

Plan

Your first steps toward creating a successful custom app



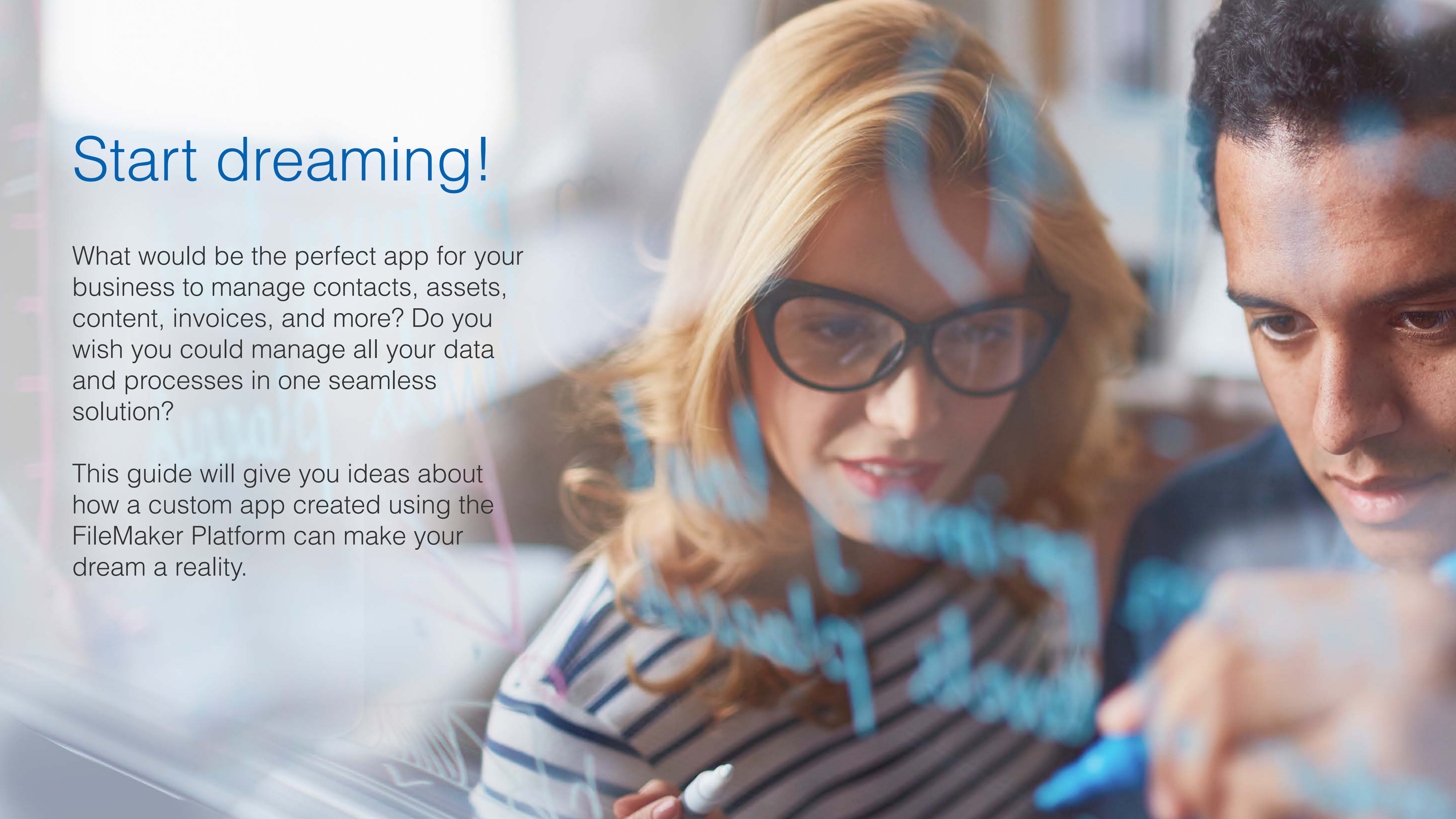
FileMaker[®]
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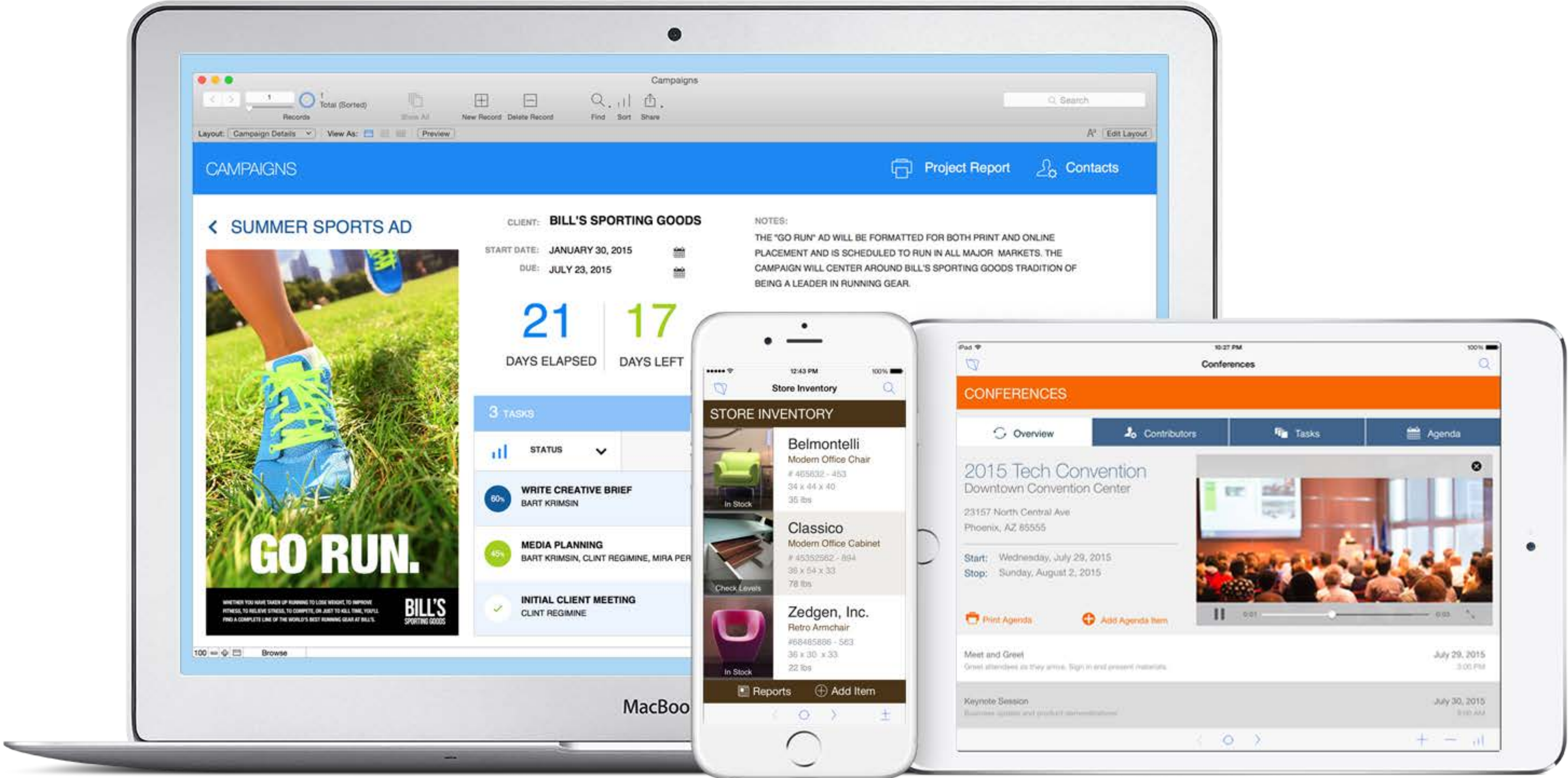
Start dreaming!

