

# Mapping - Enums



# Enum

A special Java data type for a  
set of predefined constants

# Examples of Java Enums

Core Java

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- Define logging levels

```
public enum Level {  
    SEVERE, WARNING, INFO  
}
```

# Examples of Java Enums

- Define logging levels
- Define payment types

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public enum Level {  
    SEVERE, WARNING, INFO  
}
```

```
public enum Payment {  
    DEBIT, CREDIT, PAYPAL, BITCOIN  
}
```

# Examples of Java Enums

- Define logging levels
- Define payment types

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public enum Level {  
    SEVERE, WARNING, INFO  
}
```

```
public enum Payment {  
    DEBIT, CREDIT, PAYPAL, BITCOIN  
}
```

Java Enums Tutorial

[www.luv2code.com/java- enums-tutorial](http://www.luv2code.com/java- enums-tutorial)

# Use Case for Enums

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  - Status can have constant value of **ACTIVE** or **INACTIVE**

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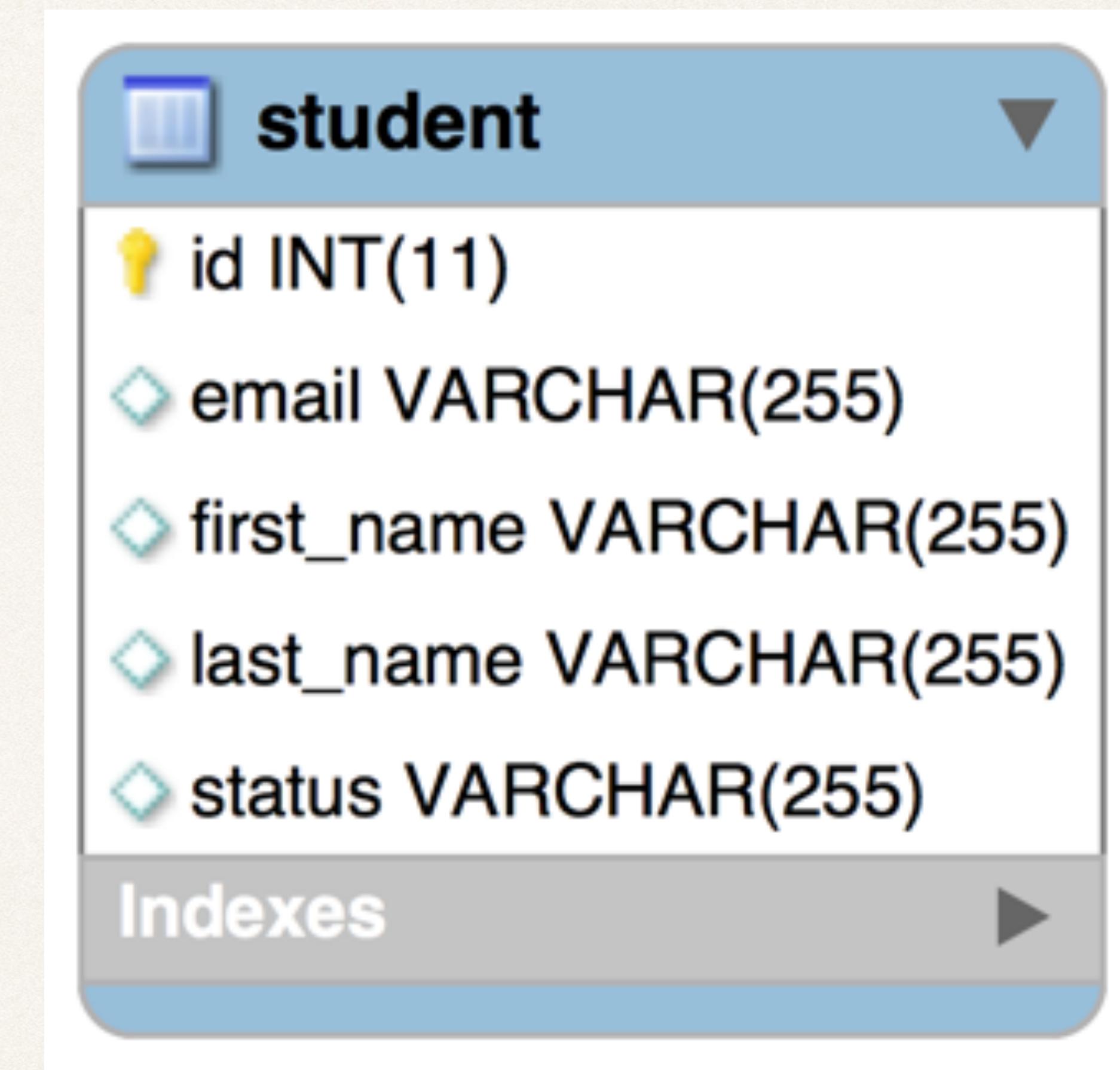
- A student will have a **status**
  - Status can have constant value of **ACTIVE** or **INACTIVE**
- The status field will be in the student database table

