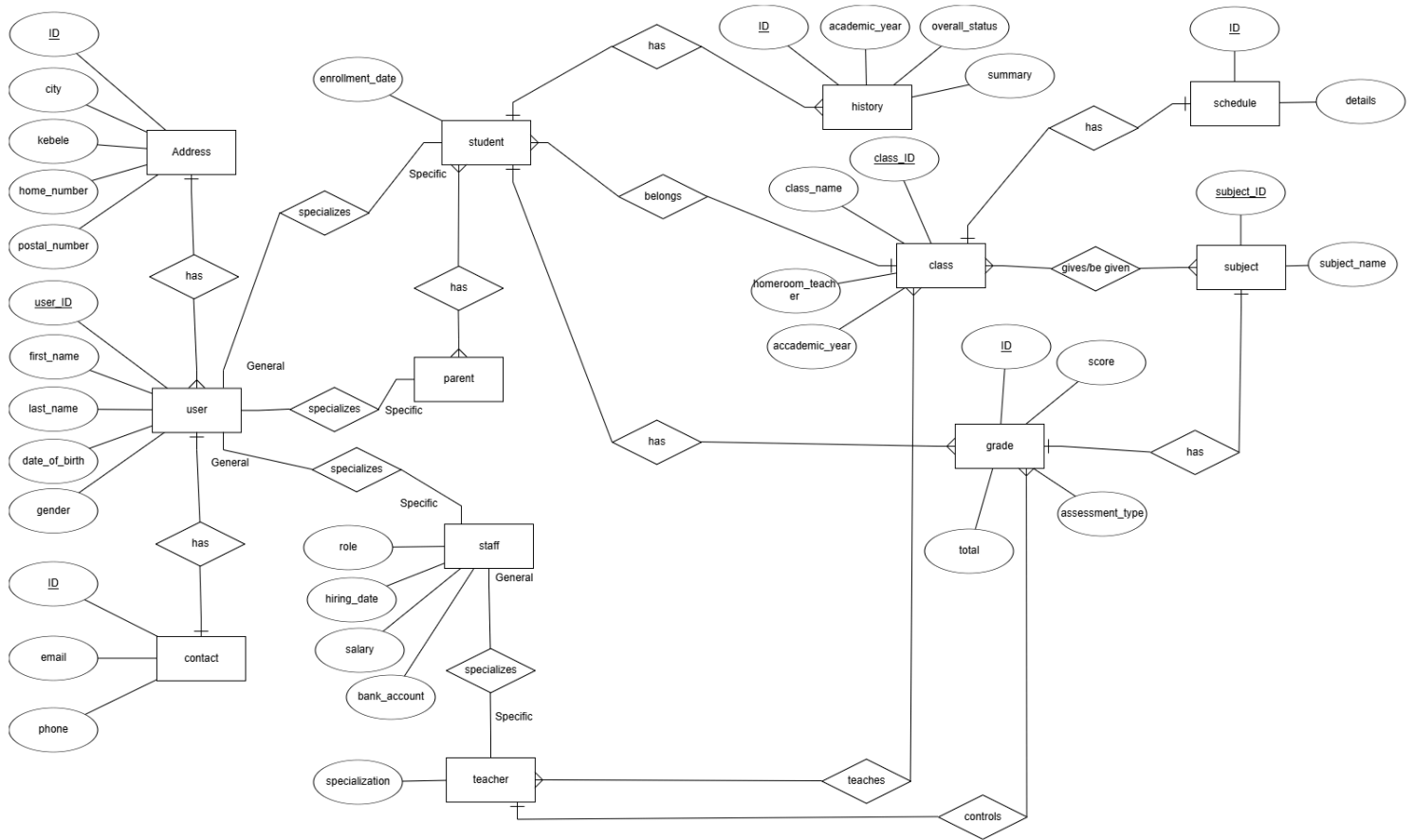


## ❖ Entity-relation description for the School Management System database design.

1. User
  - user\_id(primary\_KEY)
  - first\_name(charfield)
  - last\_name(charfield)
  - date\_of\_birth(datefield)
  - contact(one to one relation with Contact entity)
  - address(one to many relation with address entity)
  - gender(charfield)
2. Contact
  - id(primary\_KEY)
  - email(emailfield)
  - phone(charfield)
3. Address
  - id(primary\_KEY)
  - city(charfield)
  - kebele(charfield)
  - home\_number(charfield)
  - postal\_number(charfield)
4. Staff
  - Specializes User
  - role(charfield)
  - hiring\_date(charfield)
  - salary(positiveIntegerfield)
  - bank\_account(charfield)
5. Teacher
  - Specializes Staff
  - specialization(charfield)
6. Classes
  - class\_id(Primary KEY)
  - class\_name(charfield)
  - accademic\_year(charfield)
  - subjects(many to many relation to Subject)
  - schedule(one to one relation to Schedule)
  - teachers(many to many relation to Teacher)
  - homeroom\_teacher(charfield)
7. Subject
  - subject\_id(Primary KEY)

- subject\_name(charfield)
8. Grade
- student(one to many relation to Student)
  - subject(one to many relation to Subject)
  - teacher(one to many relation to Teacher)
  - sssessment\_type(charfield)
  - score(positiveintegerfield)
  - total(floatfield)
9. Schedule
- id(primary\_KEY)
  - details(textfield)
10. History
- id(primary\_KEY)
  - academic\_year(charfield)
  - overall\_status(charfield)
  - summary(charfield)
11. Student
- Specializes User
  - enrollment\_date(datefield)
  - class\_assigned(one to many relation to Classes)
  - parents(many to many relation to Parent)
  - histories(one to many relation to History)

## ❖ Entity-relation diagram



- If the ERD is needed separately, we provided a separate image in the folder.

Designed BY:

1. Menwuyelet Temesgen, UGR/34920/16, group 5
2. Tomas Chen, UGR/35515/16, group 6