What would be the perfect app for your business to manage contacts, assets, content, invoices, and more? Do you wish you could manage all your data and processes in one seamless solution?

This guide will give you ideas about how a custom app created using the FileMaker Platform can make your dream a reality.



Build the perfect custom apps to connect your team to your business.



Congratulations on taking the first step toward creating a custom app!

This is the first part of a three-part guide to start you on the path to building a custom app using the FileMaker Platform.

Learn what custom apps can do—and discover and define your own goals for a custom app.

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The steps to building a custom app

Building a custom app starts with three principles.

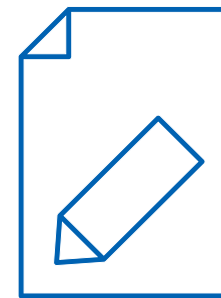
Plan

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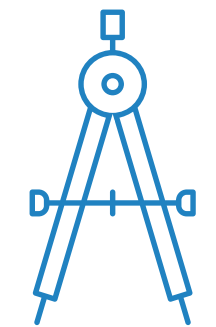
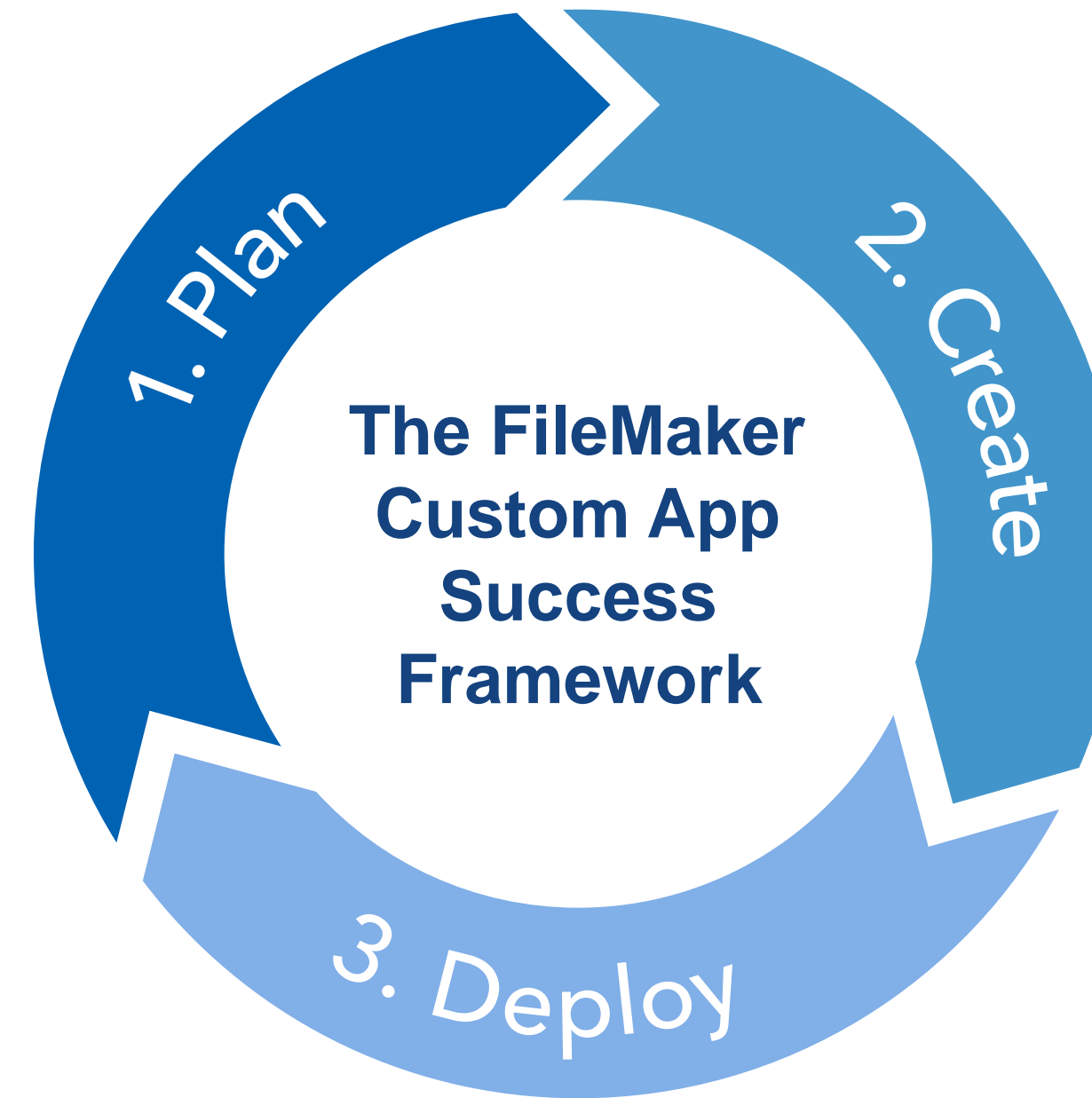
Deploy

These principles, illustrated in three separate guides, lead you through the process of creating a custom app that transforms the way you do business.

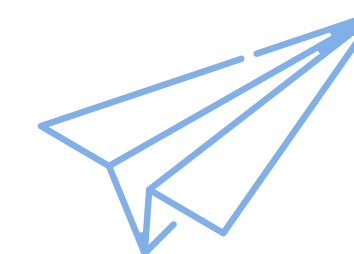
Three principles help you build a custom app.



Explore what you can do with custom apps. Start with *Plan*.



Develop your custom app with *Create*, a step-by-step guide to working with the FileMaker Platform.