# Use Case for Enums

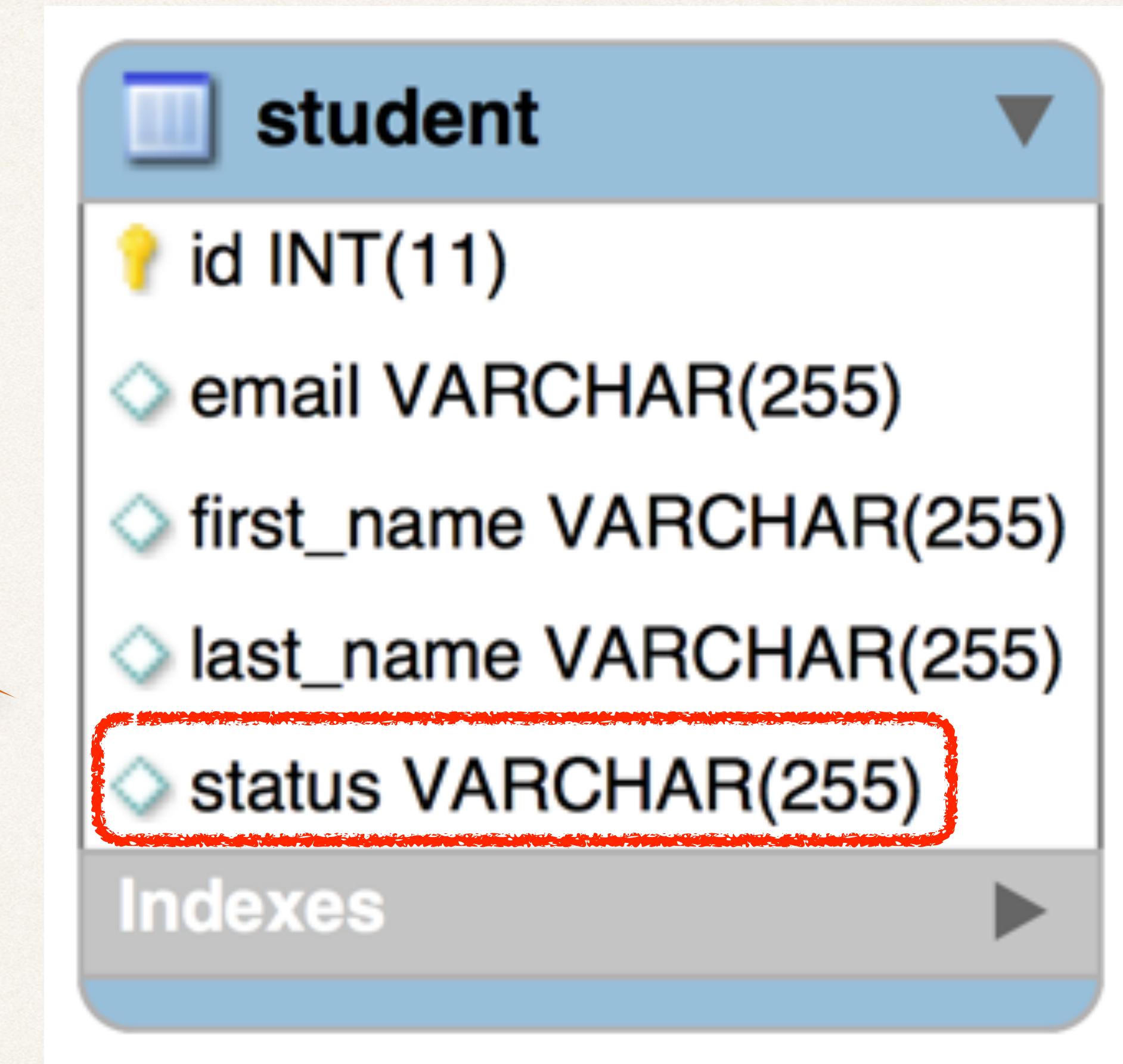
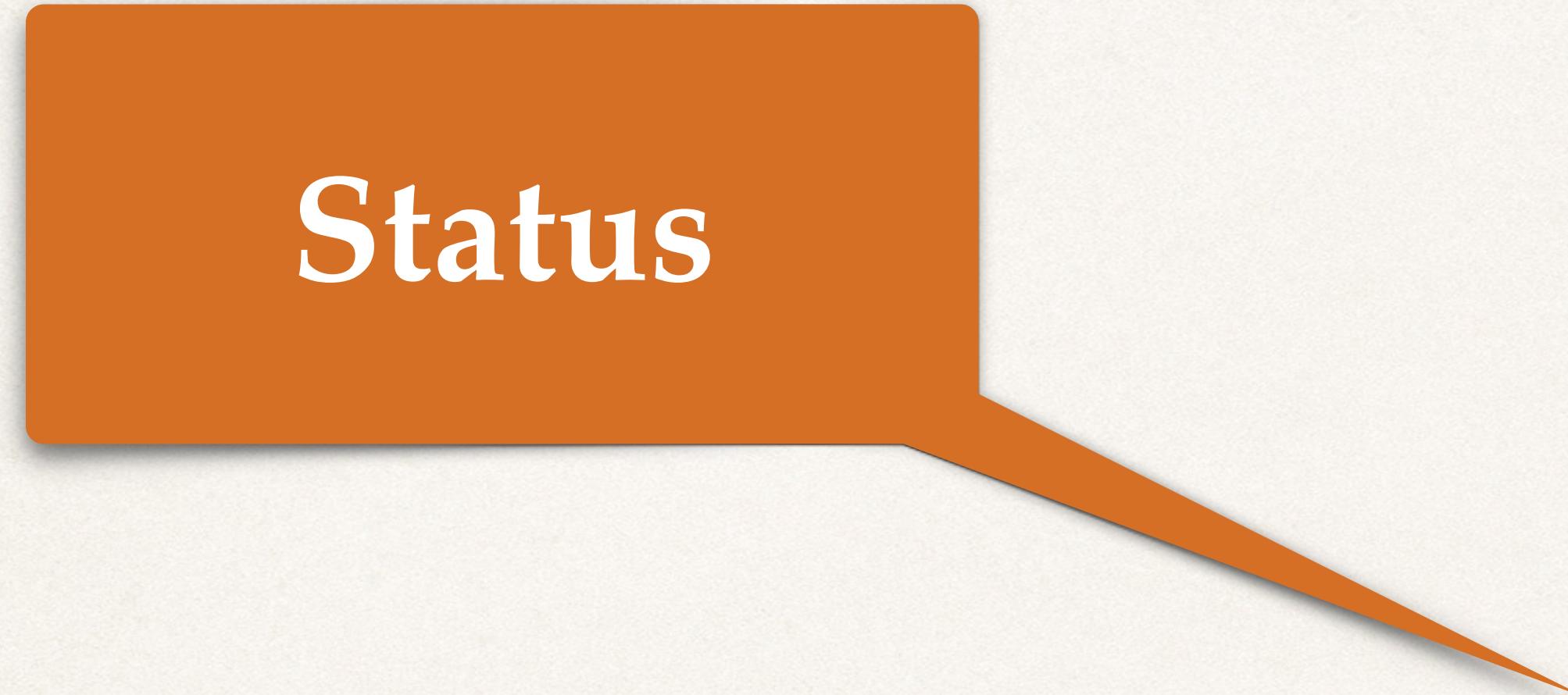
- A student will have a **status**
  - Status can have constant value of **ACTIVE** or **INACTIVE**
- The status field will be in the student database table
- In Java code, model the status as an Enum

```
public enum Status {  
    ACTIVE, INACTIVE  
}
```

