Elements:

- Dynamics 365 for Finance and Operations represent every individual element of AOT such as class, table, form, and so on.
- Elements in Dynamics 365 for Finance and Operations are stored on disk as XML files; these files contain the metadata and source code for the element.
- The XML files are the unit of Source Control

Projects:

- works the same as AX2012, but in D365 an element can be customized only once they are added to a specific Visual Studio project.
- The project may only belong to one model.

Dynamics 365 for Finance and Operations model:

- This is a group of elements. Standard elements are part of a standard model; you can add them into your model and do customization.
- A model is a design-time concept. An example of models: warehouse management model, a project accounting model, and more.
- Models can have one or more projects. Models may only belong to one package.

Dynamics 365 for Finance and Operations package:

- This is a deployment and compilation unit of one or more models. It includes model metadata, binaries, cubes, and other associated resources.
- One or more D365 packages can be packaged into a deployment package, which is the vehicle used for deployment on UAT and production environments.
- Packages are packaged into a deployable package file for deployment to Sandbox or production environments.
- A package can have one or more models. Packages can have references to other packages, just like .NET assemblies can reference each other.

How to create a Project in Visual Studio:
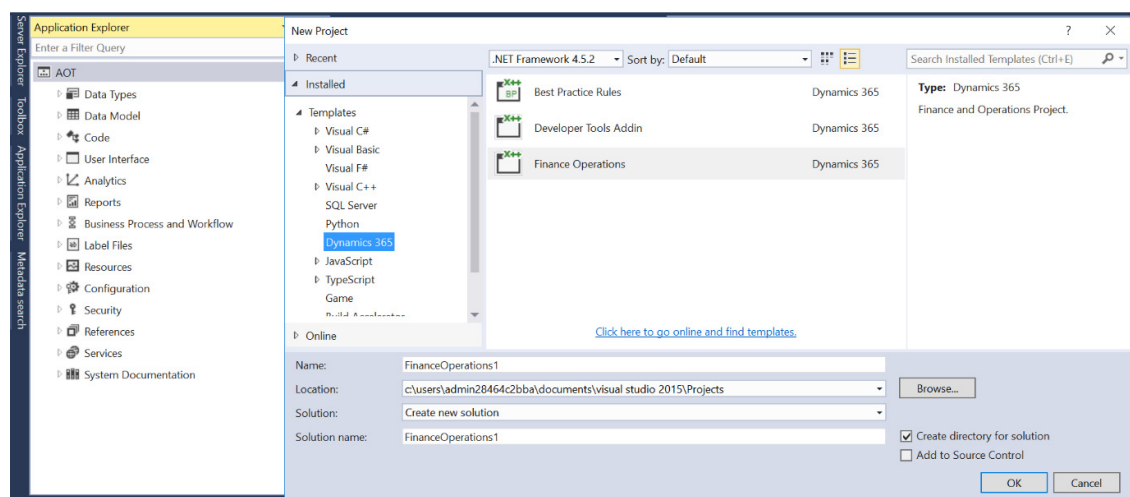
How to create a Model in Visual Studio:
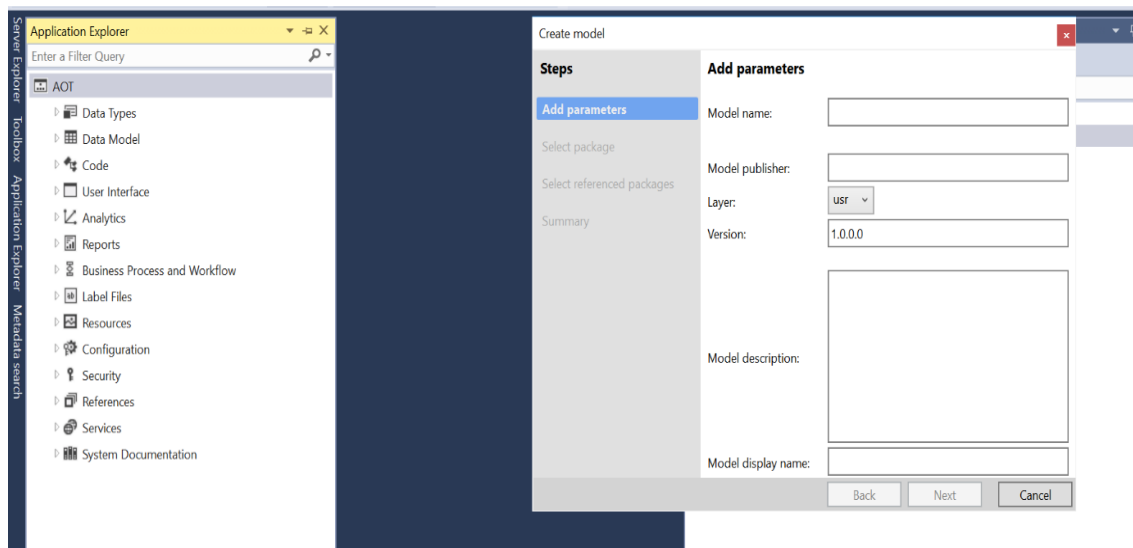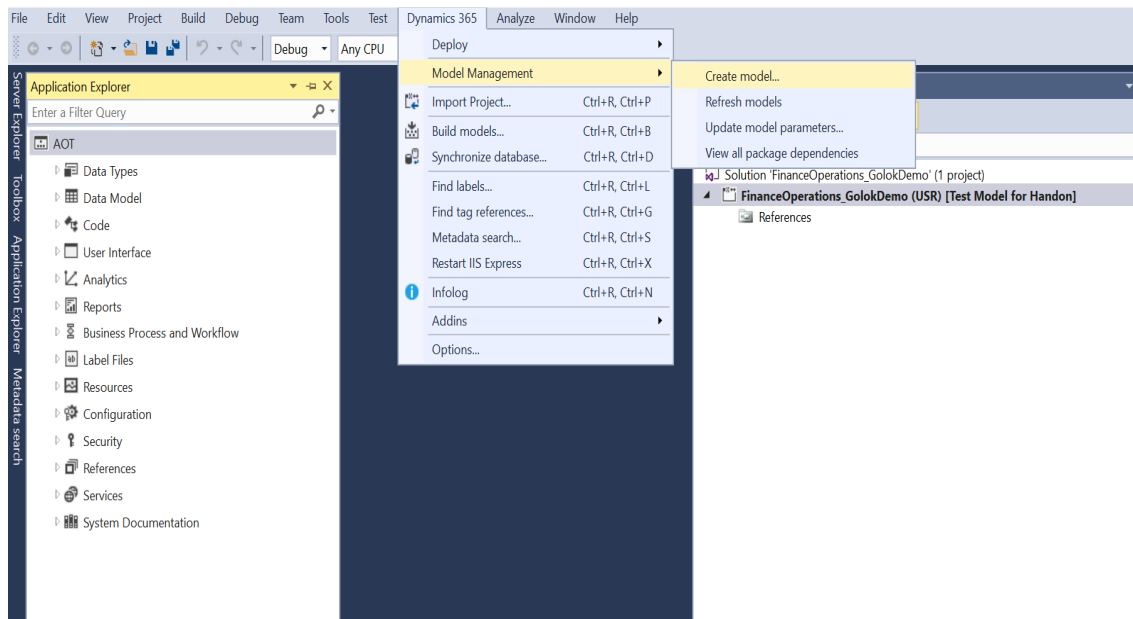
There was one more step while creating a model, **Select referenced packages**.
When you create your own package, you can select from an existing package to add them as references in your new package. You may need to add some standard package reference if you want to add them into your customization.

