

# DATABASE MANAGEMENT SYSTEMS

## PROJECT NORMALISATION

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## LOST AND FOUND SYSEM

The Original Database Schema is

— } → Denotes P. key.

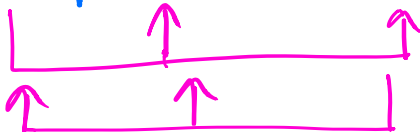
Items

<u>Item ID</u>	Name	desption	Image	Status
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People

<u>Pid</u>	Name	Contact
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DB Transactions


<u>Pid</u>	<u>Item ID</u>	Action	Date time
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## 2<sup>st</sup> Normal form

→ In the above database scheme. There can exist multiple images for a single item. Which is not allowed in the 2NF.

Items

<u>ItemID</u>	Name	description	Status
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Item Images.

<u>ItemID</u>	<u>Image</u>
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People

<u>Pid</u>	Name	Contact
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DB Transactions

<u>Pid</u>	<u>ItemID</u>	Action	Date time
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## 2<sup>nd</sup> Normal form

→ The below Relation Schema is already in 2NF because Here, all non prime attribute depend on the primary key.

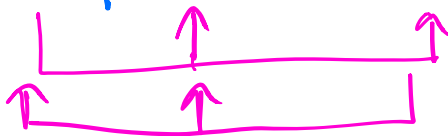
Items

<u>ItemID</u>	Name	description	Image	Status
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People

<u>Pid</u>	Name	Contact
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DB Transactions

<u>Pid</u>	<u>ItemID</u>	Action	Pat time
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## 3<sup>rd</sup> Normal form

→ Here, in the People table,  $Pid \rightarrow Contact$   
- and then  $Contact \rightarrow Name$  ie there  
exists a transitive dependency from  $Pid \rightarrow Name$   
ie it violates 3NF. This can be sorted  
by making both  $Pid$  &  $Contact$  as the  
Primary key. ie the schema will look  
like:

Items

<u>Item ID</u>	Name	description	Image	Status
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People

<u>Pid</u>	<u>Contact</u>	Name
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DB Transactions

<u>Pid</u>	<u>Item ID</u>	Action	Date time
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