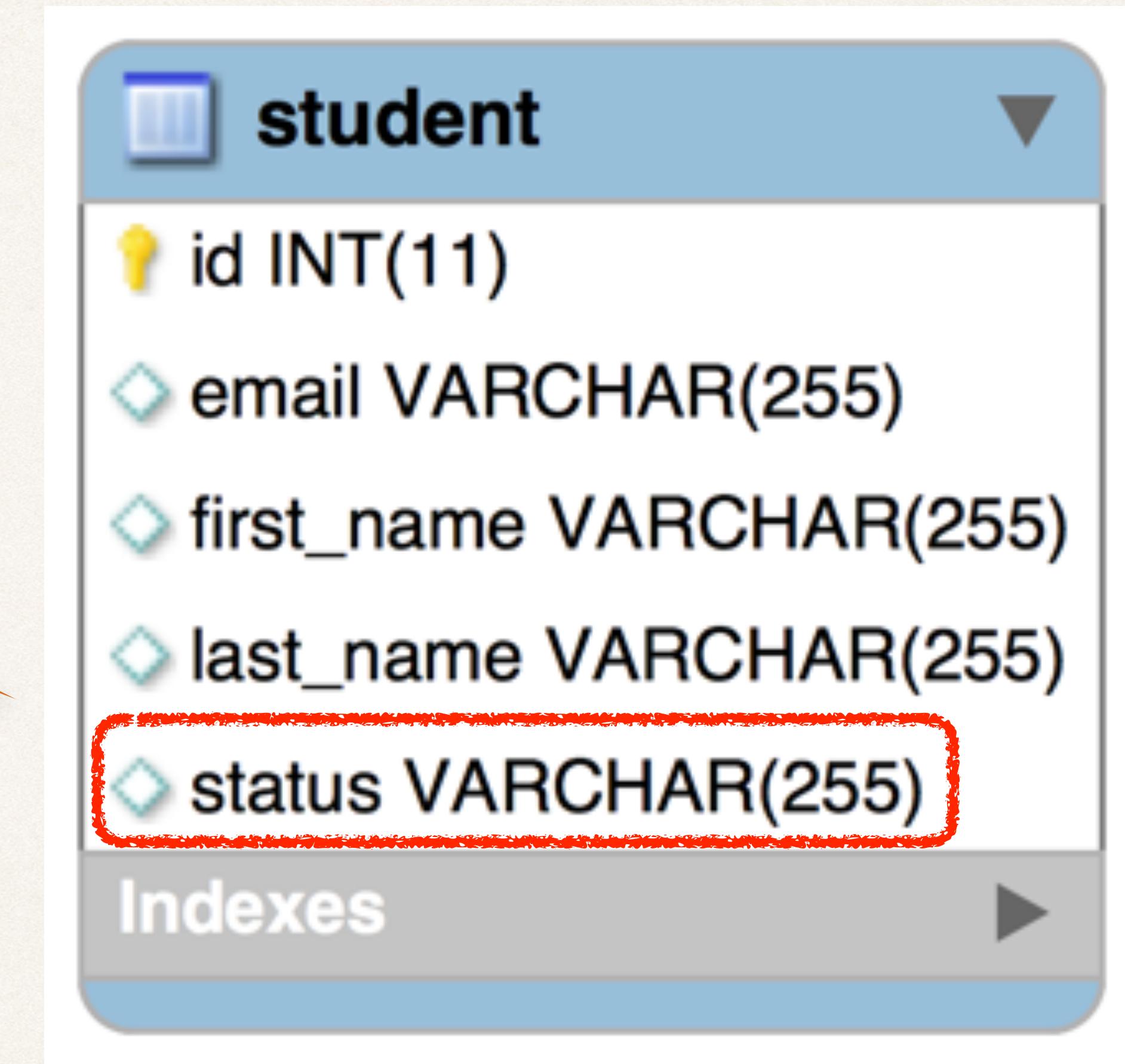
