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point countable base

Canonical name PointCountableBase
Date of creation 2013-03-22 14:49:59
Last modified on 2013-03-22 14:49:59
Owner mathcam (2727)

Last modified by mathcam (2727)

Numerical id 4

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Entry type Definition Classification msc 54E35 Let X be a topological space. A basis \mathcal{B} of X is a *point countable base* if every point of X is contained in at most countably many sets of \mathcal{B} .

Any uniform base is a point countable base, and a theorem of R. W. Heath states that every semimetric space with a point countable base is developable.

References

[1] Steen, Lynn Arthur and Seebach, J. Arthur, Counterexamples in Topology, Dover Books, 1995.