



# Relational Databases

How can we persist  
data in a web  
application?

# Databases

To save (or **persist**) data, you need to somehow write the data to permanent storage, like the hard disk

# Databases

For a microblogging system, users have many posts and posts have tags and users may be following other users and so on.

# Databases

Relational databases (also sometimes referred to as RDBMS, relational database management systems) were developed to provide a means of organizing data and their relationships, persisting that data, and querying that data.

# Table

id	user	email
1	Sally	sally@gmail.com
2	Jeff	jeff@gmail.com
3	Matt	matt@hotmail.com
4	Sophie	pretty_girl@aol.com

# Table

id	user	email
1	Sally	sally@gmail.com
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→ Row, Single entity

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Column, Attribute



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Primary Key, Identifier

# Schema

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id	post_id	tag_id
1	1	3
2	3	2
3	4	3
4	1	1

id	tag_name
1	music
2	awesomeness
3	facts
4	boring

id	user_id	post
1	1	this is my first post!
2	1	this is great
3	3	I am Matt!
4	2	I am not a pretty girl!

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Foreign Key,  
Relationships

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