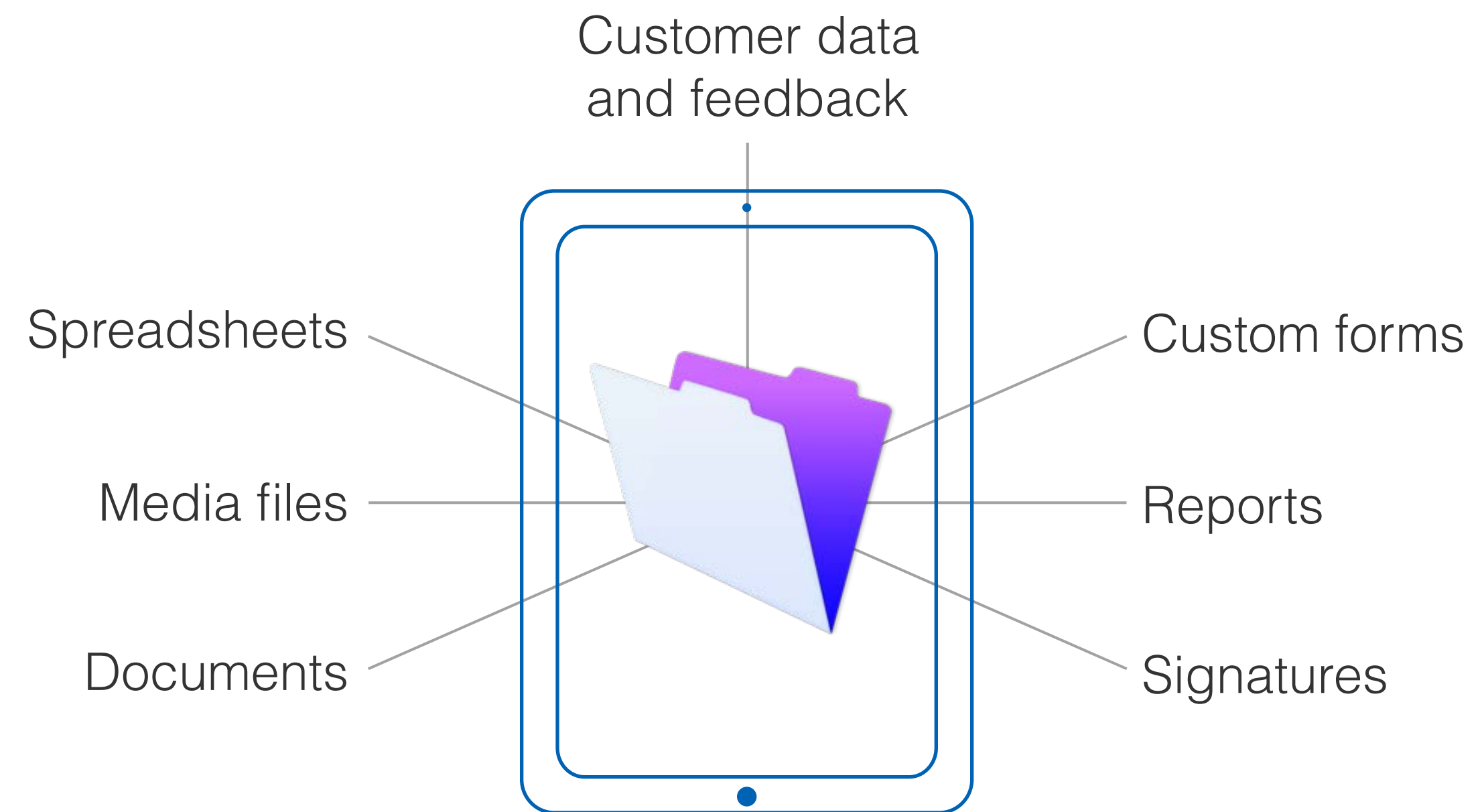


Put your custom app into action. Learn how to roll it out to users with *Deploy*.

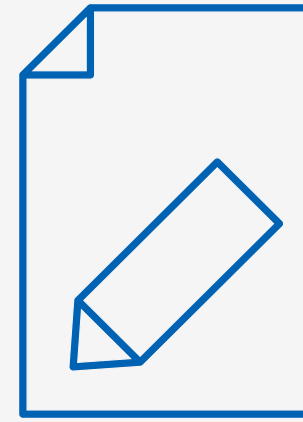
What is a custom app?

A custom app is an app created using the FileMaker Platform that is designed to meet the unique business needs of their team. Apps can be made from an idea, by modifying an existing Starter Solution, or by importing data. Businesses use multi-platform custom apps on iPhone, iPad, Mac, Windows, and across the web.

What are some of the types of content that can be accessed through a custom app?

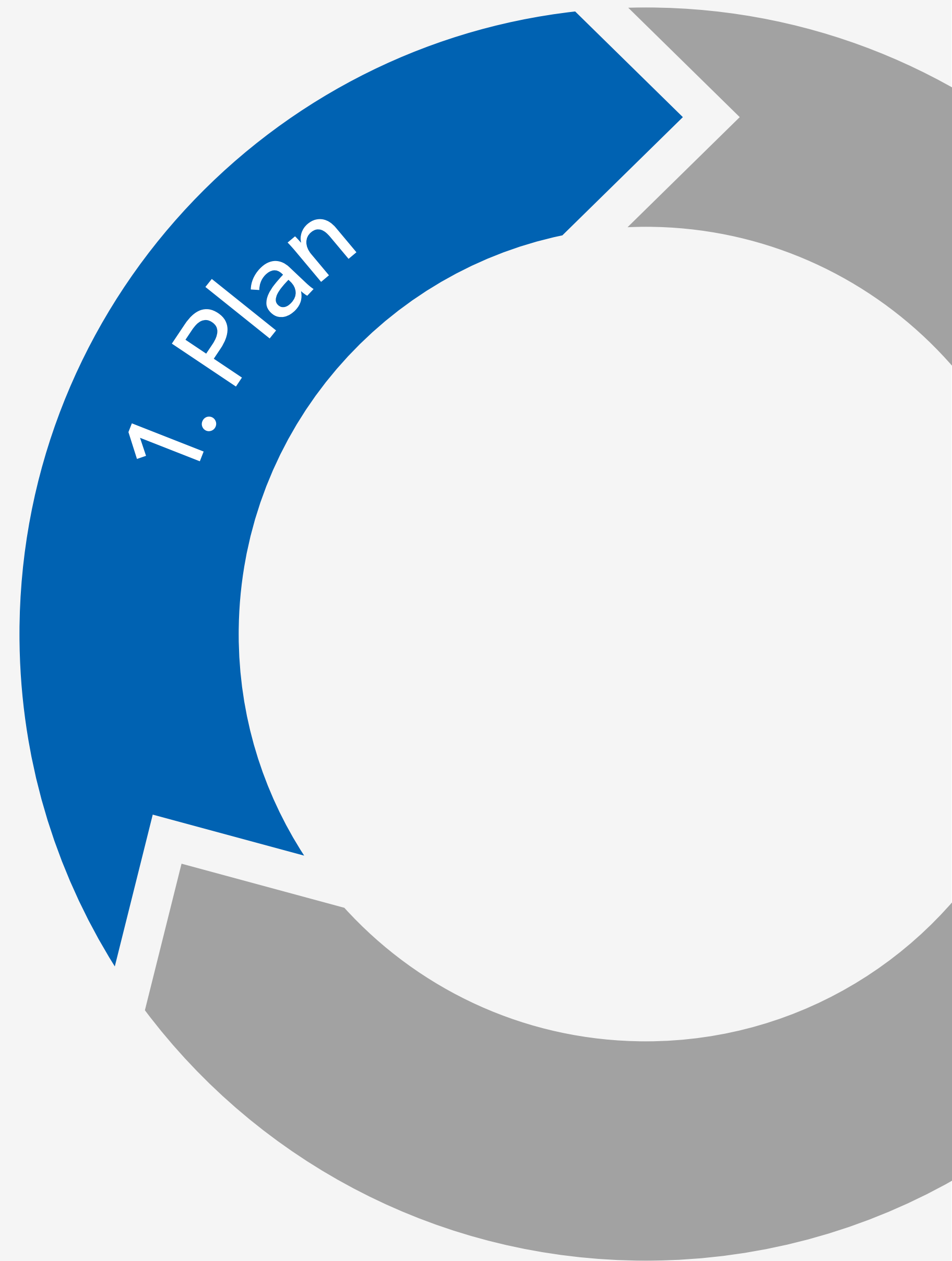


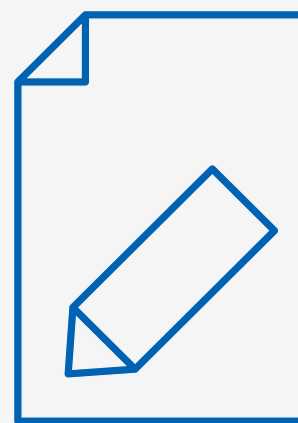
Start planning



Start by creating requirements for a custom app that works for your team.

The next few chapters will take you through the process of assessing your needs, defining requirements, and testing your custom app.





Plan Step

01

Evaluate goals

- **Evaluate goals**

- Write user scenarios and define requirements
- Integration, security, deployment
- Prototype and test
- Get support building a custom app

1. Plan

What are your goals?

What would your team like your custom app to do?

Define your goals and assess the needs of your organization and the needs of those who will be using it.

Define the needs of everyone using the app.



