

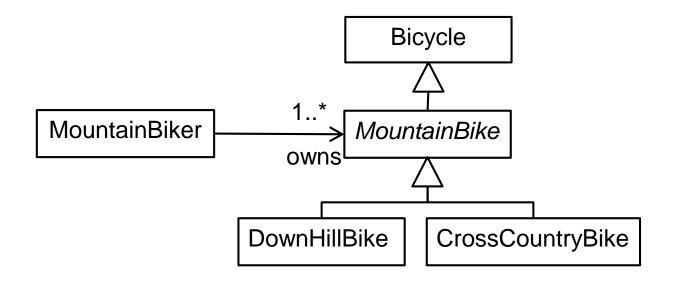


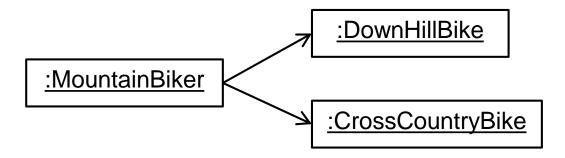
Modelling Quizzes

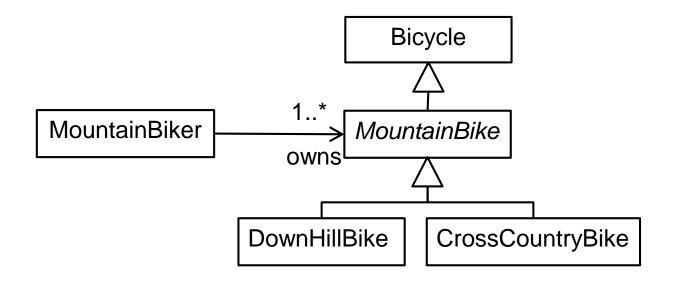


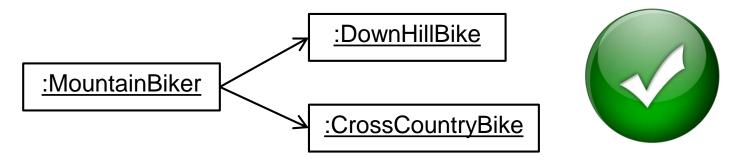
Juan de Lara, Elena Gómez, Esther Guerra {Juan.deLara, MariaElena.Gomez, Esther.Guerra}@uam.es

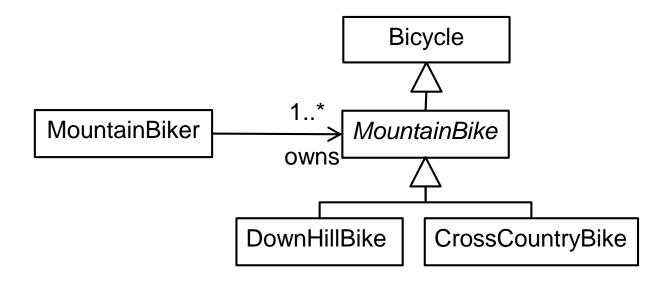
Computer Science Department
Universidad Autónoma de Madrid

