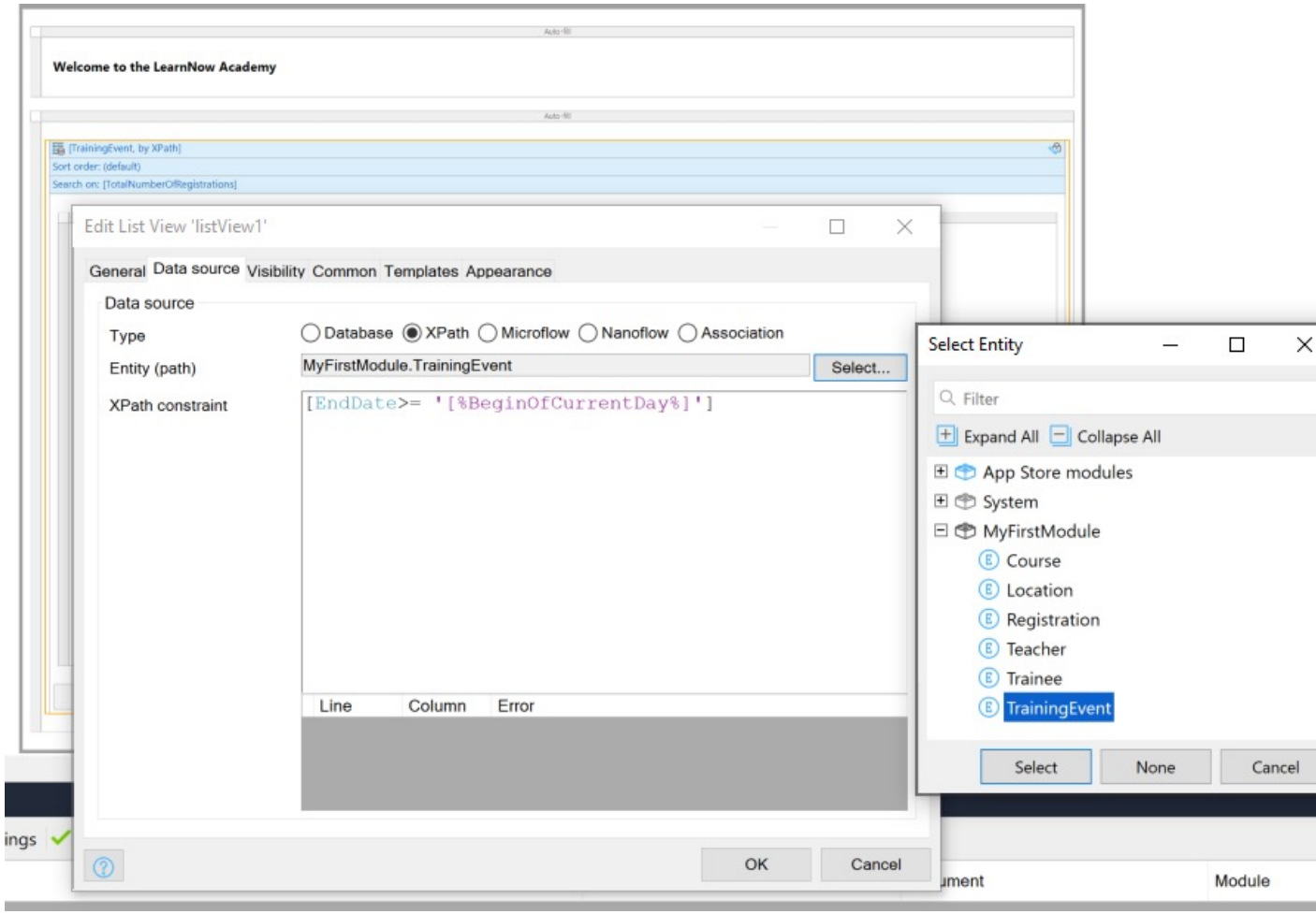




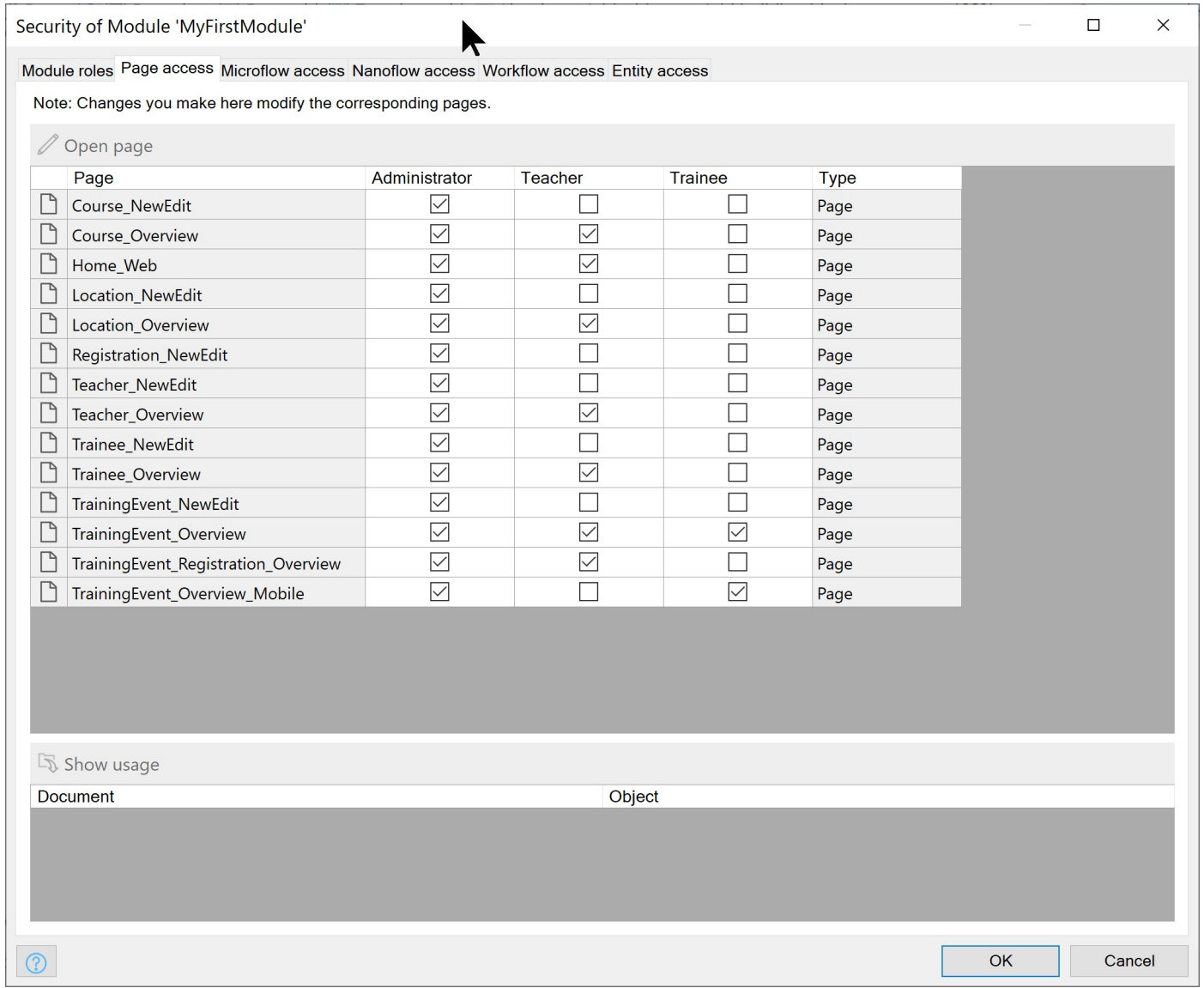
仅显示未来培训事件

- 打开 TrainingEvent_Overview_Mobile 页面
- 将 List view 的数据源类型设置为 Xpath
- 添加 Xpath 约束

[EndDate >= '[%BeginOfCurrentDay%]']