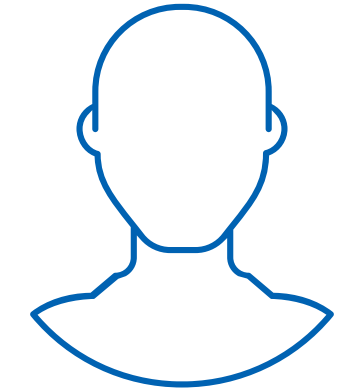
Your business goals

How do you need the custom app to function?



Your team's goals

What does your custom app need to accomplish for your business?



Your users' goals

How do your users want to interact with the app?

Focus on users:

Do you want your users to love their custom app?

Build it using the principles of user-centric design. Design the app with your users in mind, and include multiple check points to review it with them during the process.

This focus on users and their goals results in a more efficient and user-friendly experience—and an app that users will value.

Create your custom app with user-centric design.

- ✔ Start by **focusing on users** and their goals—not on the app's features.
- ✔ Meet with users before you start developing the app to **understand their needs**.
- ✔ Check in with users during development and **preview the custom app** in progress.

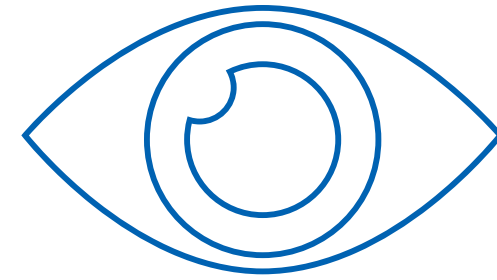


Focus on users: Ways to discover and define their needs

Get close to your users.
How do they spend their days?
Where could they be more efficient?
What processes frustrate them?

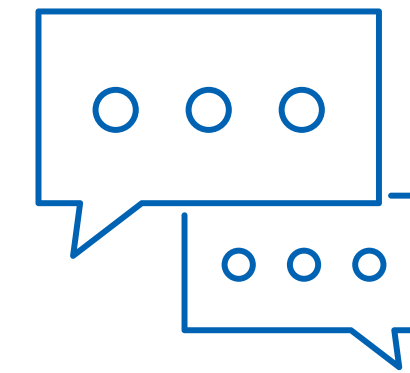
Understanding these issues will
help create a full picture of the
functionality you'll want to include in
your custom app.

Use different approaches to assess user needs.



Watch and learn

Spend time with your users and learn
their existing processes



Conversations, interviews

Discover problems,
pain points, and unmet needs



Focus groups, workshops

Collect multiple viewpoints



Questionnaires

Ask specific questions to better
understand users' workflow and
motivations

Write user-centric problem statements

A problem statement explains the problem that needs to be solved.

Create a statement for each problem you want to fix with your custom app.

Review the problem statements with your team so everyone understands what will be included in your custom app.

Write a problem statement.

Use the prompts below to write a problem statement:

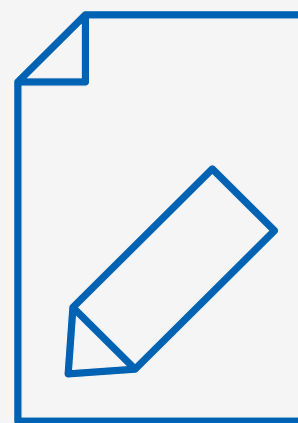
Today we **[who is involved?]** can't **[what is the broken process or activity?]**
because **[what is missing?]**.

This impacts our business **[customers? efficiency?]**

Include statistics about your problem when possible.

Examples:

- Today **our main office agents** can't **track the status of field employees in real-time and inform customers if their installation will be delayed.** This impacts our business **because we receive 8 complaints a week due to late service team arrivals.**
- Today **our receptionists** can't **sign in urgent care patients quickly** because **the paper forms take over 15 minutes to print and fill out.** This impacts our business **because doctors are idle while patients are filling out forms.**

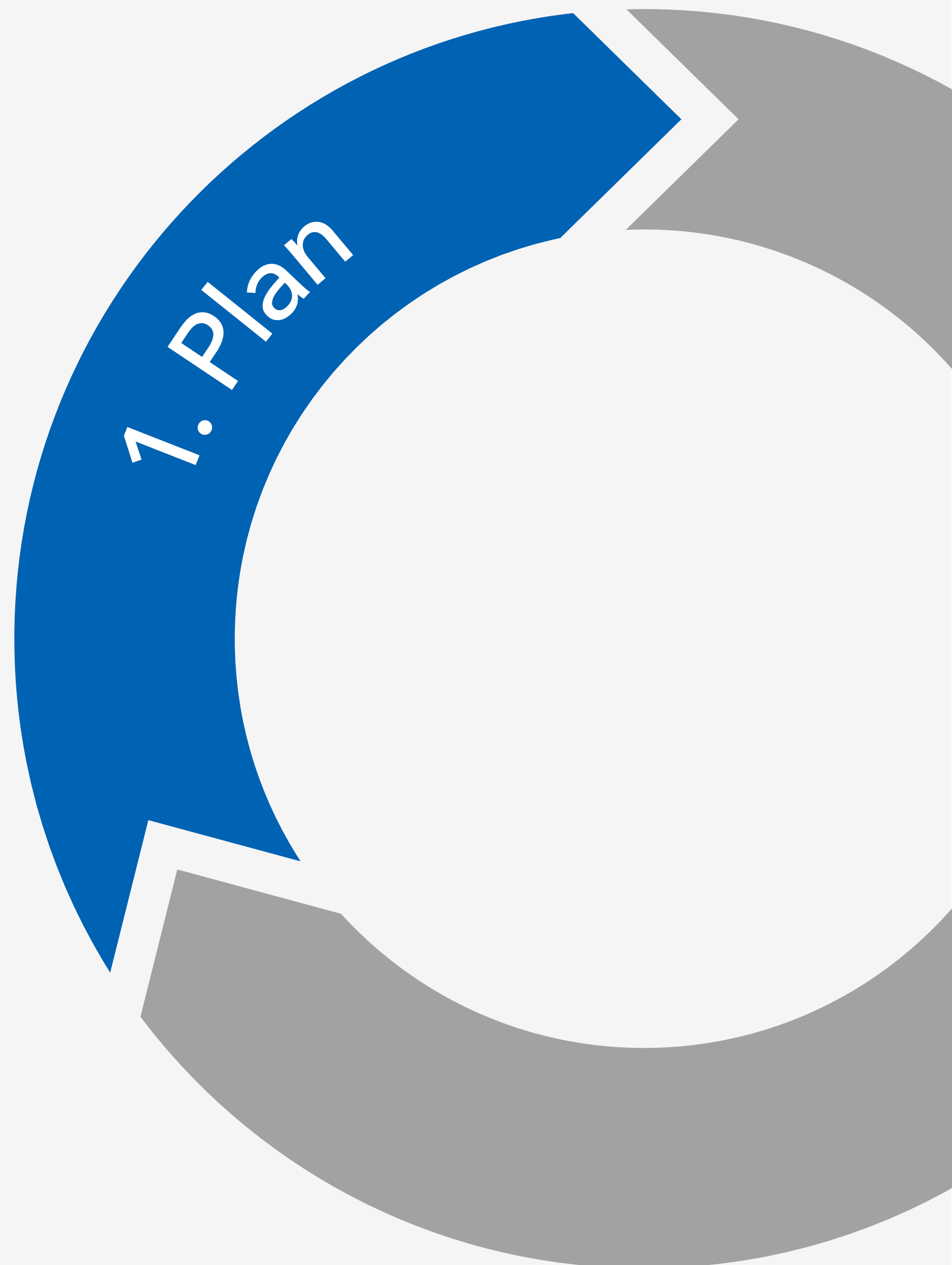


Plan Step

02

Write user scenarios and define requirements

- Evaluate goals
- **Write user scenarios and define requirements**
- Integration, security, deployment
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Write your user scenario

By asking a specific series of questions, you can create user scenarios that summarize how different people will use your app.