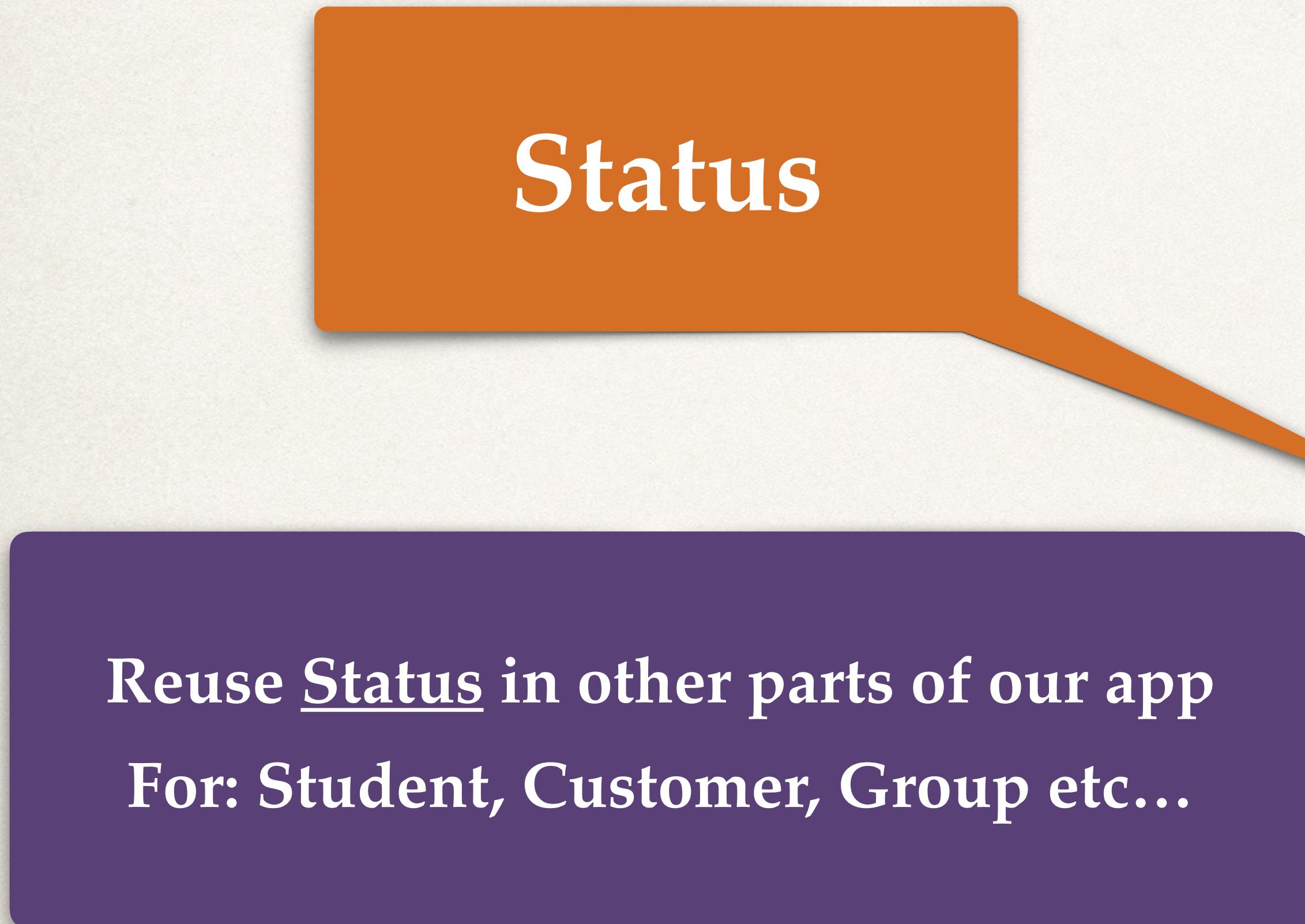
# Database Diagram



