# Introduction

## Terminology

* The projects that uses [Fody](https://github.com/Fody/Fody/wiki) are called as Fody Addins.
* As per [Fody](https://github.com/Fody/Fody/wiki) conventions, the addin must be suffixed with “.Fody”. e.g MyProject.Fody.

## FNF.Security.Fody

* FNF.Security.Fody is a Fody addin which helps our project to adhere to FNF Personal Identifier Information (PII) policies.
* The tool provides various attributes which can be decorated at class or property level.
* Using Fody, the tool weaves IL code during compile time according the attribute decorated on your class or property.

## Performance

* The addin refrains from using any resource hogging assemblies such as reflection, streams etc…
* All changes by addins happens during compile time.

# Usage

* The addin should be added to your assembly from nuget.
  + This add a FodyWeavers.xml file to root of your project.
* Add an element “FNF.Security” to the Weavers node.
* Addin shall now look for all classes loaded to this assembly, to make necessary changes during compile time.
* Any exception happened during compile time weaving will be interpreted as a build error; And so will stop the build

# Masking attributes

* Available: SSNMask, EmailMask, PhoneMask
* All masking attributes usage target is property.
* The masking attributes uses regex patterns to match and mask the values
* The patterns can be overridden through attributes constructors

## ShouldMask method

* Any masking can be overridden by introducing a ShouldMask<Property> method, where property is the property name
  + For e.g. public bool ShouldMaskContactNumber() { .. } where ContactNumber is the property name, which is decorated with any of the masking attriutes.
* Signature
  + Access modifier: Any
  + Return type: bool
* If the method returns true, the property is masked; else the property will be displayed as it is.
* This method is optional

# XSS Guard attribute

* XSS guard attributes prevents cross site scripting by encoding any script or html tags.
* The attribute usage target is either class or property
* If decorated on class level, all public properties with a Set method will be encoded
* If decorated on a property, only that property is encoded.