Focus on these key questions, and begin to define your users' goals.

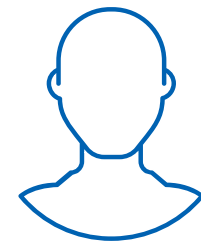
- **Who** will use your app?
- **What** will users need the app to do?
- **Where** will they use the app?
- **When** will they use the app?
- **Which** devices will be used to access it?
- **How** will the app need to interact with current systems?

Write your user scenario

User scenarios tell stories about how users get tasks done and how they use data.

Which of your problem statements apply to the user you are describing?

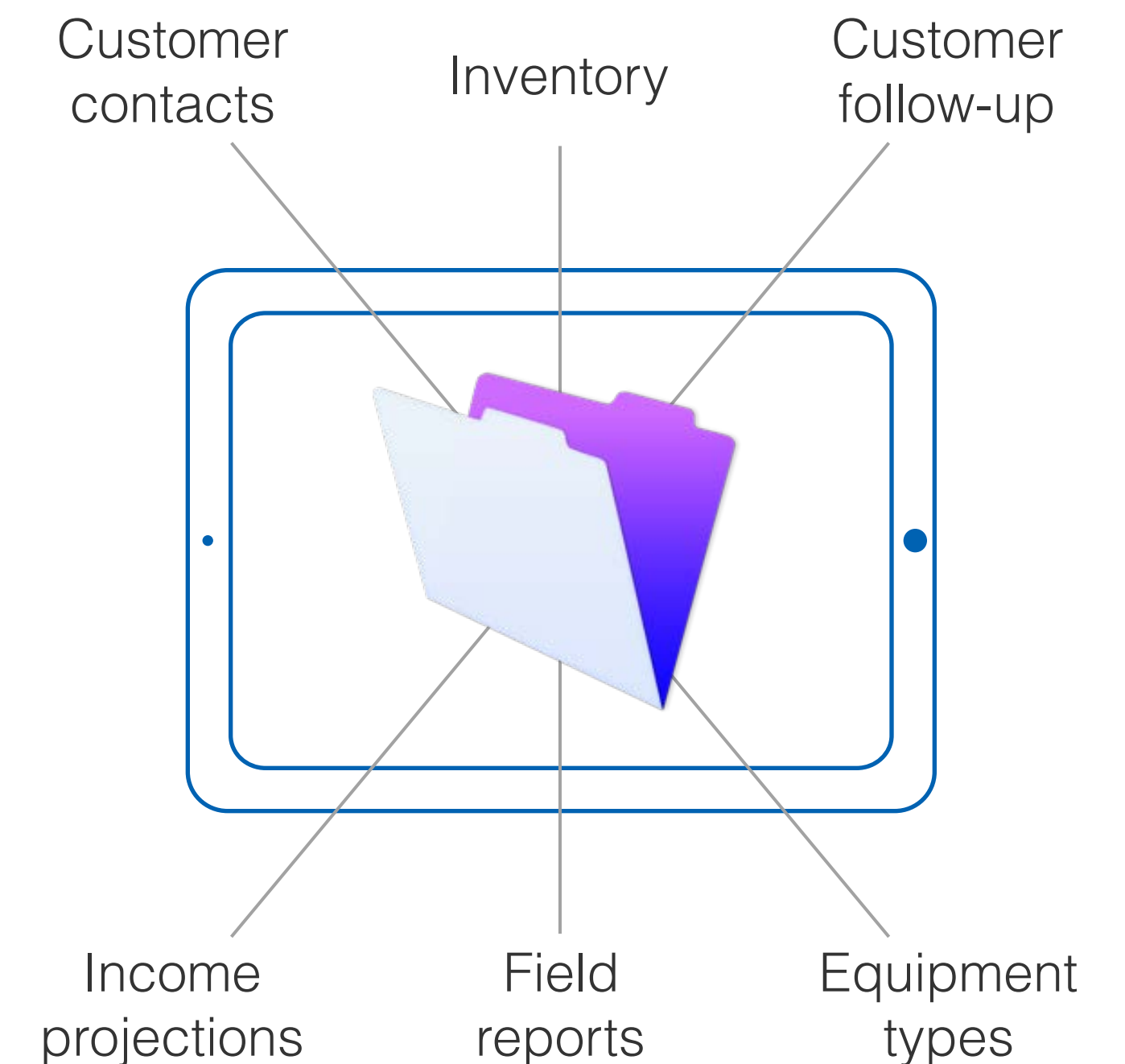
User scenarios help create the requirements for your app. Define a user scenario for each user role.



User scenario

Jennifer is a manager at a mid-sized equipment rental company.

- She needs a system to track customers and their equipment.
- Currently, she collects names, websites, addresses, and equipment types from various sources.
- She uses the data she collects for customer follow-up after equipment has been rented, and for inventory planning, income projections, and invoicing.
- She distributes reports to field employees for customer follow-up every week.
- Field employees would like to access customer data using mobile devices.



Write your user scenarios

Start by thinking about who will use your app.

Here are some important questions to answer.

Who are your users?

Sample Questions	Example
Who are the people and groups that will use the app?	Field Team Manager (individual) Field team reps (group) Sales team reps (group)
What are the users' roles and responsibilities?	A Field Team Manager is responsible for inventory, invoicing and reporting; field team reps are responsible for customer site visits and product delivery; sales reps are responsible for sales leads follow-ups and contract management.
Will the app be used by multiple users at once and are their roles similar or different?	Multiple users will use the app at the same time with different responsibilities.

Write your user scenario

Next, think about what users need the app to do.

Here are some questions to consider.

What do users need?

Sample Questions	Example
What problems are users trying to solve?	The manager cannot efficiently collect, manage, and share a list of customers and assets with the main office.
What are the strengths and drawbacks of current process?	The current process is manual and error-prone; it consists of Excel spreadsheets that are difficult to maintain and share with the team.
What are the requirements for different teams?	The Field Team Manager needs customers' current addresses and asset information. Field and sales teams need to access customer and asset data remotely.

Write your user scenario

Think about the logistics of how and where users will access the app.

Here are some questions to consider.

Where will the app be used?

Sample Questions	Example
Where will the app be used? In bright daylight? At night?	It will be used in the office and the field during the day and evening.
Will users always be able to connect to the server?	Users will have access to the server all the time.

Write your user scenario

Don't forget timing.

Here are some questions to consider.

When will the app be used?

Sample Questions	Example
When will people use the information collected?	A customer and asset report is sent out every week to the field and sales teams.
When do you need your custom app?	The custom app needs to be up and running in time for the summer rental season.

Write your user scenario

How will your custom app be used?
Will it need to be available on multiple operating systems?

Here are some questions to consider.

What devices will be used to access the app?

Sample Questions	Example
What devices will be used?	Mac and Windows desktops and iPad.
For mobile users, which orientation will be used most? Landscape, portrait, or both?	iPad will be used in both orientations by field and sales employees to look up customers.
Which gestures, voice dictation, and image capture capabilities are needed?	Field employees need to capture customer signatures and take photos.
Will the users need total access from mobile devices?	Manager wants to view/update contact and equipment information from iPhone.

Write your user scenario

How will the custom app fit into or improve your current processes?

Here are some questions to consider.

How will the custom app need to interact with current systems?

Sample Questions	Example
What part of your workflow is repetitive?	Collecting and entering customer contact and asset information into multiple spreadsheets.
What metrics could help you make better business decisions?	A list of total assets and assets per customer. Cost of assets and cost of assets per customer. Asset utilization rates.
Will you be migrating data from other systems?	The Field Team Manager needs to migrate data from current spreadsheets and accounting software.
Will it need to integrate with other software?	The custom app needs to access data from different sources, from CRM to accounting software.








