Modify files using Design Automation API

Fernando Malard

FORGE DEVCON
About the speaker

Fernando Malard

Ofcdesk’s CTO since 1999. Civil engineer with master’s degree in structural engineering. Working with AutoCAD software and ObjectARX technology since 1996 and with Revit software since 2009. Autodesk Developer Network (ADN) member since 1997. Worked on several AutoCAD and Revit software applications for civil engineering, architecture, interior design, and GIS using ObjectARX, C++, .NET, JavaScript, databases, and lately with Forge Platform. Experience teaching AutoCAD, Revit, C++, MFC, Microsoft .NET, and ObjectARX over the last years. Working with Forge platform since its creation.

@fpmalard
Summary & Learning Objective

AutoCAD software, Inventor software, Revit software, and 3ds Max software are now in the cloud, and you can use them to perform batch operations, such as creating, modifying, and migrating files or exporting data. This class will cover the basics of how to use app bundles, activities, and work items. Bring your own laptop or use the lab. This class requires basic knowledge of .NET, and previous experience creating desktop apps for AutoCAD, Inventor, Revit, or 3ds Max.

- Discover the basics of Forge
- Learn how to create your first app based on Forge
- Learn how to define bundle and activity
- Learn how to use prepare files and submit workitem
New to Forge?

- Forge is a platform (used by Autodesk, customers & partners)
- Collection on webservices for integrations (building blocks)
First steps: create accounts

AUTODESK ACCOUNT
https://accounts.autodesk.com

FORGE ACCOUNT
https://forge.autodesk.com

FORGE APP
https://forge.autodesk.com/myapps
First step: how to create an app?

You don't have any apps yet

Apps that you have created will appear here
Design Automation
Lab Information

http://learnforge.autodesk.io
Expected results of this lab
Steps to complete this lab

Create a server

Basic App UI

Prepare a Plug-in

Define an Activity

Execute workitem
Create a server / ASP.NET Core Web

- ngrok
- Visual Studio Community 2019
- C#
Next steps to complete this lab

- Create a server
- Basic App UI
- Prepare a Plug-in
- Define an Activity
- Execute workitem
Basic App UI
Next steps to complete this lab

Create a server  Basic App UI  Prepare a Plug-in  Define an Activity  Execute workitem
Prepare a Plug-in
Next steps to complete this lab

Create a server

Basic App UI

Prepare a Plug-in

Define an Activity

Execute workitem
Define an Activity
Next steps to complete this lab

Create a server

Basic App UI

Prepare a Plug-in

Define an Activity

Execute workitem
Execute Workitem
You’re done!

✓ FDC322542-L - Upload and View Your Models with Forge

✓ FDC322546-L - Connect to Fusion Team and BIM 360 Data

✓ FDC322554-L - Extend the Viewer

✓ FDC323665-L - Your First Forge Dashboard

✓ FDC322552-L - Modify Files Using Design Automation
Come code with us!

• Forge Accelerator events in 2020: [http://autodeskcloudaccelerator.com/](http://autodeskcloudaccelerator.com/)
  • Jan 13 – Jan 17 – San Francisco
  • Feb 3 – Feb 7 – Bogota
  • Feb 17 – Feb 21 – London
  • Mar 9 – Mar 13 – Sydney
  • Apr 13 – Apr 16 – São Paulo
  • Apr 27 – May 1 – Boston
  • Jun 1 – Jun 5 – Denver
  • Jun 8 – Jun 12 – Barcelona
  • More locations soon!
Thank you!

And remember to take the survey! 👍