## Syntax for names in models and bindings

Global conventions for names are as follows but may vary for particular bindings or serialisations, defined in detail in the second table.

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| ALL names | * CamelCase (whether lower or upper) * no special characters (e.g. periods, underscores) * avoid the use of abbreviations or acronyms (there are a small number of exceptions e.g. “uri” or “urn”) |
| Object names | UpperCamelCase e.g. **Concept** |
| Object Property names | lowerCamelCase e.g. **isOrdered** |
| Object Relationship names | lowerCamelCase e.g. **hasVersion** |
| Minimum length of any name | 2 |
| Maximum length of any name | No upper limit but avoid anything longer than 30 *(?)* characters, unless abridging it would genuinely obfuscate the name’s meaning |

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| UML | No specific guidance for naming in the standard, but see p.260 from <http://www.omg.org/spec/UML/2.5/PDF>: *Normally a Stereotype’s name starts with an upper-case letter, to follow the convention for naming Classes. However Profiles may use different conventions. Matching between the names of Stereotype definitions and applications is case insensitive, so naming stereotype applications with lower-case letters where the stereotypes are defined using upper-case letters is valid, although stylistically obsolete. For legacy reasons a tool may display stereotype names with the initial letter in lower case even when defined in upper case.*  Conventions for DDI Model   |  |  | | --- | --- | | UML Class name | UpperCamelCase e.g. **Concept** | | UML Class Attribute name | lowerCamelCase e.g. **isOrdered** | | UML Class Relationship (aggregation, composition and so on) name | lowerCamelCase e.g. **hasVersion** | | ✓ |
| XML | No specific convention for naming, but XML is case sensitive and there is e.g. differentiation between use of upper and lower case in tag names.  See <https://www.w3schools.com/xml/xml_syntax.asp> for details  Convention for DDI XML binding   |  |  | | --- | --- | | XML Element name | If bound to a UML class: UpperCamelCase  If bound to a UML class attribute or relationship: lowerCamelCase | | XML Attribute name | IowerCamelCase | | XML Type name (simple or complex) | UpperCamelCase | | ✓ |
| XSD | XSD follows the XML syntax, see <https://www.tutorialspoint.com/xsd/xsd_syntax.htm> | ✓ |
| OWL/RDFS | Classes begin with uppercase. Properties and relations (in that case data type properties and object properties) begin with lowercase. CamelCase is typically used for naming.  For details, see <https://www.w3.org/TR/owl2-syntax/#Classes>, <https://www.w3.org/TR/owl2-syntax/#Object_Properties> and <https://www.w3.org/TR/owl2-syntax/#Data_Properties>   |  |  | | --- | --- | | OWL/RDFS Class | UpperCamelCase | | OWL/RDFS object property | lowerCamelCase | | OWL/RDFS datatype property | lowerCamelCase | | ✓ |
| Java | Case Sensitivity − Java is case sensitive, which means identifier Hello and hello would have different meaning in Java.  Class Names − For all class names the first letter should be in Upper Case. If several words are used to form a name of the class, each inner word's first letter should be in Upper Case.  Method Names − All method names should start with a Lower Case letter. If several words are used to form the name of the method, then each inner word's first letter should be in Upper Case.  CamelCase is used.  For details, see <https://www.tutorialspoint.com/java/java_basic_syntax.htm>  **This can cause trouble when classes are named after a property or relationship!** |  |
| Json | No specific prescriptions for naming in <http://www.ecma-international.org/publications/files/ECMA-ST/ECMA-404.pdf>. Json is case-sensitive.  Convention for DDI Json binding   |  |  | | --- | --- | | Json Object name | UpperCamelCase | | Json Key name | lowerCamelCase | | ✓ |
| Json-LD | Json-LD follows the basic Json syntax rules (no specific prescriptions for naming) and applies OWL/RDFS naming conventions.  See <https://json-ld.org/spec/latest/json-ld/> | ✓ |
| SQL | No specific prescriptions for naming in SQL standard. Case-sensitivity is normally defined by the local database collation. Tables approximate (very loosely) to UML classes and should be named on that basis; table columns are analogous (again, loosely) to class attributes, and relationships to Foreign Keys - both of these should be lowerCamelCase.  Convention for DDI SQL binding   |  |  | | --- | --- | | Table name | UpperCamelCase | | Column name | lowerCamelCase | | Foreign Key name | lowerCamelCase | | ✓ |