Define your requirements

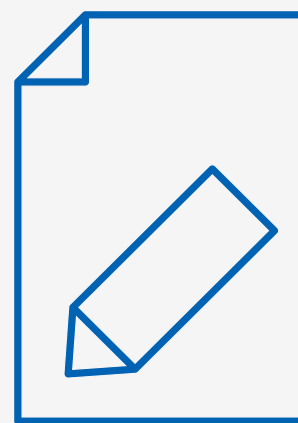
Include an overall description of how your custom app will work, and a detailed list of features and functions based on the user scenarios you have already written.

Example: “The rental services field management custom app will allow field managers and sales reps to manage customer, sales, and inventory information in real time. It will have reporting and will be integrated into accounting and CRM systems.”

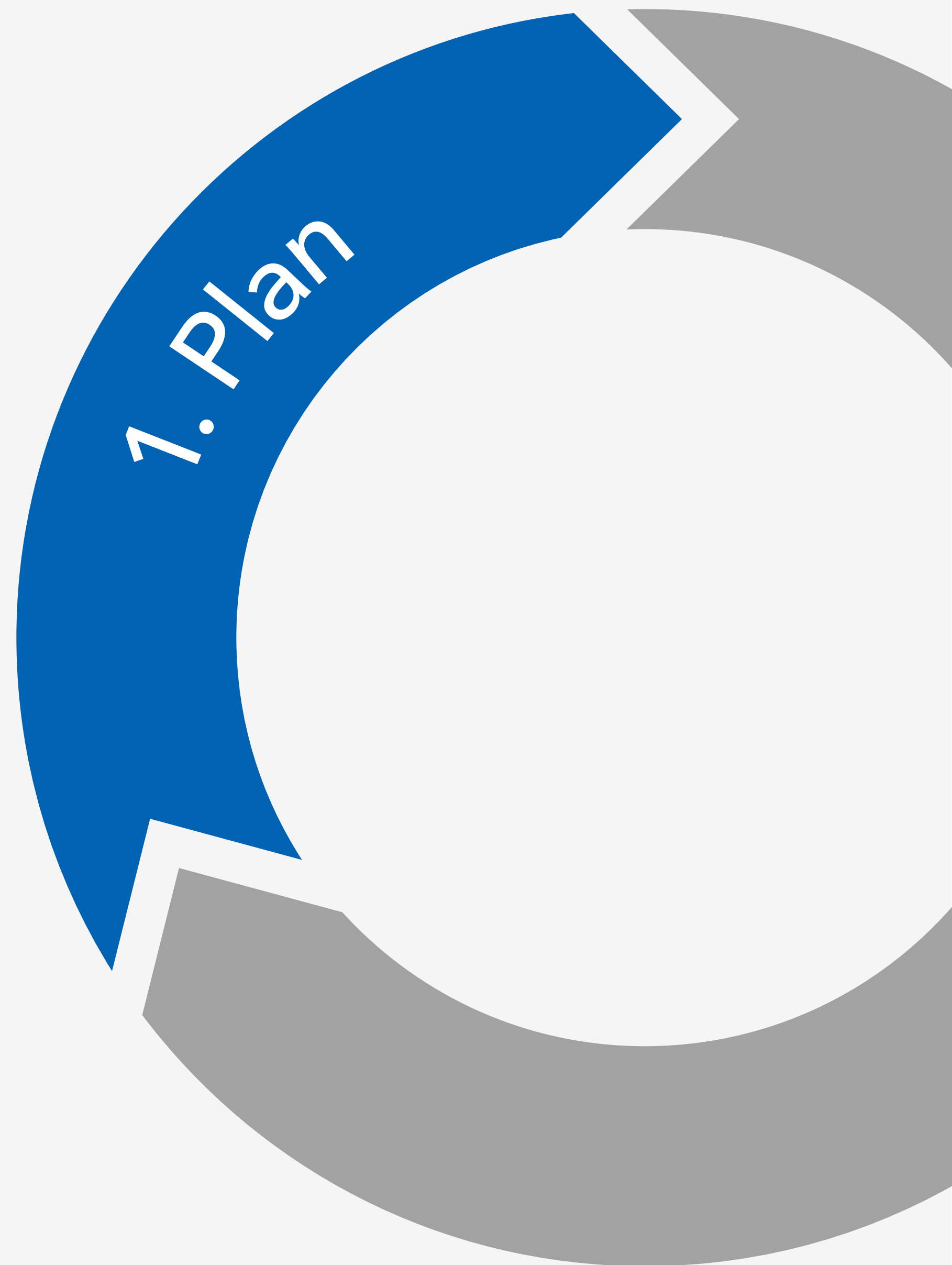
More detailed information on this portion is available in the [FileMaker Training Series: Advanced](#) guide.

List the features and functions of your custom app.

	Features	Functions
✓	 Forms	View each customer’s asset and contact information in an easy-to-read iPad form for field use, and create tables and lists views for desktop use.
✓	 Reports	Generate weekly reports.
✓	 Charts	Chart and graph data to identify trends.
✓	 iOS / Mobile	Access customer and asset data in the field.
✓	 Mac / Windows	Access customer and asset data in the office.
✓	 Automation	Automate the pull and consolidation of customer and asset data.
✓	 Integration	Pull customer and asset data from multiple sources.



- Evaluate goals
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- **Integration, security, deployment**
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Plan Step

03

Integration,
security,
deployment

Beyond features

Create a plan for how your custom app will integrate with other systems, how it will be secured, and how you will deploy it to your users.

Custom app considerations:

- ✓ **Data:** What are your sources?
- ✓ **Security:** What security measures are required?
- ✓ **Deployment:** How will you deploy?

Data sources affect complexity

The access you have to a data source is a major factor in determining the complexity of your custom app.

What are your data sources?

- If you **own and control your data sources**, you can build and deploy more easily.
- If you **need an administrator or other system** to provide access your data, the complexity increases.

What level of security is required?

Every custom app needs security.

As you think about what type and level of security your users need, here are some things to think about.

Consider whether the data you will store may require further security measures, such as encryption.

How will you secure sensitive information?

- ✓ Will you store customer or employees' personal information?
- ✓ Will you store trade secrets or future product information?
- ✓ Will the app contain credit card numbers or other financial data?
- ✓ Do you need to comply with other regulations, like HIPAA?

Security options

- Handle security authentication **internally** by creating user accounts and passwords using FileMaker software.
- Alternatively, you could use **external authentication** using outside systems, but this may add complexity.
- If you need to **encrypt your data**, that may also add complexity.

If your team has IT support, find out what options might be available.

Plan ahead for a smooth rollout

“Deployment” refers to the way you make your custom app available to users.

Deployment is an integral part of the process. Plan for it early in the process.

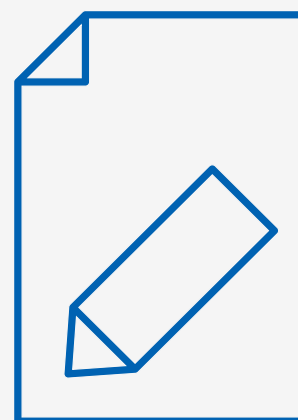
How will you deploy your custom app?