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# Development Process

*Step-By-Step*

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1. Define the **Status** enum type

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Step-By-Step

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2. Reference the **Status** enum type in **Student** class

# Development Process

Step-By-Step

1. Define the **Status** enum type
2. Reference the **Status** enum type in **Student** class
3. Develop the main application

# Annotation for Enums

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Annotation	Description

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@Enumerated	<p><b>Used to reference an Enum type</b></p> <p><b>For example: Student can use this to refer to Status</b></p>

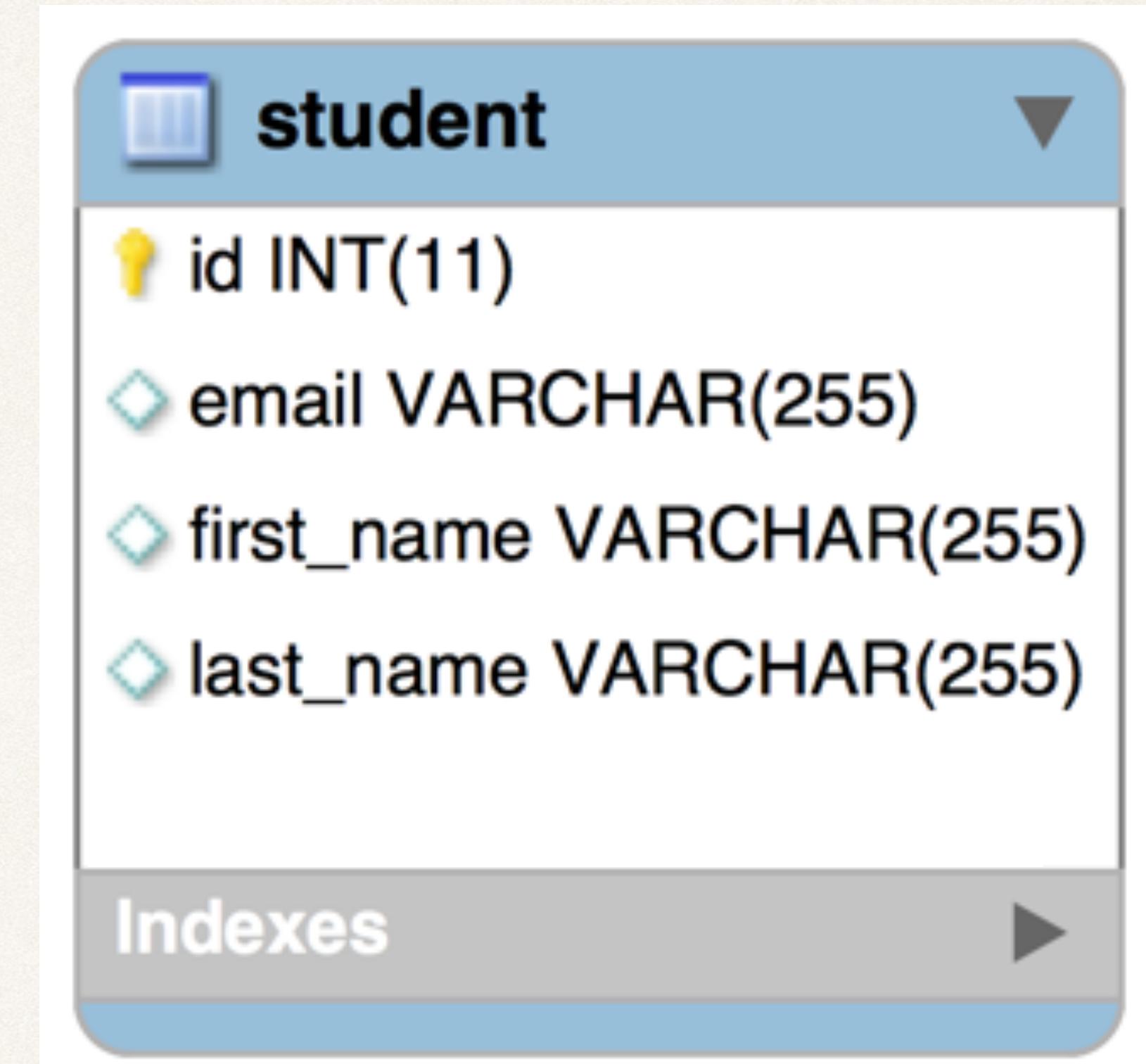
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public enum Status {  
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}
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# Step 2: Reference the Status Enum Type

