</talentlabs>

CHAPTER 10

ER Diagram

Copyright © 2021 TalentLabs Limited

</talentlabs>

AGENDA

- ER Diagram
- One-to-Many Relationship
- One-to-One Relationship
- Many-to-Many Relationship

Copyright © 2021 TalentLabs Limited

</talentlabs>

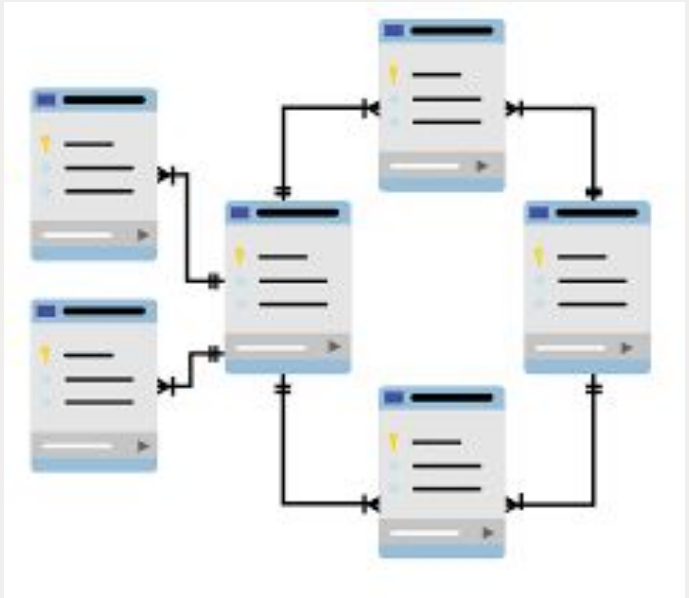
ER Diagram

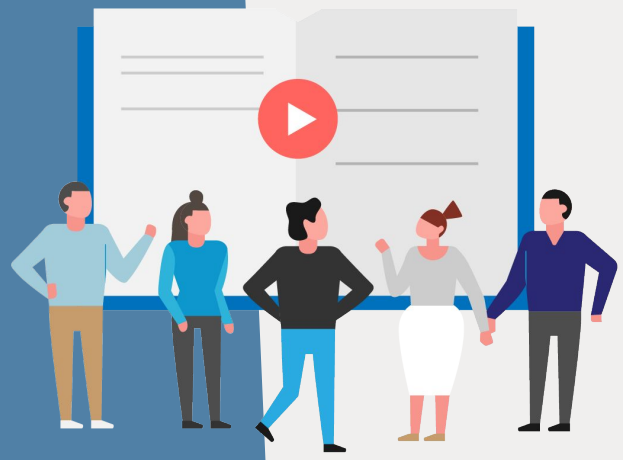
Copyright © 2021 TalentLabs Limited

</talentlabs>

ER Diagram (ERD)

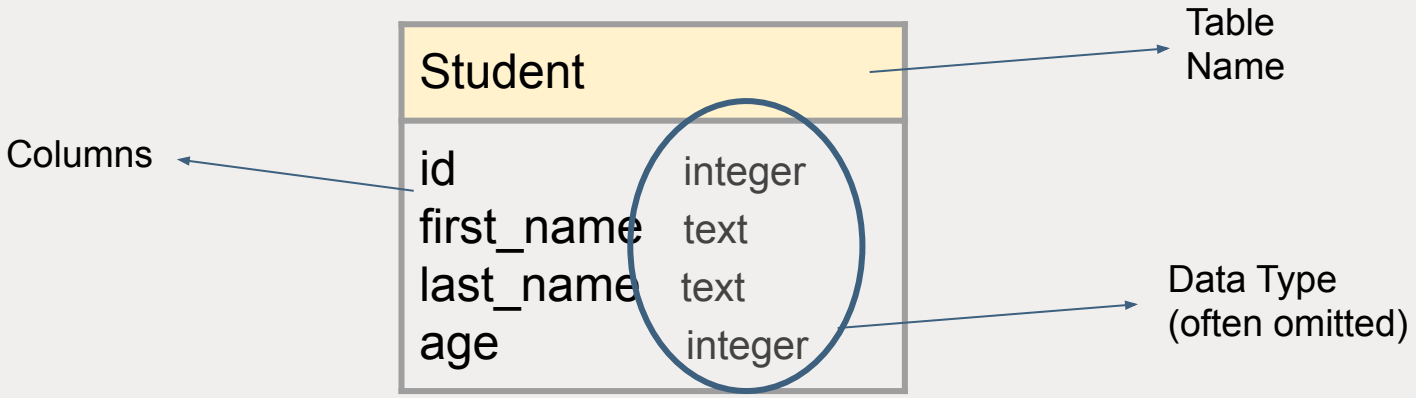
- Entity Relationship Diagram
- Usually for formal design of database
- For anyone who are new to a database can quickly understand the database architecture

