More Practical Dynamo: Practical Uses for Dynamo Within Revit

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Class Summary

This lecture will give attendees examples of Dynamo so that they could apply them to practical Revit software workflows. There is no prior Dynamo or Programming experience needed. Only Revit experience is needed.
Key learning objectives

At the end of this class, you will be able to:

- Learn how to program using visual programming. Discover more practical applications of Dynamo for Revit.
- Learn how to create practical uses in the office using the Dynamo extension for Revit software.
- Learn how to automate repetitive manual Revit tasks using the Dynamo extension.
## Change All Floor Plan View Names to Upper Case in Revit Using DynamoBIM

### Diagram:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>This node selects the view plan family.</td>
</tr>
<tr>
<td>2</td>
<td>This node selects all the view plans in the Revit project.</td>
</tr>
<tr>
<td>3</td>
<td>This node inputs the parameter name.</td>
</tr>
<tr>
<td>4</td>
<td>This node gets the view name of each view plan.</td>
</tr>
<tr>
<td>5</td>
<td>This node changes all the view names to upper case.</td>
</tr>
<tr>
<td>6</td>
<td>This node sets the view name of each plan view to upper case.</td>
</tr>
</tbody>
</table>

### View Names Example:

**Before:**
- Floor Plan
- 01 - Entry Level - Furniture Layout
- 02 - Floor
- Roof
- Site
- Ceiling Plan
- 01 - Entry Level
- 02 - Floor
- Roof

**After:**
- Floor Plan
- 01 - ENTRY LEVEL - FURNITURE LAYOUT
- 02 - FLOOR
- ROOF
- SITE
- CEILING PLAN
- 01 - ENTRY LEVEL
- 02 - FLOOR
- ROOF
Modeling Very Smart Structural Beams

CREATE BEAMS FROM 2-PT AC FAMILIES IN REVIT USING DYNAMOBIM

- These nodes select all the AC families in the project.
- This node converts AC to Dynamo curves.
- This node selects the level for the beam; does not matter if beams are sloped.
- This node creates the beams on the AC curve.
- This node selects the beam family type.

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Making 2D property lines Follow Topography

Make 2D Property Lines in Revit Follow Topography Add Offsets and/or Fencing w/ DYNAMOBIM

Offset Property Line

property Lines follow TOPO add fencing to TOPO at property Line

Dynamo Graph

Dynamo TOPO Mesh Analysis

REVIT

DYNAMOBIM

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Creating 3D Stacking Diagrams from 2D Rooms
Appendix has many more examples!
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