

# Coding standards

- Naming standards
- Compliance standards
- Safety standards
- Review standards
- Solution staging
- Test cases

# Naming standards

## URL related naming

- Always use lowercase for application naming

## Code naming standards

### Package / naming placement

- Package name all lowercase
- General platform entities
  - Servlets: **com.tsnocode.server.servlet**
  - Filters: **com.tsnocode.server.filter**
  - Core: **com.tsnocode.ui**
  - Fields: **com.tsnocode.ui.field.<group>**
  - Views: **com.tsnocode.ui.views.<type>** (item,list,statistics,)
  - Codeunit: **com.tsnocode.codeunit.common**
- Solution specific code
  - TS customer app:
    - **com.tsnocode.solution.app**
    - **com.tsnocode.solution.customer**
    - **com.tsnocode.solution.customer.app**
  - Vendor app:
    - **com.vendor.tsnocode.app**
    - **com.vendor.solution.app**

## Class naming

Naming convention follows Java standard

- Starting with uppercase
- No special characters
- Seperate words with uppercase

In addition the following are recommended

- CodeunitPage post fix name "Page"
- CodeunitService post fix name "Service"

- Shared resources include "Helper"

# Database naming standards

## Table naming

System tables should follow this syntax

- lowercase
- no special characters

Reserved prefixes include

- data\_
- \_data\_ (deleted tables)

## Table attribute naming

General rules

- Starts uppercase
- Next word in name starts with uppercase (eg ThisIsAnExample)
- Foreign keys ends with ID (eg UserID)

Changelog attributes fixed names

- CreatedAt
- CreatedBy
- ModifiedAt
- ModifiedBy
- FinalizedAt
- FinalizedBy

# Compliance standards

The platform must be able to run on

- Current versions of Java
- Current versions of Tomcat
- MySQL and MariaDB
  - Do not use `current_timestamp` (property)

# Safety standards

- Input sanitization used in SQL, using either
  - Escape all string parameters using `DbConnection.EscapeSQL`
  - Prepared statements
- All Page codeunits should contain some user group restrictions, and set to be default off

# Review standards

The following changes requires a formal code review

- Changes to the API
- Changes to common objects
  - Command
  - Security
  - Controller
  - DbConnection
- Creation of OR changes to
  - Servlets
  - Servlet Filters
  - CodeunitPagePublic
  - Code containing SQL
- Any code that
  - Deletes DB columns OR tables

# Solution staging

1. Transfer solution
  - Source: Make backup, view XML, copy
  - Target: Add repository item, create this item
2. Transfer templates
  - Source: Check solution setting for Template (if not Default)
  - Source: Download template file / Copy template content
  - Target: Add new template and upload template file / paste content
  - Target: Update solution setting for Template (if not Default)
3. Transfer stylesheet
  - Source: Check solution setting for Stylesheet (if not Default)
  - Source: Copy stylesheet content via stylesheet page (recursive)
  - Target: Add new stylesheet and paste content
  - Target: Update solution setting for Stylesheet (if not Default)
4. Transfer media files
  - Source: Check files referred in stylesheet
  - Source: Check files referred in links
  - Source: Download files
  - Target: Create media file and upload files
  - Target: Update file references (TEMPORARY)
5. Transfer wrapper
  - Source: Check interface setting for Wrapper (if not Default)
  - Source: Copy wrapper content
  - Target: Add new wrapper and paste content
  - Target: Update interface setting for Wrapper (if not Default)

# Test cases

## Test cases Fields

- Commands: list, show, edit (update)
- List interactions: Sort, Grouping