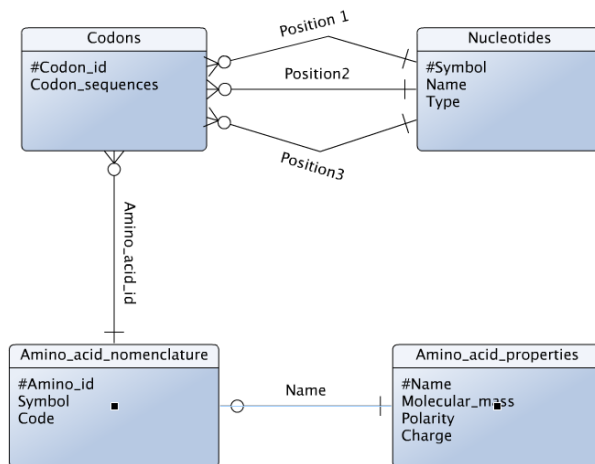


Innlevering Obligatorisk oppgave 2

Håvar Eggereide

Oppgave 1



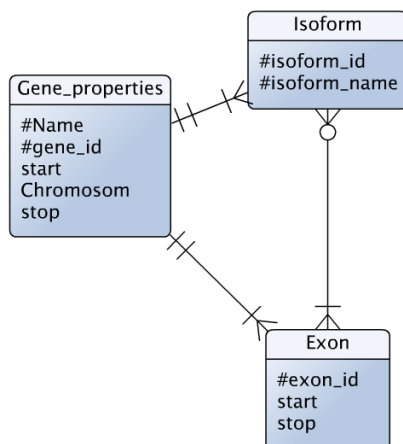
Oppgave 2

i)

Entities :

Gene, Exon, Isoform, Exon_Isoform_Connection

ii)



iii)

Chromosome(#Name)

Gene(#gene_id,#name, Chromosome*,start,stop)

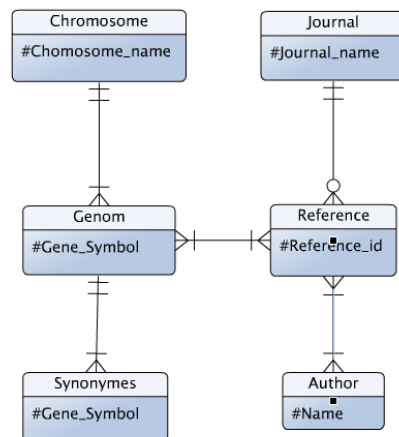
Exon(#Exon_id, start, stop, gene*, Isoform*)
 Isoform(#isoform_id, #Isoform_name)
 Exon_Isoform_Connection(#Isoform_id, #Exon_id)

Oppgave 3

i)

Genom, Synonymes, Chromosome, Journal, References, Author

ii)



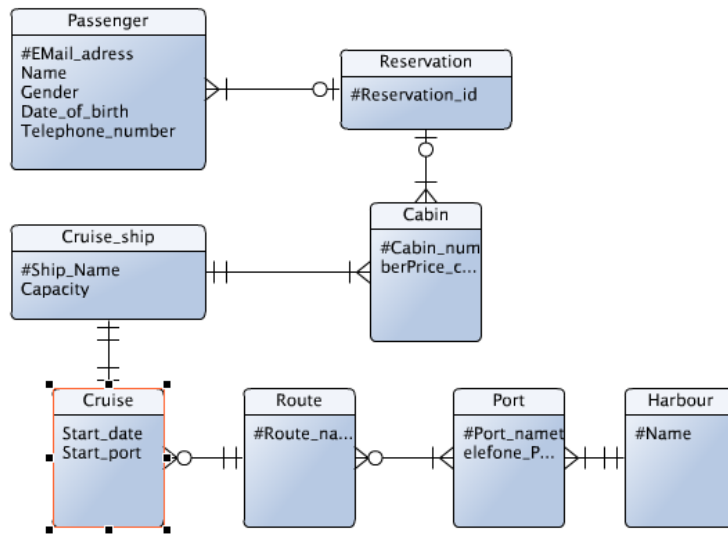
iii)

Genom(#Gene_Symbol, #Official_name, Synonymes, Chromosome_name, Chromosome_length, start_coordinate, end_coordinate, references)
 Genom_Reference(#Reference_id, #Gene_Symbol)
 References(#Reference_id, title, journal, year_published)
 Author(#Name)
 Reference_Author(#Reference_id, #Author_name)

iv)

Genom(#Gene_Symbol, Official_name, Chromosome, start_coordinate, end_coordinate)
 Synonyme(#Synonyme, Gene_Symbol*)
 Chromosome(#Chromosome_name, length)
 Reference(#Reference_id, title, Journal*, year_published)
 Genom_Reference(#Reference_id, #Gene_Symbol)
 Author(#Author_name)
 Reference_Author(#Reference_id, #Author_name)

Oppgave 4



Oppgave5

i)

Den nye truck tabellen er problematisk fordi den har en attributt for oppdrag. Som vil lage redundans nå en truck blir tildelt ett nytt oppdrag.

ii)

Registration_number -> Registration_year

Model -> Maximum_weight // gitt at enhver endring av vektkapasitet også er en endring av modeltypen eks: "Volvo XL" blir til en "Volvo XL Extra Carry" om vektkapasiteten er økt...

iii)

kandidate key

Registration_number, model

iv)

Container_type (#Type_id, Type_name, Max_weight, Cubic_quantity, Nightly_rate)

Container (#Container_number, Type_id*)

Customer (#Telephone_number, Address)

Assignment (#Assignment_number, Telephone_number*, Container_number*, Start_date, End_date)

Truck_Assignment (#Registration_number, #Assignment_number, Started_on_assignment, Released_from_assignment)

Truck (#Registration_number, Model*)

Registration (#Registration_number, Registration_year)

Truck_model (#Model, Maximum_weight)