Formalization and Semantic enrichment of urban spaces for accessibility analysis

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- Large geometric data sets available for urban modeling – urban digital twins
- Application scenario on ACCESSIBILITY: suggest appropriate paths to specific citen/tourist profiles
  - Geometry is «raw»
  - Semantics added to urban elements (platforms, streets, touristic attractions) can help understanding if a touristic route is appropriate to a specific visitor, according to his/her age, physical state, class of impairment, phobia or other factors
  - Geometry can provide numerical attributes that can possibly be automatically computed and explicitly annotated for efficient consultation.
- The challenge consists of:
  [KNOWLEDGE FORMALIZATION] design what to annotate and how to annotate in terms of classes and quantitative or qualitative attributes
  [ANNOTATION] Given our software, annotate the identified elements with attributes
  [CODING] Define an accessibility function for a specific element or for a path/area for a given user profile.