

Extensions and Tools

Logging

Using NLog

```
public class HomeViewModel : PortalMasterModel
{
    private static readonly Logger _logger = LogManager.GetCurrentClassLogger();
    private static readonly Logger _lmsLogger = LogManager.GetLogger("LMS");

    public HomeViewModel()
    {
        // Using the class name as the name of the logger
        _logger.Info("Initializing HomeViewModel");

        // Using a new logger instance with a property automatically added
        _lmsLogger.WithProperty("ActiveTab", activeTab).Info("Initializing HomeViewModel");

        // Setting a property permanently on a logger
        _logger.SetProperty("Key", "Value");
        _logger.Info("Testing EventProperties");

        // Adding properties automatically in the message
        _logger.Info("Testing dynamic EventProperty Key={PropertyName}", "PropertyValue");

        // Logging an exception
        _logger.WarnException("Exception", new System.Exception("Example Exception"));
    }
}
```

Example of log levels

Level	Message	Logger	Properties	Callsite	Exception
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Info	Initializing HomeViewModel	SignifyHR.Areas.Portal.ViewModels.HomeViewModel		SignifyHR.Areas.Portal.ViewModels.HomeViewModel..ctor	
Info	Initializing HomeViewModel	LMS	ActiveTab=TrainingRequirements	SignifyHR.Areas.Portal.ViewModels.HomeViewModel..ctor	
Info	Testing EventProperties	SignifyHR.Areas.Portal.ViewModels.HomeViewModel	Key=Value	SignifyHR.Areas.Portal.ViewModels.HomeViewModel..ctor	
Info	Testing dynamic EventProperty Key="PropertyValue"	SignifyHR.Areas.Portal.ViewModels.HomeViewModel	PropertyName=PropertyValue Key=Value	SignifyHR.Areas.Portal.ViewModels.HomeViewModel..ctor	
Warn	Exception	SignifyHR.Areas.Portal.ViewModels.HomeViewModel	Key=Value	SignifyHR.Areas.Portal.ViewModels.HomeViewModel..ctor	System.Exception: Example Exception

Log Levels

Level	Typical Use
Fatal	Something bad happened; application is going down
Error	Something failed; application may or may not continue
Warn	Something unexpected; application will continue
Info	Normal behavior like mail sent, user updated profile etc.
Debug	For debugging; executed query, user authenticated, session expired
Trace	For trace debugging; begin method X, end method X

Rules

A rule is a logger element with the following attributes:

- name – logger name filter - may include wildcard characters (* and ?)
- minlevel – minimal level to log

- maxlevel – maximum level to log
- level – single level to log
- levels – comma separated list of levels to log
- writeTo – comma separated list of targets to write to
- final – no rules are processed after a final rule matches
- enabled – set to false to disable the rule without deleting it
- ruleName – rule identifier to allow rule lookup with Configuration.FindRuleByName and Configuration.RemoveRuleByName.

NLog.config

```
!--  
    Create a rule to only log entries from the LMS HomeViewModel logger,  
    using the logDatabase target, and applicable on log levels Info and above  
-->  
<logger name="SignifyHR.Areas.Portal.ViewModels.HomeViewModel" minlevel="Info" writeTo="logDatabase"  
enabled="true" final="true" />
```

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