Think about delivery and accessibility:

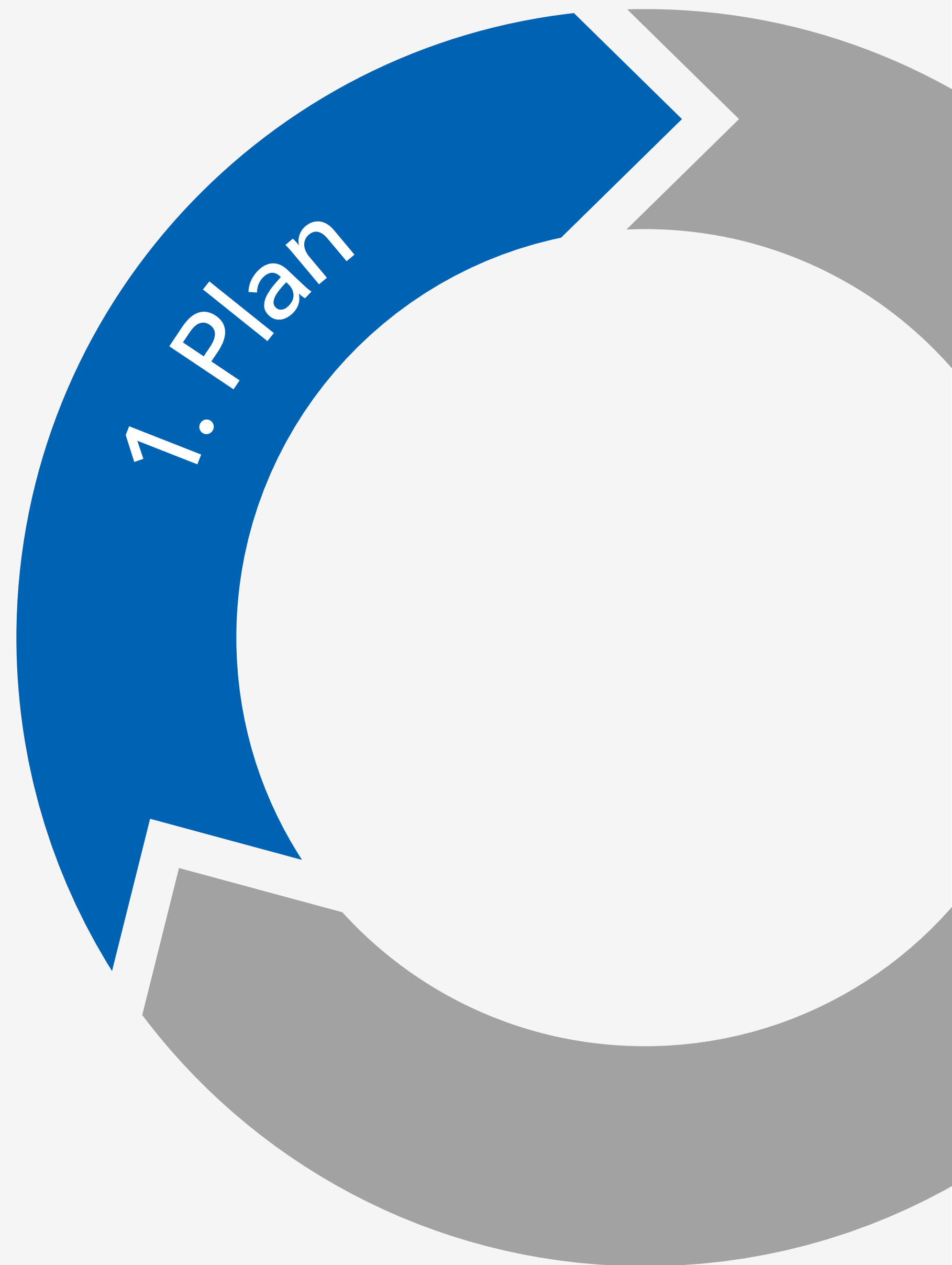
- How will it be delivered to users?
- How many people need access?
- Will they access it remotely?
- Do you need a systems administrator?

FileMaker Server allows multiple, simultaneous users to access your custom app, and provides automated backup and secure data connections.

Read more about deployment in our [Deploy guide](#).



- Evaluate goals
- Write user scenarios and define requirements
- Integration, security, deployment
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- Get support building a custom app



Plan Step

04

Prototype
and test

Develop a prototype

Now that you have a clear vision of your users' goals and requirements, it's time to design your custom app.

Start with a prototype, or draft.

By showing a prototype to your users, you can test functionality and usability early in the development process. This ensures that users understand the direction you are taking and agree that it will meet their needs.

Download paper prototype templates for [iPad](#) and [iPhone](#).

You are now ready to start prototyping.

The goal of a prototype is to check the concept of your custom app with the team before you invest too much time in development.

- The prototype can be a “paper prototype,” in which you provide a rough sketch of the elements, provide a list or descriptions of the actions a user might take, and how your custom app will respond.
- Users provide feedback about the “paper prototype.”
- Go through several revisions to your draft prototypes to ensure that you get enough feedback from your users.



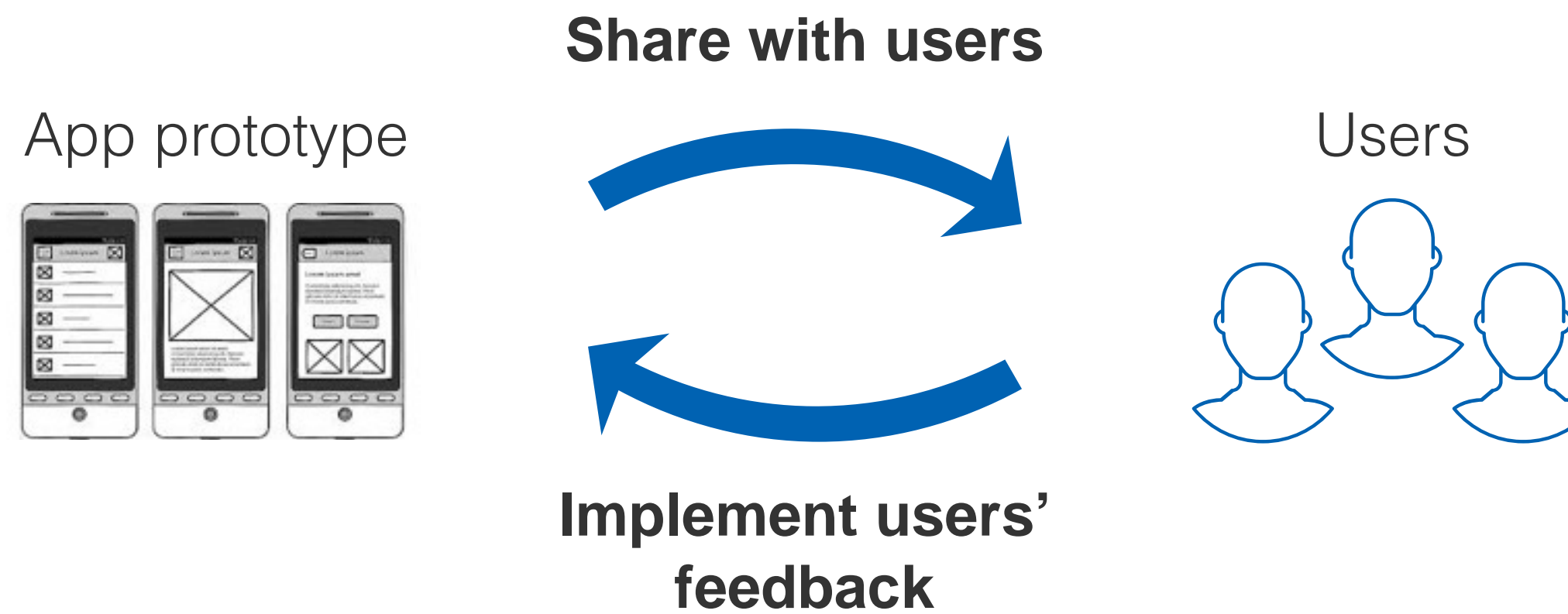
Test your prototype

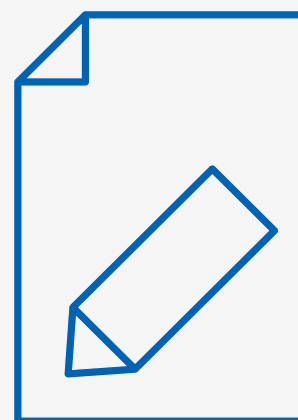
Validate your design with the intended users before spending too much time in development.

