Study guide for Exam PL-100: Microsoft Power Platform App Maker

Purpose of this document

This study guide should help you understand what to expect on the exam and includes a summary of the topics the exam might cover and links to additional resources. The information and materials in this document should help you focus your studies as you prepare for the exam.

Description
This list represents the skills measured AFTER the date provided. Study this list if you plan to take the exam AFTER that date.
Study this list of skills if you take your exam PRIOR to the date provided.
You can go directly to the change log if you want to see the changes that will be made on the date provided.
Some certifications only require passing one exam, while others require passing multiple exams.
Microsoft associate, expert, and specialty certifications expire annually. You can renew by passing a free online assessment on Microsoft Learn.
Connecting your certification profile to Learn allows you to schedule and renew exams and share and print certificates.
A score of 700 or greater is required to pass.
You can explore the exam environment by visiting our exam sandbox
If you use assistive devices, require extra time, or need modification to any part of the exam experience, you can request an accommodation.
Are you ready to take the exam or do you need to study a bit more?



Updates to the exam

Our exams are updated periodically to reflect skills that are required to perform a role. We have included two versions of the Skills Measured objectives depending on when you are taking the exam.

We always update the English language version of the exam first. Some exams are localized into other languages, and those are updated approximately eight weeks after the English version is updated. Other available languages are listed in the **Schedule Exam** section of the **Exam Details** webpage. If the exam isn't available in your preferred language, you can request an additional 30 minutes to complete the exam.

Note

The bullets that follow each of the skills measured are intended to illustrate how we are assessing that skill. Related topics may be covered in the exam.

Note

Most questions cover features that are general availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Skills measured as of September 26, 2022

Audience profile

The candidate envisions and creates business solutions to simplify and automate tasks and processes for themselves and their team. They understand the data that they are working with, the issues that they need to resolve, and the required processes and app experiences. The candidate may not have formal IT training but is comfortable using technology to solve business problems.

The candidate is self-directed and focuses on solving problems that they encounter as part of their primary job role. They may connect to and use features of apps including Microsoft Power Platform, Microsoft Teams, Microsoft 365 apps and services, and third-party solutions. The candidate has a desire to understand the capabilities and limitations of available tools and understand how to apply them.

- Design business solutions (20–25%)
- Analyze and visualize data (10–15%)
- Create business solutions (60–65%)

Design business solutions (20–25%)

Create a high-level design

- Identify existing data sources needed to support a business solution
- Describe the expected user experience for targeted devices and describe the differences between Microsoft Power Platform app types
- Create a high-level structure for a new data source



Identify Microsoft Power Platform components

- Determine the required Power Apps app type for a business solution
- Determine when to use Dataverse for Teams
- Map a problem domain to Microsoft Power Platform tools
- Identify options for implementing business logic
- Describe connectors
- Describe uses cases for cloud flows and desktop flows
- Describe use cases for chatbots in Microsoft Teams

Design the user interface (UI) for a business solution

- Identify opportunities for component reuse
- Select UI elements for canvas apps
- Identify the model-driven forms and Microsoft Dataverse views that are needed

Design reporting and visualizations for business solutions

- Select reporting options for business solutions including views, Power BI visualizations, and dashboards
- Define visualizations for Power BI dashboards
- Define visualizations for model-driven dashboards
- Define visualizations for canvas apps

Analyze and visualize data (10–15%)

Create and consume Power BI dashboards

- Create a simple report from an existing dataset by using Power BI Service
- Create Power BI dashboards from existing reports
- Create and configure model-driven dashboards
- Embed Power BI dashboards and tiles in canvas apps and model-driven apps
- Share Power BI dashboards

Describe AI Builder models

- Describe use cases for Al Builder
- Describe differences between prebuilt models and custom models
- Describe the process for training custom models
- Use a model from within Power Automate or Power Apps

Create business solutions (60–65%)

Manage Microsoft Power Platform components during development

- Create a Dataverse solution
- Import a Dataverse solution



- Import or export a canvas app or a cloud flow
- Add existing apps and flows to a Dataverse solution

