

# Creating and Publishing NuGet Packages

By

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# 1. Creating and Publishing NuGet Packages

## What is a NuGet Package?

- NuGet is a package manager for .NET.
- Packages contain compiled code (DLLs), metadata, and dependencies.
- Helps developers reuse libraries across multiple projects.

## Steps to Create a NuGet Package

### 1. Create a Class Library Project:

```
dotnet new classlib -n MyLibrary
```

### 2. Edit the `.csproj` file to add metadata:

```
<PropertyGroup>  
  <TargetFramework>net6.0</TargetFramework>  
  <PackageId>MyLibrary</PackageId>  
  <Version>1.0.0</Version>  
  <Authors>Your Name</Authors>  
  <Description>Sample NuGet Package</Description>  
</PropertyGroup>
```

### 3. Build and Pack:

```
dotnet pack --configuration Release
```

- Creates a `.nupkg` file inside the `bin/Release` folder.

## Publishing the Package

- To NuGet.org:
  - i. Create an account on [nuget.org](https://nuget.org).
  - ii. Generate an API key from your account.
  - iii. Push the package:

```
dotnet nuget push  
  bin/Release/MyLibrary.1.0.0.nupkg  
  --api-key <API_KEY>  
  --source https://api.nuget.org/v3/index.json
```

**Q & A**