



### INTAKE 01 PRODUCT VISION STATEMENT

<b>Project Code:</b>	BIMAD01-SV-01-GenQ	Program (Dept./Track):	<b>BIM Automation Development</b>
<b>Product Title:</b>	GenQ - A BOQ Auto Generating Tool		
Group Name:	GenQ Team	Main Supervisor Name:	Ahmed Mohyeldin

# GenQ - A BOQ Auto Generating Tool

## **Needs:**

The AEC industry has a big need for automation in general, especially in processes that take
days and weeks and even months of working from many people, like BOQs preparing, too
time-consuming and data-based process.

#### **Solution:**

- GenQ: Is a fully-detailed BOQ auto generating tool from Revit models. It can:
  - I. Filter all model's elements by their Categories, Families, and Types and display them in a tree-view.
  - II. Ability to include or exclude the external linked models to the core model in the filtration process.
  - III. Ability to filter by all levels or by a specific one or by some of them.
  - IV. And most importantly, can generate a fully-detailed and well-structured BOQs xls file with elements positioned according to the CSI MasterFormat.
  - V. Can generate a ready-to-print PDFs files for the BOQs.
  - VI. Can receive/send the Rate and Description's data for each type from/to the Revit.

## **Tools Used:**

- **Back-End:** .Net Framework.
- Front-End: WPF.
- **Third-Parties:** EPPlus Spreadsheets Package + MS Office Interop.

#### Value:

- Immediate and fast automated indicating for all model's elements and sorting them in a treeview
- A time-Saver tool for such an extremely time-demanding process like BOQs preparing, therefore a cost-saver tool.
- A user-friendly tool.
- Simple tool, one window and in one platform tool.

## **Target Audience:**

- Owners' Project Managers.
- Consultants.
- Main Contractors.