

# Inheritance

CSCI 111

# Example

Suppose we want to make a database system to keep track of people on Committees here at Montana State.

- Climbing Wall Upgrade Committee
- Owl Infestation Resolution Committee
- Free Pizza At All Times Committee

Who would make up these Committees?

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Suppose students and professors will make up our committees. How will we represent them (i.e. what does a student/professor consist of)?

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## **Student**

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Name

ID Number

Major

Year in School

## **Professor**

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Name

ID Number

Office Number

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So now what? Should we make a Student class and a Professor class?

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## **Professor**

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So now what? Should we make a Student class and a Professor class?

It seems like Students and Professors are very similar entities. They both have Names and ID Numbers. Maybe it would be nice to somehow consider them as related entities.

# Example

We can bundle related entities together using a concept called Inheritance.

## **Student**

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Name

ID Number

Major

Year in School

## **Professor**

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Name

ID Number

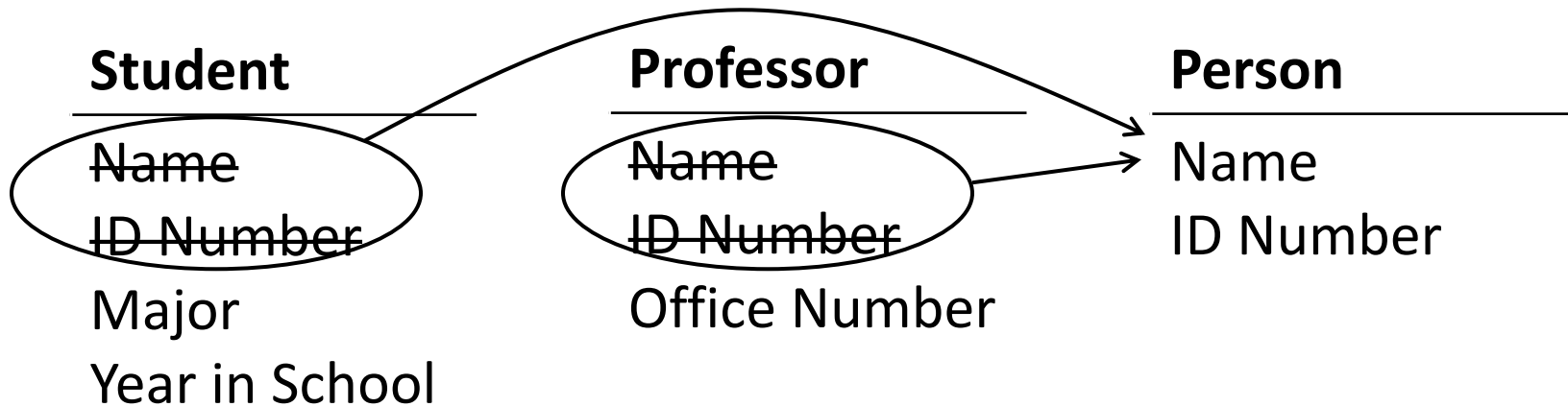
Office Number



# Example

We can bundle related entities together using a concept called Inheritance.

Move the common traits into a new entity that is more general.

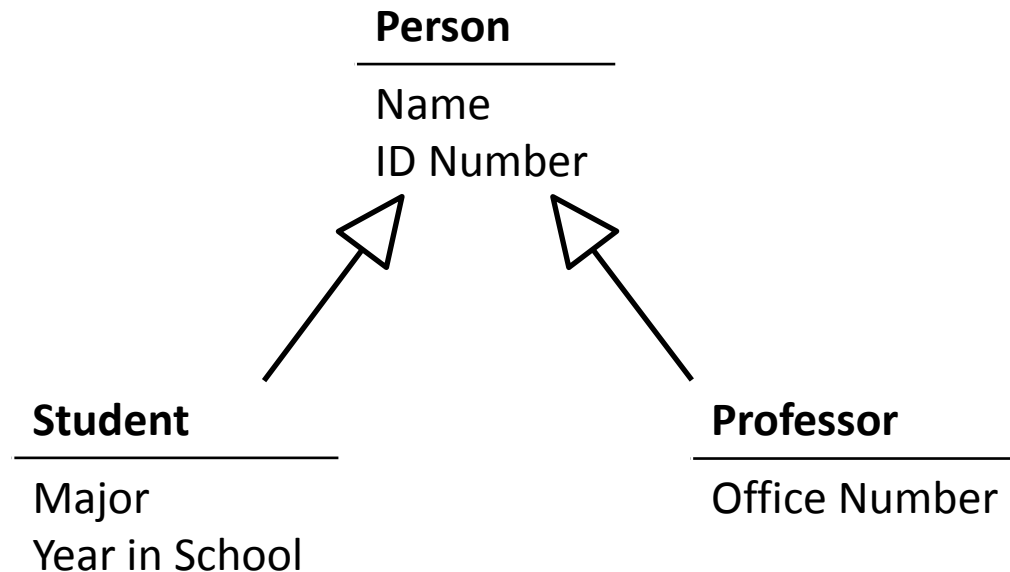


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We've now defined a hierarchy of entities.



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## Standard Vocabulary