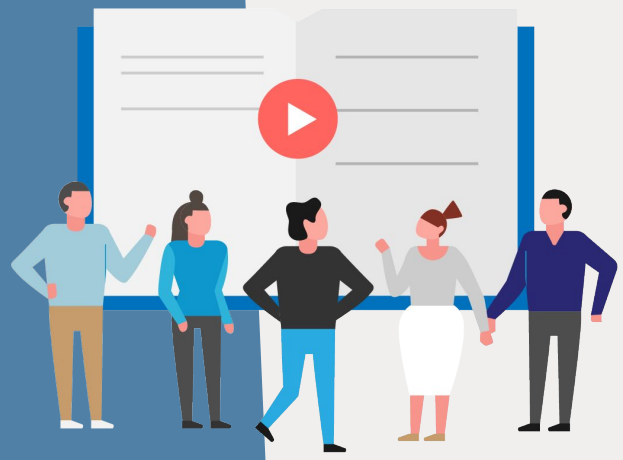




Copyright © 2021 TalentLabs Limited
</talentlabs>

Basic Module of ER Diagram - Table





Copyright © 2021 TalentLabs Limited
</talentlabs>

Representing Relationship

Student	
id	integer
first_name	text
last_name	text
age	integer
class_id	integer

Class	
id	text
classroom	text
class_size	integer

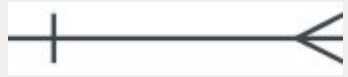
Copyright © 2021 TalentLabs Limited
</talentlabs>

