RELATION BETWEEN VIDEOS AND ACTIVITIES

VIDEO	TITLE	VIDEO ACTIVITY	MATERIAL	ACTIVITY
video0_en.mp4	Qgis installation			
video1_en.mp4	Spatial componets: geometry, data and style			
video2_en.mp4	Creating a polygon geojson file			**Activity 1.** Digitize a point with position of high School and polygons to assign zones to workgroups in mapping field. Write the file in geojson format follonero the steps in “video1_en.mp4” and “video2_en.mp4”.
video3_en.mp4	Open a Qgis project	Open “session1/project_session1_intro.qgz”	session1.zip	
video4_en.mp4	Create a new Qgis project	create “session1/project_session1_add_data.qgz”	session1.zip	**Activity 2**: Install Qgis program like in “video_0_en.mp4 and create a Qgis project adding vector and raster layers following the steps in “video4_en.mp4”. Watch “video3_en.mp4 first.
video5_en.mp4	Cartographic projections in Qgis	· create “session1/session1_projections.qgz” · create “session1/session1_projection_3857.qgz” · create “session1/session1_projection_53030.qgz” · create “session1/session1_projection_53024.qgz” · create “session1/session1_projection_53018.qgz”	session1.zip	**Activity 3**: Work with cartographic projections following the steps in “video5_en.mp4” and create a 4 Qgis project, each one with a projection.
video6_en.mp4	Administrative divisions and national cartographic projections in Europe (NUTS)	create session2_NUTS.qgz	session2.zip	**Activity 4**: Unzip “session2.zip” and work with European administrative units (NUTS) and understanding the local projections that are applied, following the steps in “video6_en.mp4”. Evaluation: Test questions autoevaluation
video7_en.mp4	Data formats and symbolizations	Create “sessio3/session3 datasources.qgz”	session3.zip	
video8_en.mp4	Online data with XYZ tiles	Create “session4/session4_online_datasource.qgz”	session4.zip	**Activity 5**: - Unzip “session4.zip”

				- Watch the “video_7_en.mp4” and “video8_en.mp4”. - Create a Qgis project called "my route" with EPSG code 3857, where you must add a GPX route downloaded from the "Wikiloc" web portal. Add a background XYZ layer with this origin: http://server.arcgisonline.com/arcgis/rest/services/World_Topo_Map/MapServer/tile/{z}/{y}/{x}
video9_en.mp4	Online databases: PostgreSQL/PostGIS	Open “session4_online_datasources.qgz” (created in video8_en.mp4). Save as session4_online_datasources_postgis.qgz Use syles defined in “session4/styles” folder	session4.zip	
video10_en.mp4	Spatial Data Infraestructure (SDI)	Create “session4/session4_wms.qgz”		**Activity 6**: - Unzip “session4.zip” - Watch the “video_9_en.mp4” and “video10_en.mp4”. - Create a Qgis project called "my zone" with the following layers: • add the WMS layer with the base cartography of your country seen in video 9. • from the Postgis database named "water" add the layers: “lau” and “river”. Watch video_8 to understand how to add layers from a PostGis database. - Arrange the layers in this order: wms base mapping, nuts and rivers. - Symbolize the nuts so that the fill is transparent. - Zoom in to the area where you are working.
video11_en.mp4	Relationships between tables and choropleth mapping	Create “session5/session5_choropleth.qgz”	session5.zip	
video12_en.mp4	Map layout	Open "session5/session5_map_composition.qgz"	session5.zip	
video13_en.mp4	Create a new map layout in Qgis	Open "session5/session5_map_composition.qgz" and create new layout	session5.zip	**Activity 7**: - Unzip “session5.zip” - Follow the instructions of the "video11_en.mp4" to make a choropleth map. - Create a layout composition called "COVID - 19 in Italy" with all the components: map, scale,

				legend, title, .etc. To learn more about the compositions watch the videos "video12_en.mp4" and “video13_en.mp4” - Export the map in a PDF file named "covid19_italy.pdf".
video14_en.mp4	Introduction to QField: Addon	Create "session5/session5_HCMGIS.qgz"		
video15_en.mp4	Generating a raster file from an online services (MBTiles)	Create "session5/session5_mbtiles.qgz" Create "openstreetmap_level_10-18.mbtiles"		**Activity 8**: Generate custom data (MBTiles) - Create a QGis project and add an OpenStreetMap XYZ layer and zoom into the area where the hydraulic heritage data will be collected. - Generate an MBTiles file with these characteristics: • zoom levels: minimum 5, maximum not to exceed 18 • the area should not be too large • the resulting file should not exceed 20 Mb. NOTE: If in the area there is not much detail in OpenStreetMap you can use instead the Google Satellite layer provided by the HCMGIS plugin.
video16_en.mp4	Introduction to QField: workflow			
video17_en.mp4	Open a "master" Qgis project for QField	· Open "session6/project_master" · Create folder "folder_qfield_june_2021"	session6.zip	**Activity 9**: Custom a master Qgis project for work with Qfield - Unzip “session6.zip” - Open Qgis project seen in video 17 - Delete the existing orthophoto layer - Add the MBTiles layer that you have generated in the previous activity - Create a "portable" project to work with Qfield named “folder_qfield_<month>_<day>_<year>! - Save the project and copy this folder to your mobile in “Download” folder.
video18_en.mp4	Working with QField	Digitalize hydraulic heritage points with QField		**Activity 10:** QField mapping - Copy the directory with the portable project generated in the previous activity to your mobile

				device. Paste it in the "/Download" folder. - Open the project in the folder you copied from QField. - Perform a fieldwork session collecting hydraulic heritage elements. - Copy portable folder to PC
video19_en.mp4	Synchronizing field data	Synchronize mapping folder	session6.zip	**Activity 11**: Sync mapping data - Transfer the folder you have used in QField from the cell phone to the PC. - Open the master project and synchronize the data using the "QField Sync" plugin. - To perform this activity we recommend you to watch the "video19_en.mp4". - Open “master Qgis project and synchronize usign QField Sync plugin