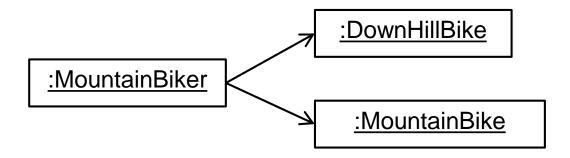


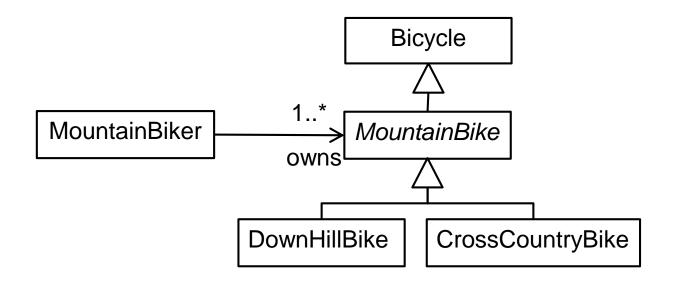


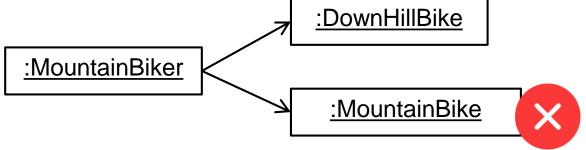




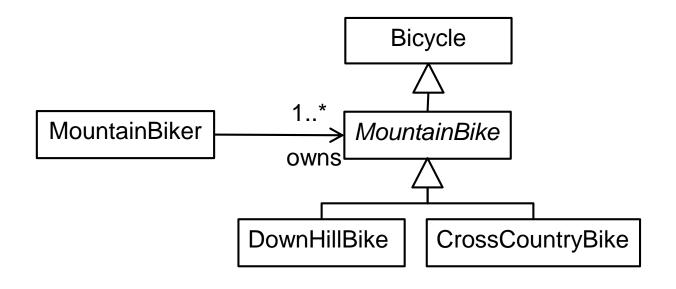


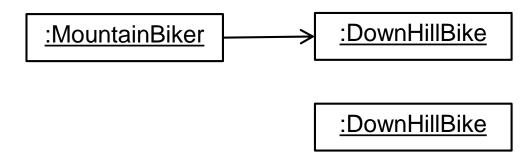


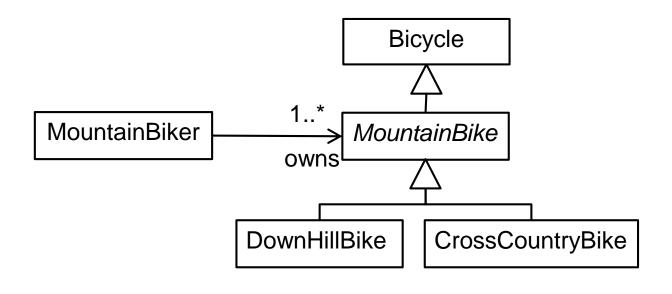




We cannot instantiate abstract classes!



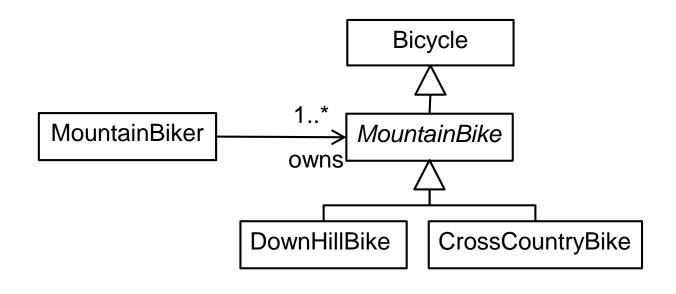




:MountainBiker :DownHillBike

Wrong, because in UML an unlabelled role means "1" and so each MountainBike needs an owner

:DownHillBike



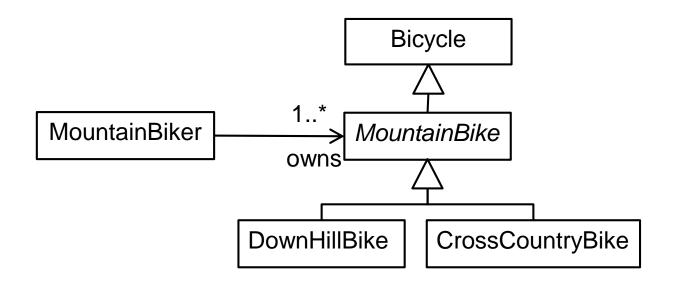
:MountainBiker

:DownHillBike

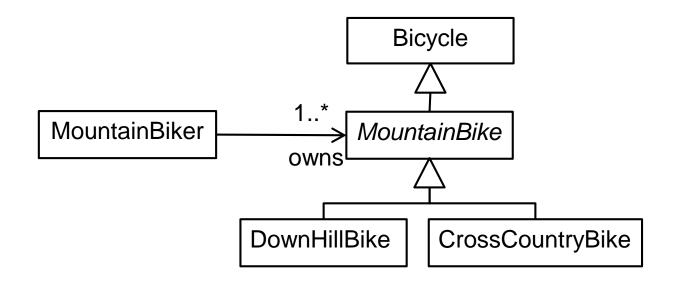


If we assume we are using EMF, where associations are unidirectional (ie., references), then the diagram is correct (as we are not saying anything about the number of owners of a MountainBike)

:DownHillBike



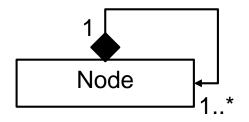




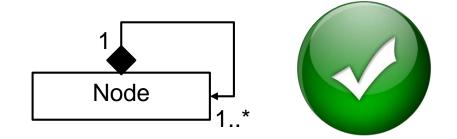


"owns" is not compatible with Bicycle unless they are also of type MontainBike

Is this class diagram correct?

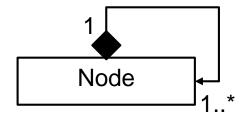


Is this class diagram correct?