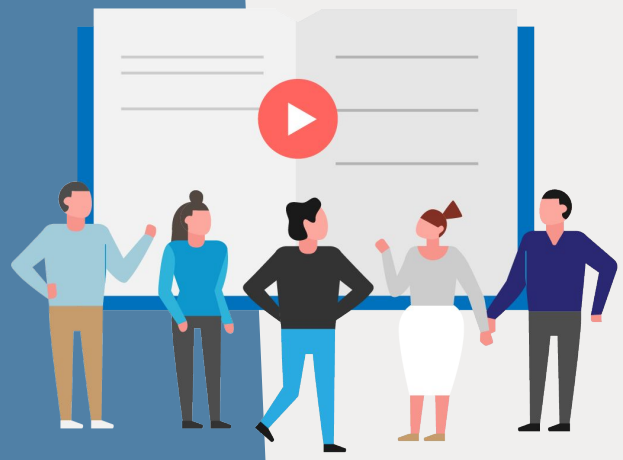
One-to-Many Relationship

Copyright © 2021 TalentLabs Limited

</talentlabs>

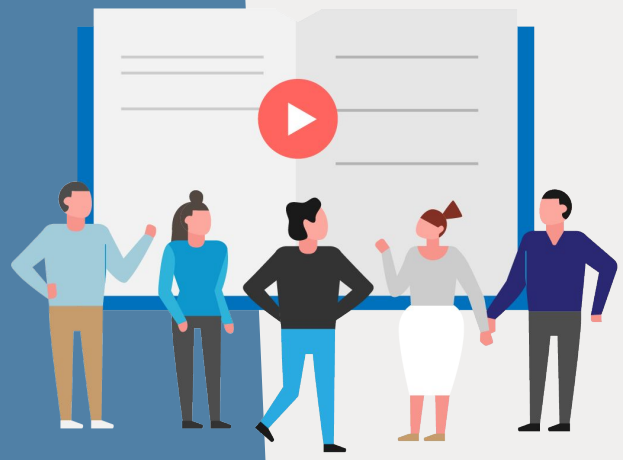
One-to-Many Relationship

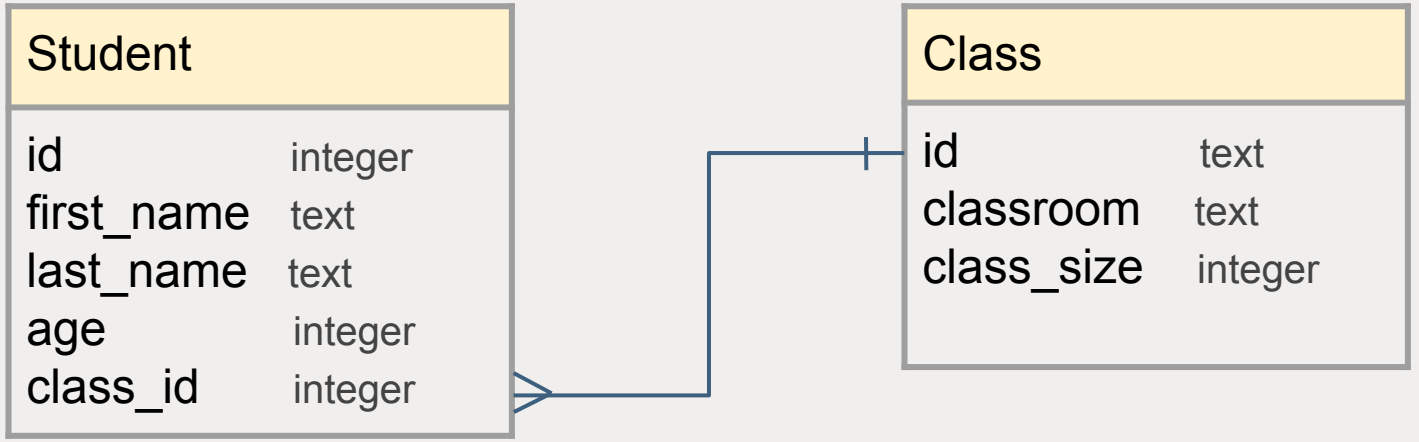
One Side  Many Side



Copyright © 2021 TalentLabs Limited
</talentlabs>

One-to-Many Relationship





Copyright © 2021 TalentLabs Limited
</talentlabs>

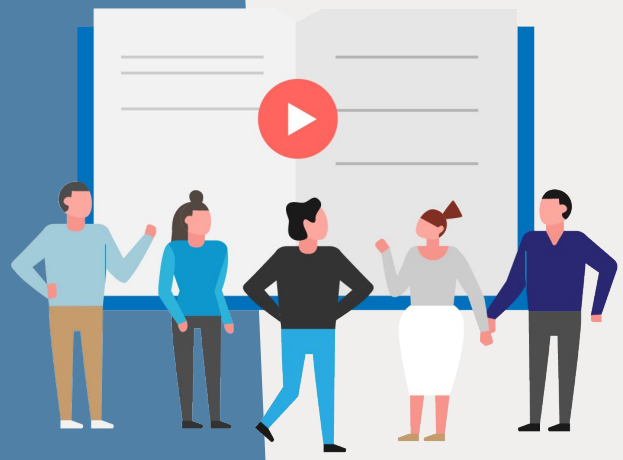
One-to-One Relationship

Copyright © 2021 TalentLabs Limited

</talentlabs>

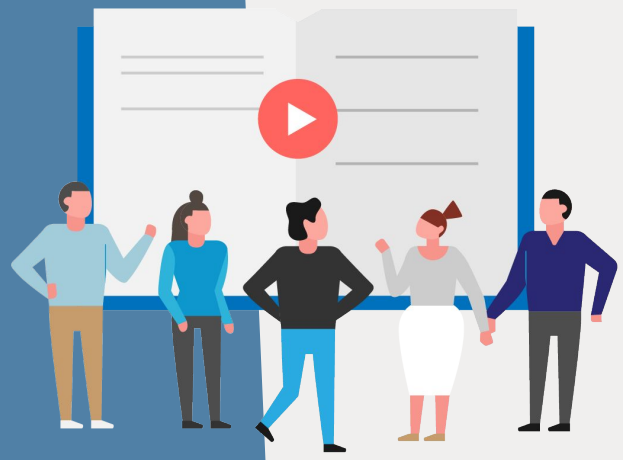
One-to-One Relationship

One Side — One Side



Copyright © 2021 TalentLabs Limited
