

**Advanced Data Management**  
**2022/2023**  
**Practical Assignment #1**  
**Aggregate-oriented logical design**

**Student Id #1:** S4545532  
**Name #1:** Giacomo  
**Surname #1:** Garbarino

**Student Id #2:** S4701853  
**Name #2:** Manuel  
**Surname #2:** Parmiggiani

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**Output STEP 1: Workload formalization**

**Q1:**

E: Product  
LS: [Product(IdProd)]  
LP: [For(Quantity), Offer(Price), User(IdU, Name, BirthDate)]

**Q2:**

E: Offer  
LS: [Offer(IdO)]  
LP: [Product(IdProd, BasePrice, Description)]

**Q3:**

E: Product  
LS: [Product(Description)]  
LP: [User(idU)]

**Q4:**

E: User  
LS: []  
LP: [User(IdU, Name, BirthDate), Region(IdRegion, Name, Area)]

**Q5:**

E: Product  
LS: [Product(BasePrice)]  
LP: [Comment(Text), Offer(Price, DateTime)]

**Q6:**

E: User  
LS: [User(IdU), Comment(DateTime)]  
LP: [Comment(Text), Product(BasePrice, Description)]

**Q7:**

E: Product  
LS: [Product(IdProd)]  
LP: [Region(IdRegion)]

**Q8:**

E: Category  
LS: [Category(IdCat)]

LP: [Product(BasePrice)]

THE OUTPUT OF STEP 2 IS THE ANNOTATED ENTITY RELATIONSHIP DIAGRAM, THAT HAS TO BE DELIVERED TOGETHER WITH THIS FILE

### Output STEP 3: Aggregate-oriented logical schema

**Product :**

{ IdProd, BasePrice, Description, offers : [{ IdU, Name, BirthDate, Price, Quantity }],  
liked\_by : [IdU], comments : [{Text, Price, Offer.DateTime}], regions\_of\_offers : [IdRegion] }

**User :**

{ IdU, User.Name, BirthDate, IdRegion, Region.Name, Area,  
comments : [{Text, DateTime, BasePrice, Description}] }

**Offer :**

{ IdO, IdProd, BasePrice, Description }

**Category :**

{ IdCat, prices : [ Price ] }

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