

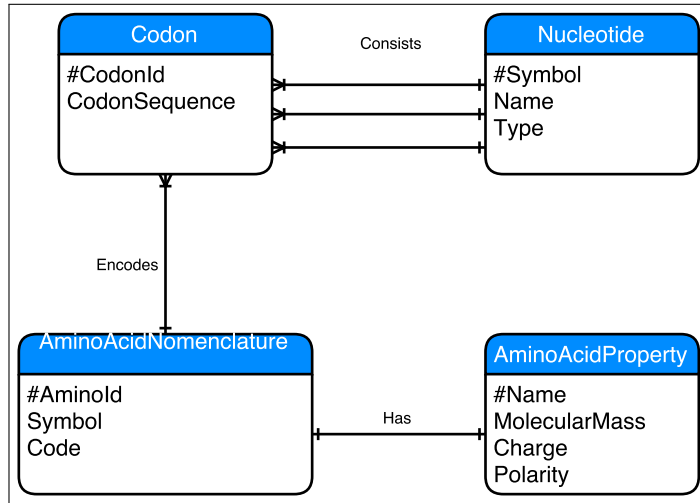
DATABASER OG MODELLERING

## Compulsory exercise 2

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## Exercise 1



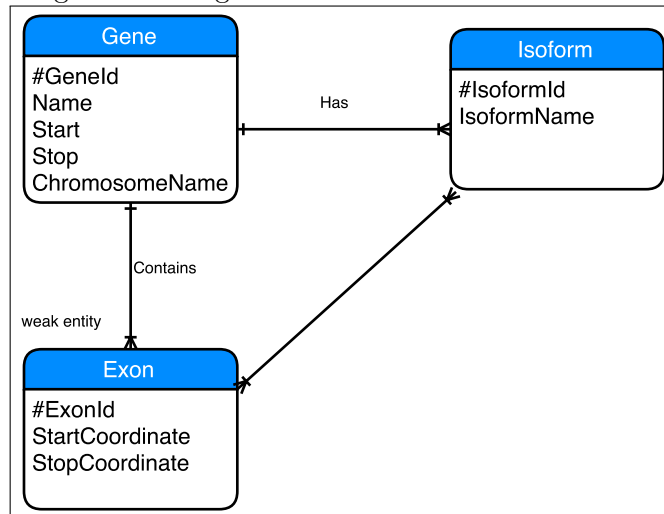
## Exercise 2

i

Entities: Gene, Exon and Isoform.

ii

ER diagram showing relations between these entities.



iii

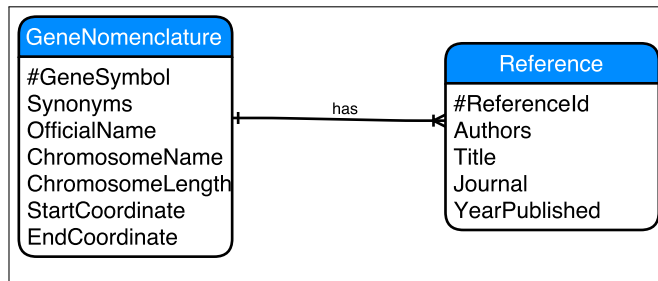
- Gene(GeneId, Name, Start, Stop, ChromosomeName)
- Isoform(IsoformId, GeneId\*, IsoformName)
- Exon(ExonId, GeneId\*, StartCoordinate, StopCoordinate)
- IsoformExon(ExonId\*, IsoformId\*)

### Exercise 3

i

Entities: GeneNomenclature and Reference

ii



iii

- GeneNomenclature(GeneSymbol, Synonyms, OfficialName, ChromosomeName, ChromosomeLength, StartCoordinate, EndCoordinate)
- Reference(ReferenceId, Authors, GeneSymbol\*, Title, Journal, YearPublished)

iv

- Gene(GeneSymbol, OfficialName, Synonym\*, ChromosomeName\*)
- Chromosome(ChromosomeName, ChromosomeLength, StartCoordinate, EndCoordinate)
- Publication(ReferenceId, Authors\*, Title, Journal, YearPublished)

- Author(Authors, ReferenceId\*)
- Synonym(Synonym, GeneSymbol\*)

## Exercise 4

E/R diagram for Global\_cruises

