Microsoft Certified: Dynamics 365: Finance and Operations Apps Developer Associate – Skills Measured

This document contains the skills measured on the exams associated with this certification. It does not include any upcoming or recent changes that have been made to those skills. For more information about upcoming or recent changes, see the associated exam details page(s).

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is NOT definitive or exhaustive.

NOTE: Most questions cover features that are General Availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Exam MB-300: Microsoft Dynamics 365: Core Finance and Operations

Describe finance and operations apps, and extend apps by using Microsoft Power Platform technologies (20-25%)

Identify and use common apps, features, and functionality

- describe apps in the finance and operations portfolio
- describe the main components of Dynamics 365 Commerce
- describe uses cases for and capabilities of workspaces and mobile workspaces
- describe case management
- describe global address book features and their use cases
- identify inquiry and report types available in a default installation
- describe use cases for the Business document management and electronic reporting features
- perform searches, save queries and views, create and use, record templates, and create filters

Extend app functionality by using Microsoft Power Platform technologies

- identify use cases for Microsoft Dataverse
- identify use cases for Power Apps
- identify use cases for Power Automate
- identify use cases for Power BI

- identify use cases for Power Virtual Agents

Configure administrative features and workflows (30-35%)

Implement security

- distinguish between roles, duties, privileges, and permissions
- assign security roles to users based on requirements
- describe segregation of duties
- describe and use the security diagnostics tool

Design and create workflows and business events

- describe use cases for workflows
- design and create workflows
- configure workflow properties, tasks, approvals, and elements
- configure queues, workflow assignment hierarchies, workflow parameters, and troubleshoot workflows
- troubleshoot workflows
- manage workflow versions
- Trigger Power Automate flows by using business events

Configure organization administration features

- set up and configure legal entities and operating units
- configure and troubleshoot number sequences
- create organization hierarchies
- describe and apply user options
- configure document handling for attachments
- configure print management and form setup features

Configure system administration features

- describe use cases for the Microsoft Excel Workbook Designer and the Microsoft Dynamics Office add-in
- configure email (SMTP/Exchange)
- create and maintain email templates
- describe use cases for Entity store
- create, export, and import personalization
- publish saved views
- set up and monitor batch jobs
- set up alerts

Manage finance and operations data (25-30%)

Manage data

- describe use cases for the Data Management framework
- describe use cases for projects, data entities, and templates
- copy configuration data between companies or legal entities by using the data management framework
- describe use cases for the dual-write feature

Describe the migration process

- identify common migration scenarios and tools in finance and operations apps
- identify relevant data entities and elements based on given scenarios
- identify data migration requirements

Prepare data for migration and migrate data to finance and operations apps

- identify types of data including master, transactional, reference, and parametric
- generate field mapping between source and target data structures
- import or export data by using the data management framework
- support the transition between the existing and migrated systems
- perform a test migration and validate output from the process
- implement data task automation

Validate and support solutions (20-25%)

Test solutions

- describe types of testing, including unit, regression, functional, and end-to-end
- describe capabilities of available testing tools
- track work items through a project implementation by using Azure DevOps
- create test cases and test plans by using Azure DevOps
- automate and manage test cases by using the Regression Suite Automation Tool (RSAT)
- create test scripts by using Task recorder and upload scripts to Business process modeler or Azure DevOps

Describe and use Lifecycle Services tools

- identify use cases for project asset libraries and shared asset libraries
- describe environment purposes and topologies
- differentiate between Tier 1 environment and other tiers
- describe use cases for Business process modeler libraries

- describe the types of environments including sandbox, test, and production
- report production outages
- create and save trace files to troubleshoot performance issues
- describe the impacts of Dynamics 365 One Version service updates on projects

Exam MB-500: Microsoft Dynamics 365: Finance and Operations Apps Developer

Plan architecture and solution design (10-15%)

Identify the major components of Dynamics 365 Finance and Operations apps

- identify the Finance and Operations app modules required for a solution based on business requirements
- identify architectural differences between the cloud and on-premises versions of Finance and Operations apps
- identify components of the application stack
- differentiate the purposes and interrelationships between packages, projects, models, and elements

Design and implement a user interface

- describe the Finance and Operations user interface layouts and components
- design the workspaces
- design and personalize user interface elements including grids, forms, and pages
- configure filtering options

