Bentley® Education

Data documentation and management template

This template supports your **Data Collection Checklist** by helping you document formats, storage plans, and responsibilities for each dataset in your campus digital twin

1: Data overview	
Project name	Smart campus twin
Primary use case(s)	Inclusive design, room occupancy monitoring, facilities planning
Data owner(s)	Digital Twin Project Lead, Head of IT

2: Data types and formats			
Type of data	Source/tool	Formats	Volume estimate
Reality mesh (outdoor)	Drone + iTwin Capture Modeler	.obj, .3mx, .3dtiles	10–30 GB
Indoor scans (manual)	iPhone + Polycam	.obj, .gltf	1–5 GB per building
BIM models	Revit/ArchiCAD	.ifc, .rvt	500 MB – 2 GB each
IoT sensor data	WIA / HiData / CIVIC	.csv, .json, API URLs	10–50 MB/day
Maps and GIS layers	OpenStreetMap, local GIS	.shp, .geojson, .kml	1–5 GB
Dashboards/interfaces	OpenCities Planner, Unreal Engine	Web URL / .html	Hosted/cloud
Documentation/scripts	Internal/Shared	.docx, .pdf, .py	100 MB

3: Storage and backup

Data type	Storage location & backup plan	Access control
Raw drone images	University research drive, backed up weekly	Core project team only
Processed models	Cloud storage with auto-backup	Read-only for broader access
IoT data	Live stream from API, 4DA export weekly	Restricted by sensor type
Docs/scripts	GitLab or shared folder with version control	Team contributors

4: Metadata and documentation

Item	Plan/notes
Readme files	Describe content, version, usage, units, and contact person
Metadata standard used	DataCite or schema.org (if publishing openly)
Software documentation	Inline comments, install instructions, version info
Codebook for sensors	Spreadsheet describing variables, units, locations
User guides/training	PDF/Video explaining how to explore or update twin

5: Privacy, IP, and sharing

Aspect	Plan
Personal data used?	Yes—anonymized room occupancy data only
GDPR compliance	Data stored securely, access limited, no identifiers
Open licensing	Creative Commons BY or similar for non-sensitive data
Where published?	Internal server; public models via OCP; data via 4TU
Embargo period?	6 months post-project to allow for publication