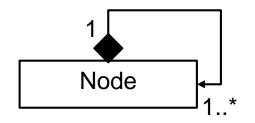


It is **syntactically** correct

Please create a valid object model

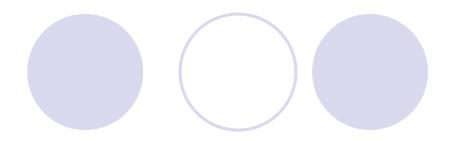


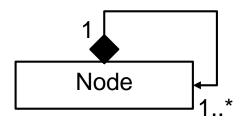
Please create a valid object model



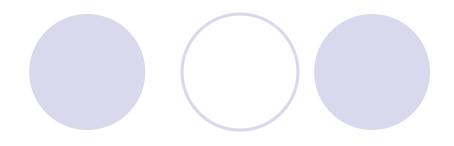


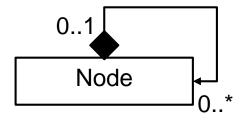
Can we fix it?

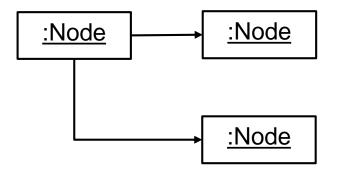


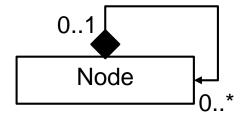


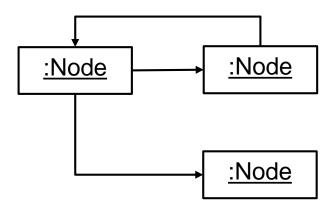
Can we fix it?

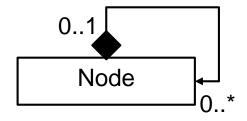


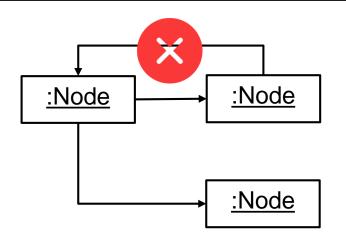




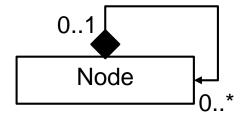


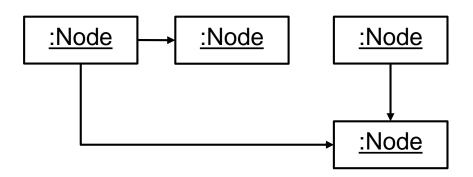


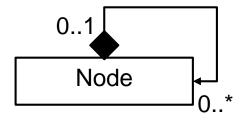


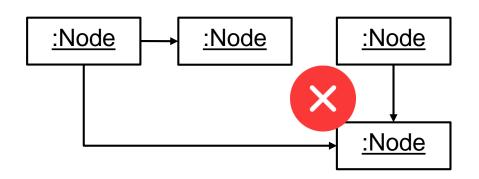


No cycles allowed!!



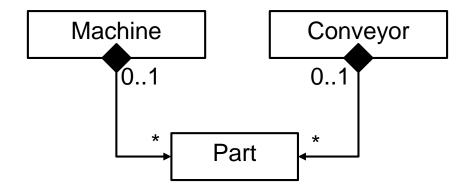




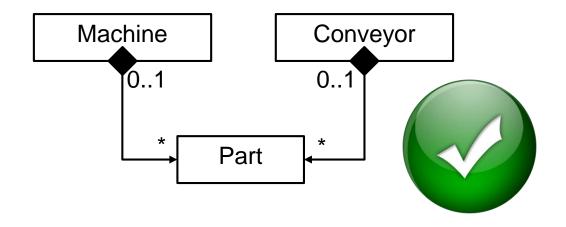


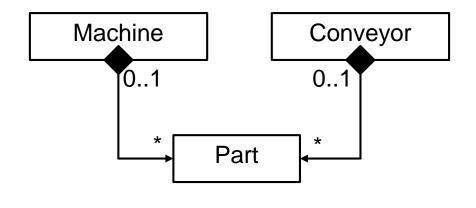
Upper cardinality!

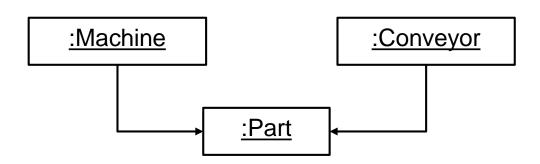
Is this class diagram correct?

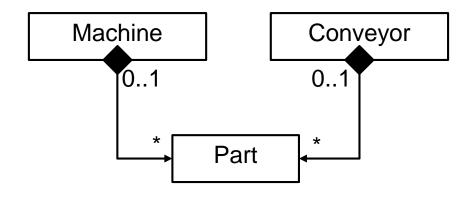


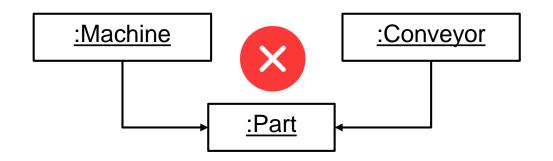
Is this class diagram correct?











No sharing between containers!