</talentlabs>

One-to-One Relationship



Emergency_Contact	
id	integer
first_name	text
last_name	text

Student	
id	integer
first_name	text
last_name	text
age	integer
class_id	integer
emergency_contact_id	integer

Class	
id	text
classroom	text
class_size	integer

Copyright © 2021 TalentLabs Limited
</talentlabs>

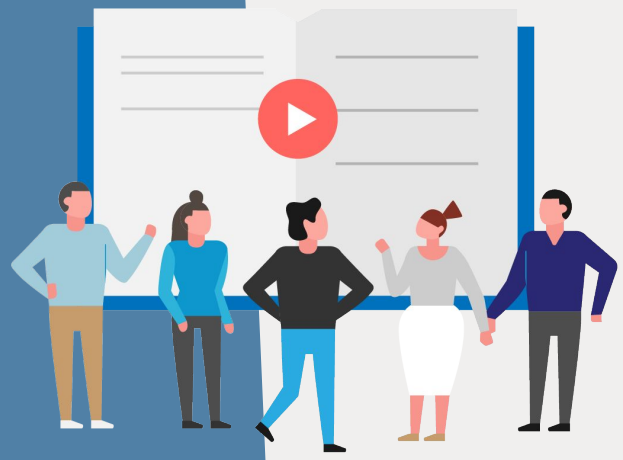
Many-to-Many Relationship

Copyright © 2021 TalentLabs Limited

</talentlabs>

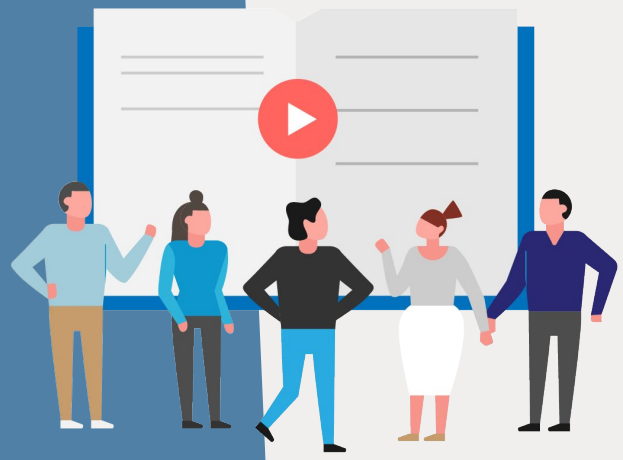
Many-to-Many Relationship

Many Side Many Side



Copyright © 2021 TalentLabs Limited
</talentlabs>

Many-to-Many Relationship (Simple Way)



