MB-820T00: Dynamics 365 Business Central Developer

Course Content

Course Description:

A Dynamics 365 Business Central developer develops apps that extend Business Central. This can include creating new modules and modifying existing modules. The developer can add new business logic or change existing business logic by using events. A developer also makes it possible to integrate Business Central with other applications, including Microsoft Power Platform products.

Business Central developers are responsible for troubleshooting and debugging issues in the system. This may involve identifying the root cause of a problem, fixing bugs, and testing the solution to ensure it works as expected. Business Central developers may be required to optimize the performance of the system by identifying bottlenecks and improving code quality. Business Central developers are responsible for upgrading the system, migrating data, and maintaining the system to ensure it remains up to date and secure.

Course Objectives:

Upon successful completion of this course, students will be able to;

- Create a Business Central account
- Create proper installation and upgrade codeunits
- Create a basic new AL Language extension
- Deploy your extensions to a production tenant
- Use snippets to create pages in Visual Studio Code
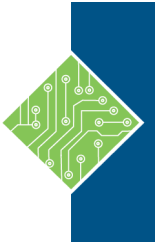- And so much more!

Prerequisites:

The following is recommended:

- Access to a Business Central trial account
- Knowledge about development in Business Central
- Basic understanding of working with tables and pages and familiarity with general debugging processes

Target Audience:

Candidates for this course are Developers, Software engineers, Architects, Technical advisors, Technical consultants, User Experience leads or have a combination of these skills. Business Central is our fastest growing app with the largest number of solutions published to AppSource. It is however a complex solution, and it requires deep domain and technical expertise for implementation.

MB-820T00: Dynamics 365 Business Central Developer

Course ID #: 7000-887-ZZ-Z

Hours: 35

Topics:

Lesson 1: Start your free Dynamics 365 Business Central trial
- Introduction – Create your own Business Central account
- Sign in to Business Central
- Use a demo database
- Start a trial with your own data
- Extend your trial and subscribe or unsubscribe your organization
- Exercise – Sign into Business Central
- Check your knowledge
- Summary

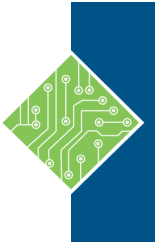**Lesson 2: Introduction to the capabilities of Microsoft Dynamics 365 Business Central**
- Introduction to Business Central
- Identify available subscription types for Business Central
- Explore the relationship management functionality
- Use Dynamics 365 Sales with Business Central
- Discover supply chain management capabilities
- Process and administer the purchase cycle
- Process and administer the sales cycle
- Send documents to customers
- Explore how to administer jobs
- Discover service management capabilities
- Business Central manufacturing capabilities
- Business Central Human Resources capabilities
- In Microsoft 365 experience for Business Central
- Exercises – Create a customer and a new office furniture item
- Check your knowledge
- Summary

Lesson 3: Customize Microsoft Dynamics 365 Business Central
- Introduction – Cloud architecture for Business Central
- Tailor, extend, and build applications
- Check your knowledge
- Summary

Lesson 4: Prepare for an easy application upgrade experience in Business Central
- Introduction
- Understand upgrade responsibilities and best practices
- Consider the update lifecycle
- Create proper installation and upgrade codeunits
- Transfer data between tables using DataTransfer
- Manage apps
- Detect and avoid breaking changes
- Frequently asked questions about updating your Business Central App
- Check your knowledge
- Summary

Lesson 5: Administer Dynamics 365 Business Central online
- Introduction – Get started with the Cloud Solution Provider program
- Extend a trial for a customer
- Access the administration center
- Manage sandbox and production environments
- Set up tenant notifications
- Inspect environment telemetry and troubleshoot issues
- Export databases
- Enable features
- Monitoring and analyzing telemetry
- Analyze performance using the In-client performance profiler
- Work with the Performance Toolkit extension
- Configure a BCPT suite
- Use APIs for automation and administration
- Check your knowledge
- Summary

Lesson 6: Manage users and implement security in Business Central
- Introduction – Add users
- Create user groups
- Implement permissions and permission sets
- Configure user access times and logging
- Understand users, profiles, and role centers
- Perform user-specific setup
- Auditing changes
- Exercise – Add a new user
- Check your knowledge
- Summary

Lesson 7: Introduction to the development environment for Dynamics 365 Business Central
- Introduction
- Get started with Visual Studio Code
- Install the AL language extension in Visual Studio Code
- Discover the logical database and its objects
- Differentiate the base app and the system app
- Create a new Business Central extension in Visual Studio Code
- Work with JSON configuration files
- Configure the AL language extension
- Manage multiple AL extensions in one workspace
- Exercise - Create and run an AL extension
- Check your knowledge
- Summary

Lesson 8: Debug and deploy your extension in Dynamics 365 Business Central
- Introduction
- Debug your extension with Visual Studio Code
- Use attach and debug with attach configurations
- Implement snapshot debugging
- Work with Rapid Application Development
- Publish and install an extension
- Set Resource Exposure Policy settings
- Configure projects and workspaces
- Use AL code actions
- Work with the Business Central Performance Toolkit
- Use Database Wait Statistics
- Exercise - Create a table extension
- Exercise - Create a page extension
- Check your knowledge
- Summary

Lesson 9: Work with pages in Dynamics 365 Business Central
- Introduction
- Get started with pages
- Identify different page types
- Configure the different page properties
- Build a page layout by using controls
- Link pages with page parts
- Use snippets in Visual Studio Code to create pages
- Set different control properties
- Enable users to search for a page
- Define actions on a page and its properties
- Exercise - Create a Card page
- Exercise - Create a List page
- Check your knowledge
- Summary