Elements Components:

- **AOT**
  - **Data Types**
    - Base Enums
    - Base Enum Extensions
    - Extended Data Types
    - Extended Data Type Extensions
  - **Data Model**
    - Tables
    - Table Extensions
    - Views
    - View Extensions
    - Queries
    - Query Extensions
    - Data Entities
    - Data Entity Extensions
    - Composite Data Entities
    - Aggregate Data Entities
    - Maps
    - Table Collections
  - **Business Process and Workflow**
    - Workflow Categories
    - Workflow Approvals
    - Workflow Approval Extensions
    - Workflow Tasks
    - Workflow Task Extensions
    - Workflow Automated Tasks
    - Workflow Types
    - Workflow Type Extensions
    - Providers
  - **Label Files**
  - **Resources**
  - **Configuration**
    - License Codes
    - Configuration Keys
    - Configuration Key Groups
  - **Code**
    - Classes
    - Macros
  - **User Interface**
    - Forms
    - Form Extensions
    - Tiles
    - Menus
    - Menu Extensions
    - Menu Items
    - Menu Item Extensions
  - **Analytics**
    - Perspectives
    - Key Performance Indicators (KPI)
  - **Reports**
    - Reports
    - Report Style Templates
    - Report DataSources
    - Report Images
  - **Security**
    - Security Roles
    - Security Role Extensions
    - Security Duties
    - Security Duty Extensions
    - Security Privileges
    - Security Policies
  - **References**
  - **Services**
    - Services
    - Service Groups
  - **System Documentation**
    - Tables
    - Extended Data Types
    - Base Enums
    - Classes
    - Views

Creating a new number sequence:

- Number sequences in Dynamics 365 for Finance and Operations are used to generate specifically, formatted numbers for record identification. These number sequences can be anything from voucher numbers or transaction identification numbers to customer or vendor accounts.
- Adding a number sequence to the system is a two-step process. First, we create the number sequence itself. second, we start using it in some form or from the code.
- D365 contains a list of **NumberSeqApplicationModule** derivative classes, which hold the number sequence's setup data for the specific module. These classes are read by the number sequence wizard, which detects existing number sequences and proposes to create the missing ones or newly added ones.
- The wizard is normally run as a part of the application initialization. It can also be rerun any time later when expanding the D365 functionality used, where a setup of additional number sequences is required.
- The wizard also must be rerun if new custom number sequences are added to the system.
- we will do the first step, that is, add a new number sequence to the system. In a standard application, the customer group number is not driven by any number sequence, so we will enhance this by creating it.

Steps for Creation:

- Create new Project.
- Create new Model.
- Add a 'Class' file in the newly created Solution under the Model and paste below code:

```
class NumberSeqModuleCustomer_packt extends
NumberSeqModuleCustomer
{
public void loadModule_Extension()
{
NumberSeqDatatype datatype = NumberSeqDatatype::construct();
datatype.parmDatatypeId(extendedTypeNum(CustGroupId));
datatype.parmReferenceHelp("Customer group ID");
datatype.parmWizardIsContinuous(false);
datatype.parmWizardIsManual(NoYes::No);
datatype.parmWizardIsChangeDownAllowed(NoYes::Yes);
datatype.parmWizardIsChangeUpAllowed(NoYes::Yes);
datatype.parmWizardHighest(999);
datatype.parmSortField(20);
datatype.addParameterType(
NumberSeqParameterType::DataArea, true, false);
this.create(datatype);
}
}
```

- Add a 'Runnable Class (Job)' file in the newly created Solution under the Model and paste below code:

```
class loadNumSeqCustPackt
{
/// <summary>
/// Runs the class with the specified arguments.
/// </summary>
/// <param name = "_args">The specified arguments.</param>
public static void Main(Args args)
{
//define the class variable
NumberSeqModuleCustomer_packt nymberSeqMod = new
NumberSeqModuleCustomer_packt();
//load the number sequences
nymberSeqMod.loadModule_Extension();
}
}
```

- Run the number sequence wizard by Navigating to 'Organization administration 'by clicking on the 'Generate' button under Number sequence as under,

  Modules → Organization administration → Number Sequences → Number Sequences→ Generate