Data Modelling in ArcMap for the Example "Urban Gardening"

(based on ArcMap version 10.2 of Esri)

Creating a file geodatebase
 In a first step, a *File Geodatabase* with the name
 UrbanGardening.gdb is created.

Catalog Window: right click on folder > New > File Geodatabase

2. Creating a new feature class

In the next step, a new (point) *feature class* with the name UrbanGardening is added to the file geodatabase:

UrbanGardening.gdb UrbanGardening

UrbanGardening.gdb

- type: Point Features
- coordinate system: Projected Coordinate Systems > World > WGS 1984 Web Mercator (auxiliary sphere)

For this feature class the following attributes are defined. The attribute names are specified in English and German (see image):

	Field Name	Data Type
	OBJECTID	Object ID
	SHAPE	Geometry
	City_Stadt	Text
	Date_Datum	Date
	Location_Lage	Text
	Type_Art	Text
	Size_Groesse	Text
Γ		

3. Defining the different "domains"

For the defined ranges of location, type and size, for each case, a domain is created under **Database Properties** (level: file geodatabase). In order to allocate each domain to the according field easily, the *Field Name* corresponds to the *Domain Name*.

Catalog Window: right click on UrbanGardening.gdb > Properties > Domains

You can find detailed instructions on how to create domains in the ArcGIS resources, keywords: A quick tour of attribute domains

http://resources.arcgis.com/en/help/main/10.2/index.html#//001s00000001000000 (15.12.2015)

In the following image, you can see the structure of the domain *Location_Lage*. For the predefined values, please, take a look at the conceptual data model.

Database Properties		×
General Domains		
Domain Name	Description	•
Location_Lage	Describes the location where urban gardening take	
		.
	+	
Domain Properties:		
Field Type	Text	*
Domain Type	Coded Values	
Split policy	Default Value	_
Merge policy	Default Value	-
		-
		+
Coded Values:		
Code	Description	~
В	Balcony_Balkon	
A	Allotment_Schrebergarten	
G	PrivatGarden_Privatgarten	
oLoc	others_sonstiges	_
		-
	F	
	OK Cancel A	pply

With the same procedure the domains for *Type_Art* and *Size_Groesse* are defined.

4. Assigning domain - attribute

In the next step, the assignment of the three domains to their respective attribute is carried out in the *Feature Class Properties* und *Fields > Field Properties*. It is important, that the respective attribute is chosen in the top field. The following image shows this for the attribute *Location_Lage*.

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5. Reassessing the dataset

Finally, the new dataset is loaded into the Table of Contents (TOC) in ArcMap and the attribute table is used to control for correctness.