Lesson 10: Design the data model of a report in Dynamics 365 Business Central
- Introduction
- Create report data items and their properties
- Add columns to a report dataset
- Link, order, and indent data items
- Use a query to create a report dataset
- Check your knowledge
- Summary

Lesson 11: Work with codeunits in Dynamics 365 Business Central
- Introduction
- Create and access a codeunit
- Check your knowledge
- Summary

Lesson 12: Work with XMLports in Dynamics 365 Business Central
- Introduction
- Get started with XMLports
- Configure different XMLport properties
- Define nodes and their properties
- Design XMLports
- Create an XMLport by using snippets in Visual Studio Code
- Use XMLports in AL code
- Exercise - Create an XMLport to export XML data
- Check your knowledge
- Summary

Lesson 13: Work with entitlements and permission sets in Dynamics 365 Business Central
- Introduction
- Get started with entitlements and permissions
- Create entitlements and permission sets
- Override entitlements with inherent permissions
- Check your knowledge
- Summary

Lesson 14: Work with queries in Dynamics 365 Business Central
- Introduction
- Get started with queries
- Create a query in Visual Studio Code
- Join data in queries
- Filter data in queries
- Aggregate and sort data in a query
- Access queries from AL
- Advanced query concepts
- Check your knowledge
- Summary

Lesson 15: Build control add-in objects in Dynamics 365 Business Central
- Introduction
- Apply the Business Central look and feel
- Build a control add-in for Business Central
- Asynchronous considerations for control add-ins
- Connect control add-ins with Azure Functions
- Exercise - Build a control add-in object
- Check your knowledge
- Summary

Lesson 16: Customize the UI experience in Dynamics 365 Business Central
- Introduction
- Add objects to search
- Create page customizations
- Create profiles in application language
- Use and create views in application language
- Extend application areas
- Check your knowledge
- Summary

Lesson 17: Identify functional table types and characteristics in Dynamics 365 Business Central
- Introduction
- Define the different functional table types and characteristics
- Create master tables
- Create supplemental tables
- Create subsidiary tables
- Create ledger tables
- Create register tables
- Create journal tables
- Create document tables
- Create setup tables
- Check your knowledge
- Summary

Lesson 18: Introduction to the basics of AL programming in Dynamics 365 Business Central
- Introduction
- Get started with application language
- Work with identifiers, syntax, and variables
- Discover intrinsic data types
- Options and enums
- Work with collections
- Use assignments and type conversions
- Define different expression types
- Exercise - Discover the intrinsic data types
- Exercise - Use logical and relational expressions
- Check your knowledge
- Summary

Lesson 19: Learn about application performance and monitoring in Business Central
- Introduction
- Prepare your application for optimal performance
- Get essential Application Insights
- Check your knowledge
- Summary

Lesson 20: Work with source control using Git in Visual Studio Code for Business Central
- Introduction
- Configure Git
- Compare and contrast local and remote repositories
- Create a local Git repository
- Use the .gitignore file
- Add and remove files in Git
- Get the status of your Git repository
- Use a remote Git repository
- Clone a remote Git repository
- Work with a remote Git Repository
- Exercise - Source control with Git
- Check your knowledge
- Summary

Lesson 21: Use Application Lifecycle Management for Business Central
- Introduction
- Create an Azure DevOps organization
- Manage Azure DevOps Projects
- Introduction to Azure DevOps Services
- Connect to Azure DevOps via Personal Access Tokens
- Introduction to GitHub
- Exercise - Create an Azure DevOps organization and project
- Check your knowledge
- Summary

Lesson 22: Introduction to test automation in Business Central
- Introduction
- Test applications in Business Central
- Install and run the Test Toolkit
- Run the standard tests
- Create your own test codeunits with a test app
- Check your knowledge
- Summary

Lesson 23: Use Power Automate with Business Central
- Introduction
- Explore Business Central triggers in Power Automate
- Create a Power Automate flow from scratch
- Create customer, vendor and item approvals in Power Automate
- Create approvals in a general journal with Power Automate
- Create documents approvals with Power Automate
- Create Power Automate flows for different business scenarios
- Create a button or instant flow in Power Automate
- Run a Power Automate flow on a schedule
- Troubleshoot and monitor flows
- Exercise - Create a flow for sending emails when a new item is created in Power Automate
- Check your knowledge
- Summary

Lesson 24: Access REST services from within Dynamics 365 Business Central
- Introduction
- Use the different HTTP classes and their functions
- Get data from and send data to an external REST service
- Use and read JSON in Business Central
- Get JSON data from external REST services
- Exercise - Connect to external REST services
- Check your knowledge
- Summary

Lesson 25: Use Azure Functions with Dynamics 365 Business Central
- Introduction
- Create basic Azure functions
- Create an Azure function
- Use an Azure function in Business Central
- Exercise - Create an Azure function
- Check your knowledge
- Summary

Lesson 26: Work with web services in Dynamics 365 Business Central
- Introduction
- Define differences between SOAP, OData, REST, and API
- Web service authentication
- Enable access to OData web services
- Work with different OData return documents
- Request records with OData
- Work with OData query options
- Create new records with OData
- Update records with OData
- Use SOAP web services
- Request records with SOAP
- Handle UI interaction when working with web services
- Exercise - Create and connect to an OData web service
- Check your knowledge
- Summary

Lesson 27: Work with the API in Dynamics 365 Business Central

- Introduction
- Access Business Central API
- Tips for working with APIs
- Work with API limits
- Create new APIs
- Read, create, and update by using API
- API and OData bound actions
- Exercise - Connect to the API
- Check your knowledge
- Summary

Register for this class by visiting us at:
www.tcworkshop.com or calling us at 800-639-3535