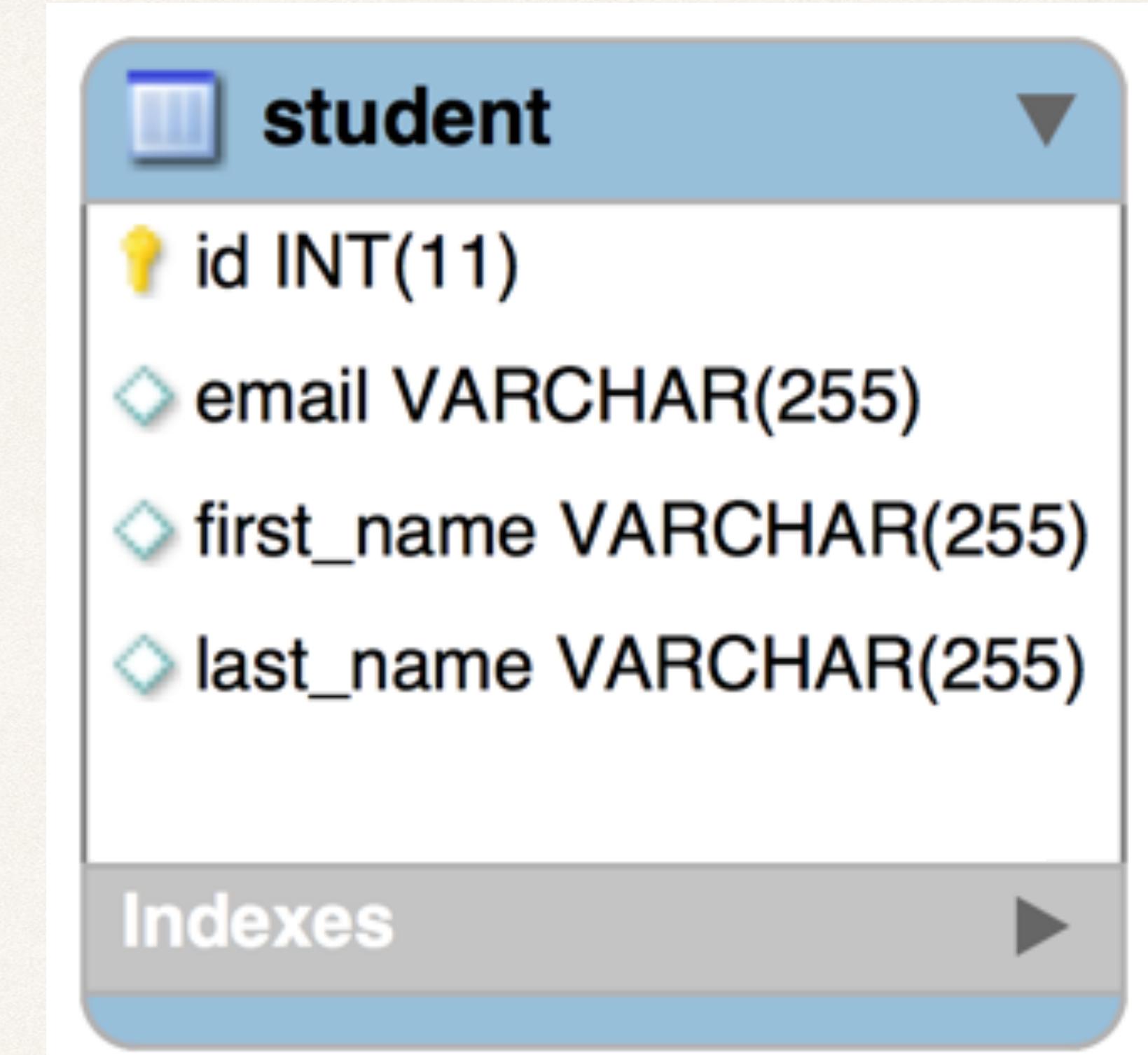
```
@Entity  
@Table(name="student")  
public class Student {  
  
    @Id  
    @GeneratedValue(strategy=GenerationType.IDENTITY)  
    private int id;  
  
    @Column(name="first_name")  
    private String firstName;  
    ...  
  
}
```



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@Table(name="student")  
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    private String firstName;  
    ...  
  
    @Enumerated(EnumType.STRING)  
    @Column(name="status")  
    private Status status;  
  
    ...  
}
```

Reference the  
enum type



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}
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Reference the  
enum type

student	
!	id INT(11)
!	email VARCHAR(255)
!	first_name VARCHAR(255)
!	last_name VARCHAR(255)
!	status VARCHAR(255)
Indexes	

# Step 3: Develop the main application

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```
// create the objects
Student tempStudent1 = new Student("John", "Doe", "john@luv2code.com", Status.ACTIVE);
Student tempStudent2 = new Student("Mary", "Public", "mary@luv2code.com", Status.INACTIVE);
```

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session.beginTransaction();
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System.out.println("Saving the student...");
session.save(tempStudent1);
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// commit the transaction
session.getTransaction().commit();
```

# Run the App

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## Console

```
Hibernate: insert into student (email, first_name, last_name, status) values (?, ?, ?, ?)
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**Table: student**

	id	email	first_name	last_name	status
▶	1	john@luv2code.com	John	Doe	ACTIVE
	2	mary@luv2code.com	Mary	Public	INACTIVE

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