Implement Application Lifecycle Management (ALM) and Lifecycle Services (LCS)

- describe the capabilities of the Environment Monitoring Tool within Lifecycle Services (LCS)
- select the purpose and appropriate uses of LCS tools and components
- research and resolve issues by using Issue Search
- identify activities that require asset libraries
- prepare deployment packages and deploy packages

Apply Developer Tools (10-15%)

Customize Finance and Operations apps by using Visual Studio

- create extension models
- design and build projects

- manage metadata using Application Explorer
- synchronize data dictionary changes with the application database
- create elements by using the Element Designer

Manage source code and artifacts by using version control

- create, check out, and check in code and artifacts
- branch and merge code
- compare code and resolve version conflicts

Implement Finance and Operations app framework functionality

- implement the SysOperation framework
- implement the asynchronous framework
- implement the workflow framework
- implement the unit test framework
- identify the need for and implement the Sandbox framework

Design and develop AOT Elements (20-25%)

Create forms

- add a new form to a project and apply a pattern (template)
- configure a data source for the form
- add a grid and grid fields, groups, and other controls to a form
- create and populate menu items
- test form functionality and data connections
- add a form extension to a project for selected standard forms

Create and extend tables

- add tables to a project
- add table fields and field properties to a table
- add a table extension to a project for a table
- add fields groups, relations, delete actions, and indices

Create Extended Data Types (EDT) and enumerations

- add an EDT to a project and populate EDT properties
- add an enumeration to a project
- add or update enumeration elements and enumeration element properties
- add an extension of EDT and enumerations

Create classes and extend AOT elements

- add a new class to a project
- create a new class extension and add new methods
- add event handler methods to a class

Develop and test code (10-15%)

Develop X++ code

- identify and implement base types and operators
- implement common structured programming constructs of X++
- create, read, update, and delete (CRUD) data
- identify and implement global functions in X++
- implement table and form methods

Develop object-oriented code

- implement X++ variable scoping
- implement inheritance and abstraction concept
- implement query objects and the QueryBuilder class
- implement attribute classes
- implement chain of command

Implement reporting (10-15%)

Describe the capabilities and limitations of reporting tools in Dynamics 365 Finance and Operations apps

- create and modify report data sources and supporting classes
- implement reporting security requirements
- describe the report publishing process
- describe the differences between using Entity store and Bring your own database (BYOD) as reporting data stores

Design, create, and revise Dynamics reports

- create and modify reports in Finance and Operations apps that use SQL Server Reporting Services (SSRS)
- create and modify Finance and Operations apps reports by using Power BI
- create and modify Finance and Operations apps reports FO by using Microsoft Excel

Design, create, and revise Dynamics workspaces

- design KPIs
- create drill-through workspace elements

- implement built-in charts, KPIs, aggregate measurement, aggregate dimension, and other reporting components

Integrate and manage data solutions (10-15%)

Identify data integration scenarios

- select an appropriate data integration API
- identify differences between synchronous vs. asynchronous patterns

Implement data integration concepts and solutions

- develop a data entity by using Visual Studio
- develop, import, and export composite data entities
- identify and manage unmapped fields in data entities
- consume external web services by using OData and RESTful APIs
- integrate Finance and Operations apps with Microsoft Excel by using OData
- develop and integrate Power Automate and Power Apps

Implement data management

- import and export data using entities between Finance and Operations apps and other systems
- monitor the status and availability of entities
- enable Entity Change Tracking
- set up a data project and recurring data jobs
- design entity sequencing
- generate field mapping between source and target data structures
- develop data transformations

Implement security and optimize performance (10-15%)

Implement role-based security policies and requirements

- create or modify duties, privileges, permissions, and roles
- enforce permissions policies
- implement record-level security by using Extensible Data Security (XDS)

Apply fundamental performance optimization techniques

- identify and apply caching mechanisms for forms and tables
- implement the global cache
- create or modify temporary tables for optimization purposes
- determine when to use set-based queries and row-based queries
- modify queries to optimize performance

- modify variable scope to optimize performance
- analyze and optimize concurrency

Optimize user interface performance

- capture traces by using TraceParser and analyze traces
- diagnose and optimize client performance by using Microsoft Edge F12 Developer tools, Fiddler, and other common tools
- diagnose and optimize client performance by using Performance Timer