Vivasoft

Technology + Knowledge = Innovation

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Vivasoft

Consulting & Training

Microsoft

MCT Microsoft Certified Trainer 2023 - 2024

Microsoft MCSA

Microsoft MCSD

Microsoft CERTIFIED EXPERT

Microsoft CERTIFIED ASSOCIATE

Microsoft CERTIFICATION

Microsoft CERTIFIED AZURE AI FUNDAMENTALS

Microsoft CERTIFIED AZURE AI ENGINEER ASSOCIATE

Microsoft CERTIFIED FUNDAMENTALS

Vivasoft is a leading company in the technology sector, specializing in offering innovative solutions based on Microsoft. With years of experience in the market, we are proud to be certified Microsoft partners, committed to supporting the digital transformation of businesses. We provide a comprehensive range of Microsoft products and highly qualified training courses, designed to help companies optimize their processes, enhance productivity, and acquire advanced skills in the world of technology.

Power Apps

Module 1: Introduction to Power Apps

What is Power Apps and what is it used for

Overview of Power Apps and its features

Differences between Power Apps Canvas, Model-driven, and Portals

When and why to use Power Apps: typical business scenarios

Introduction to Power Apps as part of Microsoft Power Platform (with Power BI and Power Automate)

Introduction to the Power Apps Interface

Overview of Power Apps Studio interface (Canvas and Model-driven)

Step-by-step guide to creating a basic app

Key differences between Canvas Apps and Model-Driven Apps

Navigating through screens and components within an app

Installation and Configuration of Power Apps

Accessing Power Apps via Microsoft 365

Overview of Power Apps subscription plans and licensing

Configuring data and connectors (e.g., SharePoint, SQL, Excel, Common Data Service)

Module 2: Building a Basic Canvas App

What are Canvas Apps?

Overview of Canvas Apps and their structure

Designing a Canvas App using a drag-and-drop interface

Creating the App Layout: Adding screens, controls, and navigation

Designing simple UI layouts (list, detail, form)

Adding and Configuring Controls

Types of controls in Power Apps (label, textbox, gallery,

button, form, dropdown, etc.)

Setting control properties (color, size, visibility)

Managing user input with forms and input controls

Connecting to Data and Using Connectors

Introduction to Power Apps connectors (SharePoint, SQL Server, Excel, and more)

Connecting the app to external data sources

Displaying data in a Gallery and a Data Table

Saving Data and CRUD Operations: Saving, updating, and deleting data in Power Apps

Implementing Create, Read, Update, Delete (CRUD) operations using functions like Patch, SubmitForm, etc.

Managing data flow between the app and the data source

Module 3: Building Model-Driven Apps

What are Model-Driven Apps?

Overview of Model-Driven Apps and their structure

Differences from Canvas Apps (data-driven dynamic design)

Creating an app using the Common Data Service (CDS)

Adding entities (tables) and relationships

Creating custom tables in the Common Data Service (CDS)

Managing fields, data types, and entity relationships

Customizing forms for data visualization and management

Navigation and Interface Customization

Customizing views, forms, and layouts in a Model-Driven App

Adding business logic such as validation rules, calculations, and automated actions

Customizing app navigation and configuring workflows

Module 4: Advanced Logic and Functionality

Introduction to Power Apps Logic

Understanding and using key Power Apps functions (If, Switch, Filter, Lookup, etc.)

Creating logical expressions for visibility, enabling, and control behavior

Using local and global variables to manage app state

Advanced Power Apps Functions

Using advanced functions like Collect, ClearCollect, Navigate, Patch, and Set

Creating formulas to validate user input and automate processes

Managing navigation between screens in a Canvas App (passing parameters)

Error Handling and Notifications

Implementing error handling in Power Apps

Displaying error messages and custom alerts

Using the Notify control to inform users of successful or failed operations

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Module 5: App Customization and Design

Customizing the User Interface
Creating a Responsive User Interface
Designing a responsive app layout (responsive design)
Using themes and styles to maintain a consistent look
Customizing controls (e.g., button styles, colors, fonts)
Layout and User Experience Design
Building professional-looking apps using grids, containers, and flexible layouts
Working with Components to reuse UI elements across screens
Creating intuitive user experiences (UI/UX best practices)
Custom Controls
Creating and using custom controls with Power Apps Component Framework (PCF)
Integrating third-party libraries to extend functionality (e.g., advanced charts, maps)

Module 6: Integration with Other Services and Workflows

Integration with Power Automate
Using Power Automate to automate workflows in Power Apps
Practical examples: sending notifications, approving requests, updating external data
Sending data between Power Apps and Power Automate for automated actions
Integration with Other Microsoft Solutions
Connecting Power Apps with SharePoint, Excel, SQL Server, Teams, Outlook, and other Microsoft tools
Creating apps that leverage real-time workflows and data from Microsoft 365
Third-Party Connectors and APIs
Using third-party connectors like Salesforce, Dropbox, Google Sheets, Twitter, etc.
Calling and interacting with external APIs via Power Apps (e.g., REST API, Web Services)

Module 7: Publishing and Managing Apps

App Distribution and Sharing
How to share and distribute Power Apps with other users
Configuring permissions and access roles for users
Customizing the end-user experience (preparing the app for internal teams or clients)
Version Management and Updates
Managing app versions and release cycles
Publishing and updating Power Apps
Monitoring app usage and collecting user feedback
Security and Access Control
Configuring data-level security: permissions, visibility, and access
Using role-based access control (RBAC) to manage user access
Implementing sensitive data protection within the app

Module 8: Hands-on Exercises and Final Project

Practical Project: Building a Complete App
Students develop a full Power App for a business use case (e.g., order management, project tracking, request approvals)
The app must include:
- **External data integration** (e.g., SharePoint, SQL, or APIs)
- **Automated workflows** (using Power Automate)
- **Business logic implementation**
- **Customized user interface and experience**