Create model-driven apps

- Compose model-driven apps
- Create and configure Dataverse table forms
- Create and configure Dataverse table views
- Share model-driven apps with other users and groups
- Create and configure model-driven dashboards

Create and manage canvas apps

- Connect to data sources in canvas apps
- Interpret App Checker results
- Manage versions of canvas apps
- Publish canvas apps
- Share canvas apps with other users and groups
- Build canvas apps screens
- Add canvas app assets and components to screens

Create screens for canvas apps

- Determine when to use forms, galleries, button, labels, input controls, images, and custom controls
- Configure UI elements
- Implement Power Fx formulas
- Implement collections and variables
- Run a Power Automate flow from a canvas app

Configure Microsoft Dataverse

- Create tables and table columns based on a data model
- Link tables by using lookups
- Describe use cases and capabilities of business rules
- Create Dataverse business rules
- Describe how Dataverse uses role-based access control (RBAC)
- Add table permissions to existing Dataverse security roles

Create Power Automate flows

- Describe types of triggers for cloud flows
- Create cloud flows
- Configure triggers for cloud flows
- Configure flow steps
- Test a cloud flow



- Implement conditional logic for a cloud flow
- Create approvals and monitor the approval process by using Power Automate and Microsoft Teams
- Share cloud flows
- Create a desktop flow for personal use

Create Power Virtual Agents chatbots in Microsoft Teams

- Identify use cases and capabilities for chatbots
- Create a chatbot that uses topics and trigger phrases
- Test a chatbot
- Publish a chatbot

Study resources

We recommend that you train and get hands-on experience before you take the exam. We offer self-study options and classroom training as well as links to documentation, community sites, and videos.

Study resources	Links to learning and documentation
Get trained	Choose from self-paced learning paths and modules or take an instructor led course
Find documentation	Microsoft Power Apps documentation Microsoft Dataverse Power BI documentation Power Automate documentation Microsoft Power Virtual Agents documentation Planning a Power Apps project Canvas apps Model-driven apps
Ask a question	Microsoft Q&A Microsoft Docs
Get community support	Power Apps - Power Platform Community Microsoft Power Automate - Power Platform Community
Follow Microsoft Learn	Microsoft Learn - Microsoft Tech Community
Find a video	#LessCodeMorePower Shows



Study resources	Links to learning and documentation
	Browse other Microsoft Learn shows

Change log

Key to understanding the table: The topic groups (also known as functional groups) are in bold typeface followed by the objectives within each group. The table is a comparison between the two versions of the exam skills measured and the third column describes the extent of the changes.

Skill area prior to September 26, 2022	Skill area as of September 26, 2022	Changes
Audience profile		Major
Design business solutions	Design business solutions	% of exam decreased
Create a high-level design	Create a high-level design	Minor
Identify Microsoft Power Platform components	Identify Microsoft Power Platform components	Minor
Design data models		Removed
Design the user interface (UI) for a business solution	Design the user interface (UI) for a business solution	Minor
Design reporting	Design reporting and visualizations for business solutions	Major
Create solutions	Create business solutions	% of exam increased; reordered
Manage Microsoft Power Platform development environments	Manage Microsoft Power Platform components during development	Major
Create model-driven apps	Create model-driven apps	Major
Create canvas apps	Create and manage canvas apps	Major
	Create screens for canvas apps	Added
Configure Microsoft Dataverse	Configure Microsoft Dataverse	Major
Create Power Microsoft Automate flows	Create Power Automate flows	Major
Create Microsoft Power Virtual Agents chatbots in Microsoft Teams	Create Power Virtual Agents chatbots in Microsoft Teams	Minor



Analyze and visualize data	Analyze and visualize data	% of exam decreased; reordered
Create Microsoft Power BI reports	Create and consume Power BI dashboards	Major
Implement other reports		Removed
Describe AI Builder models	Describe AI Builder models	Minor

Skills measured prior to September 26, 2022

Audience Profile

The app maker builds solutions to simplify, automate, and transform tasks and processes for themselves and their team where they have deep expertise in the solution domain. They are skilled in key technical business analyst tasks such as data modeling, basic UX design, requirements analysis, process analysis, etc.