更新模块安全设定：页面访问权限



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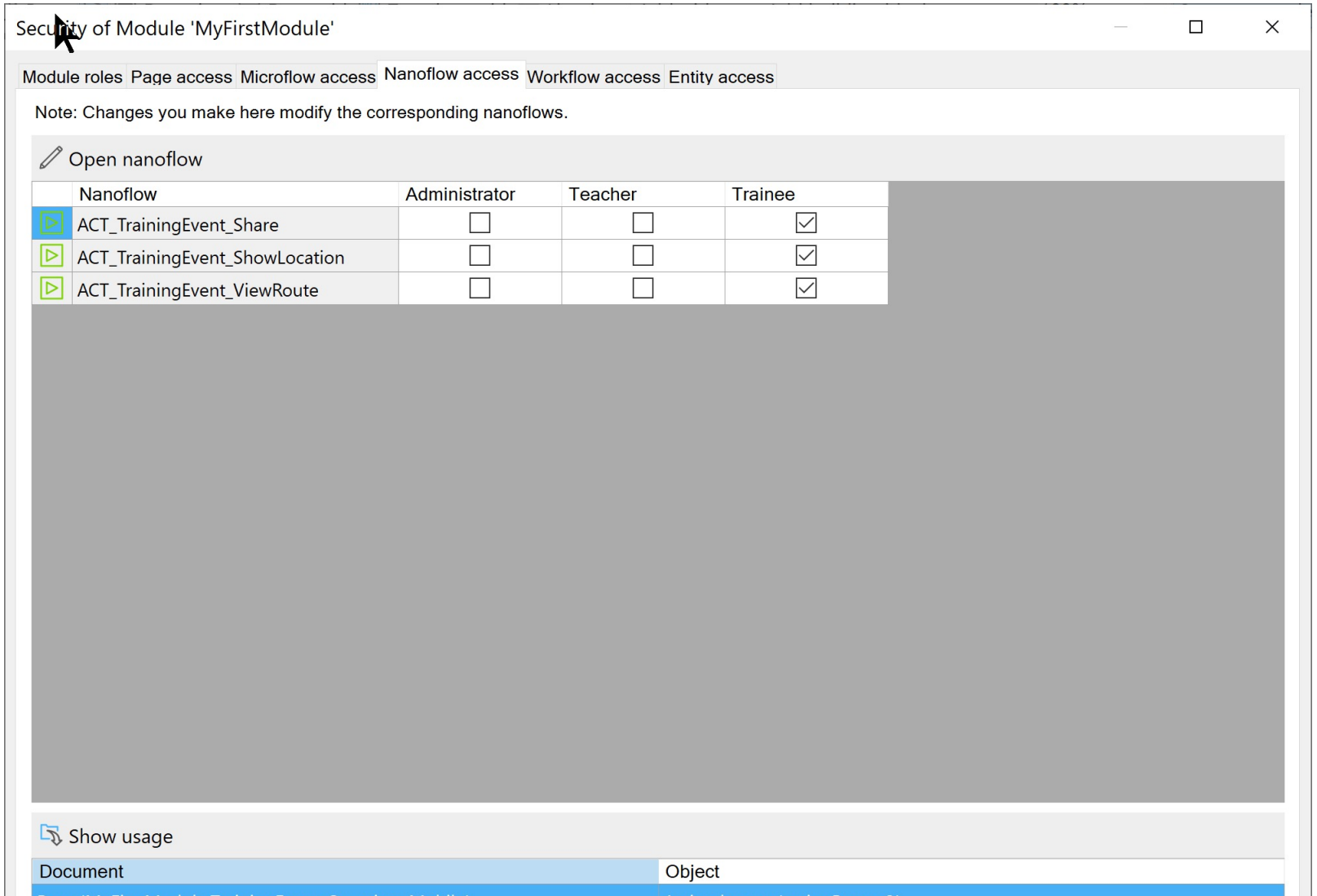
更新模块安全设定：纳流访问权限



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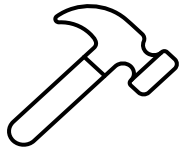


发布到云端

- 运行和发布
- 在响应式浏览器中预览
- 使用 demo_administrator 数据登录，创建用户和基本数据
- 复制应用链接并在手机上打开，以 demo_trainee 身份登录