Emergency_Contact	
id	integer
first_name	text
last_name	text

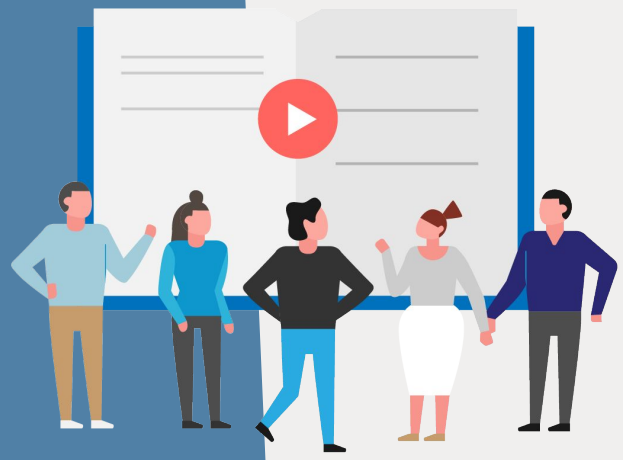
Student	
id	integer
first_name	text
last_name	text
age	integer
class_id	integer
emergency_contact_id	integer

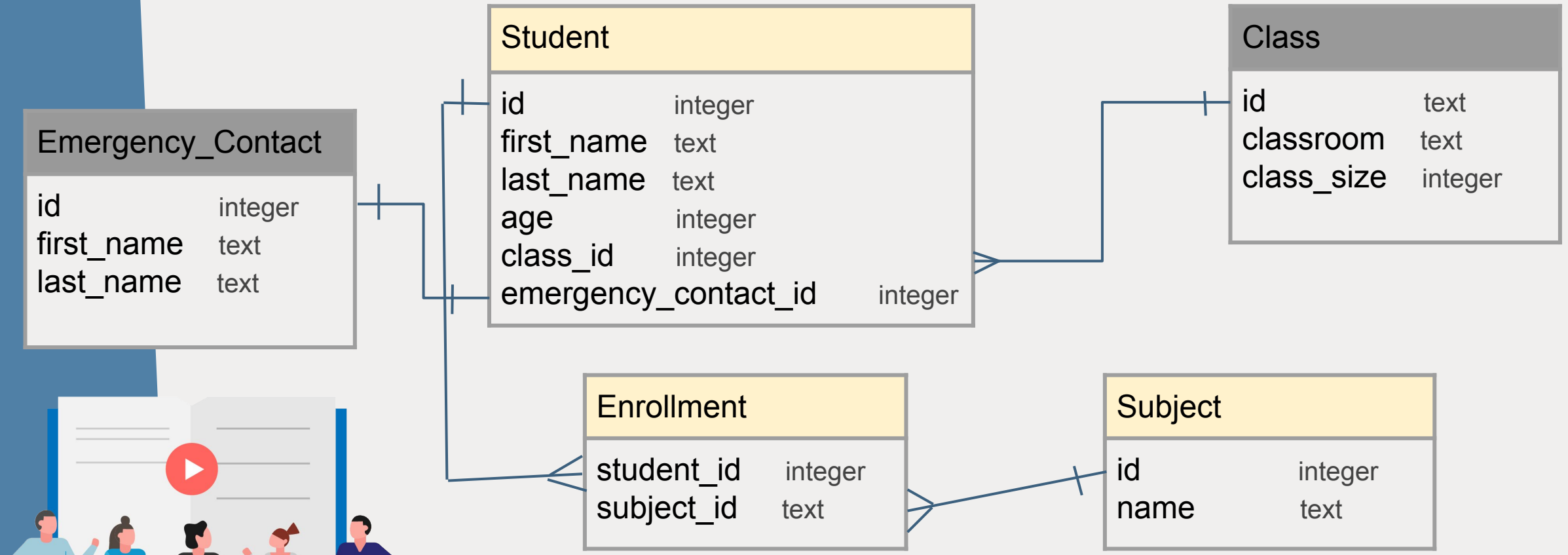
Class	
id	text
classroom	text
class_size	integer

Subject	
id	integer
name	text

Copyright © 2021 TalentLabs Limited
</talentlabs>

Many-to-Many Relationship (Alternative Way)





Copyright © 2021 TalentLabs Limited </talentlabs>