The app maker creates and enforces business processes, structures digital collection of information, improves efficiency of repeatable tasks, and automates business processes.

The app maker uses the maker tools of Microsoft Power Platform to solve business problems. They may have experience with Visual Basic for Applications, Excel pivot tables, Teams and other tools. They should have a basic understanding of data models, user interface, and processes. The app maker is aware of the capabilities and limitations of available tools and understands how to apply them.

The app maker is self-directed, and solution focused. They may not have formal IT training but are comfortable using technology to solve business problems with a personal growth mindset. They understand the operational need and have a vision of the desired outcome. They approach problems with phased and iterative strategies.

- Design business solutions (35–40%)
- Create solutions (45–50%)
- Analyze and visualize data (15–20%)

Design business solutions (35–40%)

Create a high-level design

- Identify required data sources for a business solution
- Describe real-world objects as tables
- Describe the expected user experience for targeted devices and describe the differences between Microsoft Power Platform app types
- Create a high-level data model including source, volume, and intended uses



Identify Microsoft Power Platform components

- Determine the required Power Apps app type
- Determine when to use Dataverse for Teams
- Map a problem domain to Microsoft Power Platform tools
- Identify options for implementing business logic
- Describe connectors
- Describe unmanaged solutions
- Describe uses cases for desktop flows
- Describe use cases for chatbots

Design data models

- Determine required tables
- Identify relationships between tables
- Identify columns and data types

Design the user interface (UI) for a business solution

- Identify opportunities for component reuse
- Apply UI standards
- Identify the model-driven forms and Dataverse views that are needed

Design reporting

- Define data output requirements
- Define visualizations for Power BI dashboards
- Define visualization requirements for model-driven dashboards

Create solutions (45–50%)

Manage Microsoft Power Platform development environments

- Create a solution
- Add existing apps and flows to a solution
- Run solution checker and interpret results

Create model-driven apps

- Compose model-driven apps
- Create a site map
- Create and configure Dataverse table forms
- Create and configure Dataverse table views
- Embed model-driven apps in Microsoft Teams channels
- Embed a canvas app on a form in a model-driven app
- Manage versions of canvas apps
- Publish and share canvas apps



Share model-driven apps

Create canvas apps

- Create canvas apps
- Connect to data sources in canvas apps
- Build canvas apps screens
- Compose Microsoft Power Fx formulas
- Implement collections and variables
- Interpret App checker results
- Add canvas app assets and components to screens

Configure Microsoft Dataverse

- Create tables and table columns based on a data model
- Link tables by using lookups or relationships
- Load or create data records for testing and development
- Publish customizations
- Create Dataverse business rules
- Configure security roles

Create Microsoft Power Automate flows

- Create business process flows
- Create cloud flows
- Configure triggers
- Build scheduled, automated, and instant flows
- Configure flow steps
- Test a flow
- Implement common expressions and loops
- Create adaptive cards for Microsoft Teams
- Create and monitor approvals from Power Automate, Microsoft Teams, and SharePoint
- Share flows

Create Microsoft Power Virtual Agents chatbots in Microsoft Teams

- Create a chatbot
- Test a chatbot
- Publish a chatbot

Analyze and visualize data (15-20%)

Create Microsoft Power BI reports

- Create Power BI report by using Power BI Desktop
- Create Power BI report by using Power BI service



- Embed canvas apps in Power Bi reports and dashboards
- Share Power BI reports and dashboards

Implement other reports

- Merge data from a data source into a Microsoft Word or Excel template
- Create model-driven dashboards
- Embed Power BI content in Power Apps

Describe AI Builder models

- Identify model types including prebuilt and custom models
- Describe the process for preparing data and training models
- Use a model from within Power Automate or Power Apps