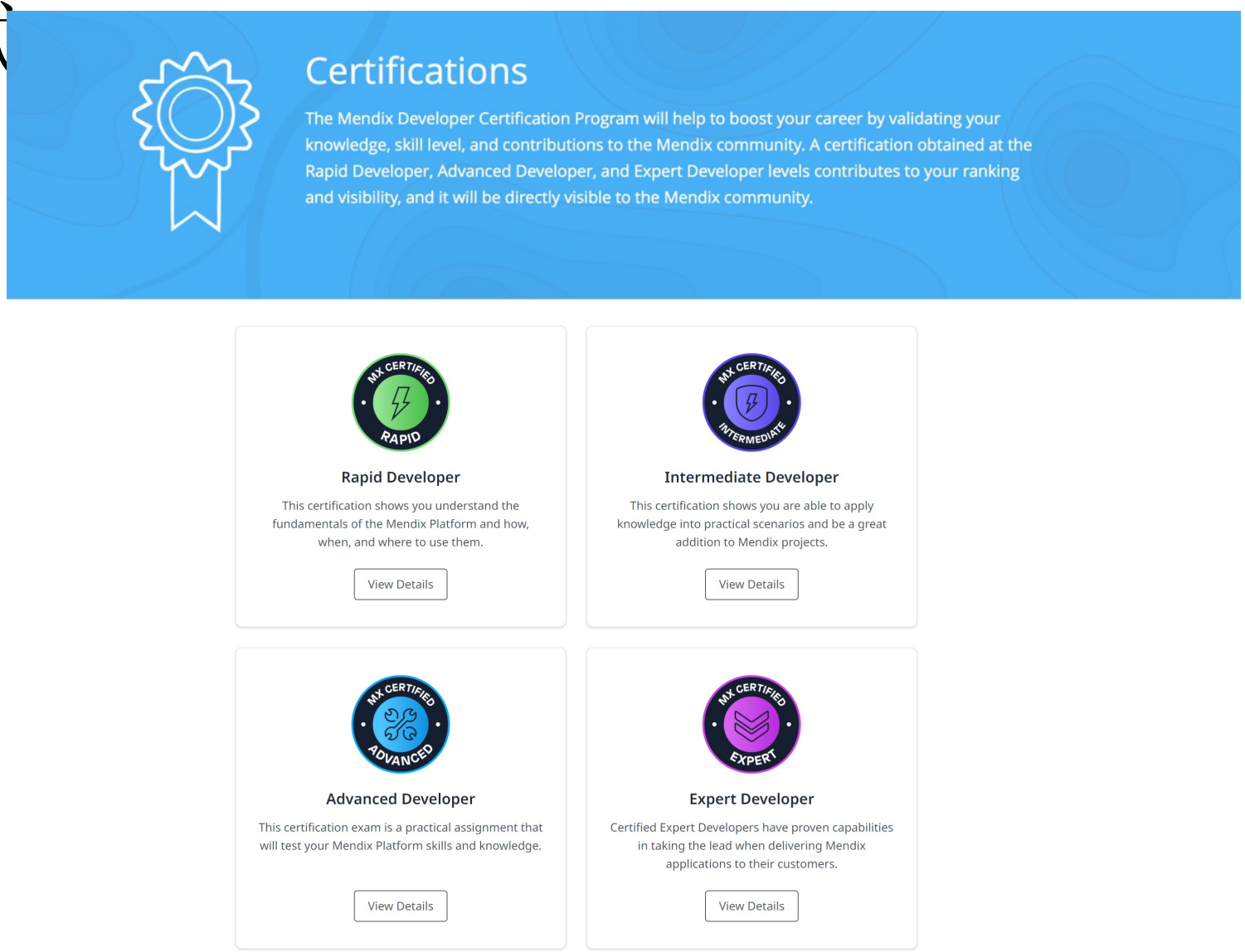
Knowledge checks

Go to kahoot.it

Summary

Go make it!

认证考试



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https://academyportalcloud.mendixcloud.com/index.html

希望持续精进？

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下一步的学习

Rapid Developer Course

Rapid | 3 Days

Learn the fundamentals of the Mendix platform and how, when, and where to use them.

View Classroom

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反馈

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问题?