Test frequently with users.

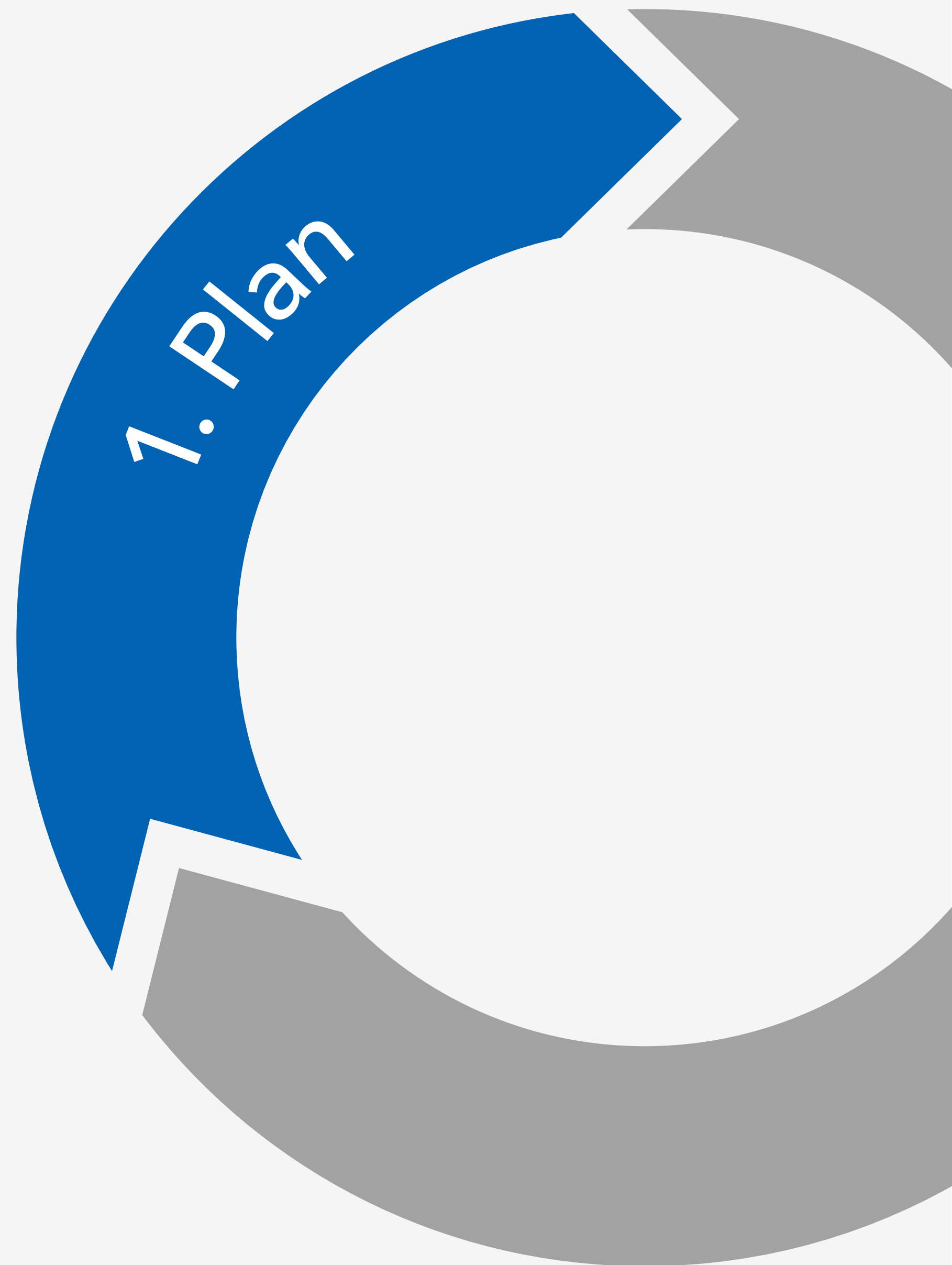
Good development is iterative. Keep revising and refining your design, while getting feedback from users about each revision.

Design Validation Cycle





- Evaluate goals
- Write user scenarios and define requirements
- Integration, security, deployment
- Prototype and test
- **Get support building a custom app**



Plan Step

05

Get support building a custom app

How comfortable are you with technology?

Anyone can learn to make a custom app, though having an aptitude for technology can make it easier.

Expect a learning curve in the beginning as you start to explore what's possible and how all of the pieces will work together.

Fortunately, there are great online communities, forums, and tutorials to help answer your questions and guide you along your journey.

Start by evaluating your current level of technical understanding using this list.

You'll be more successful if you:

- ✓ Like learning new software
- ✓ Have a working knowledge of relational databases
- ✓ Experienced using Excel macros, functions, etc.
- ✓ Have designed webpages

Ready to build your custom app?

There are three ways you can begin building your app.

Ask yourself:

How much time do you have to devote to the project?

Do you like learning new technology?

Do you have a budget for consulting help?

What's the best model for you?

Do it yourself

Start developing on your own, supplementing your knowledge with other resources, including:

- FileMaker Training Series
- Training tutorials
- Webinars and videos
- FileMaker Community
- Third-party training classes

Hire a consultant

Third-party consultants offer a range of services and can be brought in at anytime and at any stage of the process.



Get a coach

Combine your resources and the expertise of a consultant for a blended approach.



What resources do you need?

As you begin to build your custom app, consider time, cost and scope.

Evaluate your resource needs by asking:

- ✓ How complex are your needs?
- ✓ What features are critical to have?
- ✓ What features would be nice to have?
- ✓ How much development time do you have?
- ✓ What is your budget?

FileMaker Business Alliance (FBA) consultants

FileMaker consultants provide a wide array of services: from a day of coaching on layout design, to specific aspects of a project (like integrating with disparate data sources) to complete design, development, and hosting of an app.

However, not all FileMaker developers are the same. FBA members have entered into a partnership with FileMaker, Inc.

There are three types of FileMaker consultants:

FileMaker Business Alliance Platinum members

Platinum members are larger consulting organizations, and have in-depth knowledge on the best practices in FileMaker custom app development. They take on a range of projects from simple to complex.

FileMaker Business Alliance members

These consultants offer extensive real-world experience and in-depth knowledge of FileMaker app development.

Freelance consultants

People with extensive knowledge of creating custom apps using the FileMaker Platform. They usually work on smaller-scale projects. Select a consultant with FileMaker certification, which indicates a high level of knowledge, experience, and skills.



Explore resources

There are great resources to help you along the journey to develop a custom app using the FileMaker Platform.

Online learning, training and community

The FileMaker.com learning site connects you to a training series, webinars, discussions, videos and tutorials:

<http://www.filemaker.com/learning/>

The official FileMaker Community connects you with other FileMaker users and experts. Get answers to your questions, watch videos, access technical briefs, how-to articles, white papers, and more.

<https://community.filemaker.com/>

The FileMaker.com support site provides product documentation, knowledge base articles, help with purchasing decisions, and installation guides:

<http://www.filemaker.com/support/>

Third-party training is available through Lynda.com:

<http://www.lynda.com/FileMaker-Pro-training-tutorials/199-0.html>

Many FileMaker consultants offer training courses and services to help you with every step of the process.

<http://developer.filemaker.com/search/>

Get started developing your app with our next guide:



Your step-by-step guide to successfully create an app with FileMaker.