Database model documentation

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1. Model details

Model name:

df_Plataforma_Cursos

Version:

2.4

Database engine:

MySQL

Description:

Physical design to systematize the data managed on the LearnHub online education platform, which focuses on offering courses in technology and sustainability.

2. Tables

2.1. Table student

Description:

Information for registered students

2.1.1. Columns

Column name	Type	Properties	Description
student_code	varchar(20)	PK	Student identification code this is unique. Example: LHCT-00001. LH = LearHub CT = Technology Course 00001 = Correlative
document_type	char(1)	null	This field allows us to select a type of document D = Dni C = Immigration Card
document_number	varchar(20)	null	D= 8 digits C= 20 digits
name	varchar(100)	null	Student's full name
last_name	varchar(100)	null	Student's full last name
phone_number	char(9)		student phone number
email	varchar(150)	null	Student email
password	varchar(250)	null	Student password
registration_date	timestamp		Date the student registered

2.2. Table course

Description:

Online course details

2.2.1. Columns

Column name	Type	Properties	Description

course_code	varchar(10)	PK	Unique identifier for each course. For example, if we have the Artificial Intelligence and Data Science course, this would be recorded as follows: IACD-2025 IACD = Course Name 2025 = year
title	varchar(200)	null	Course title
description	text		Detailed course description
category	varchar(100)		Category to which the course belongs
instructor	varchar(150)		Name of the instructor teaching the course
creation_date	timestamp		Date the course was created

2.3. Table enrollment

Description:

Student registration for courses

2.3.1. Columns

Column name	Type	Properties	Description
enrollment_id	serial	PK	Unique identifier for each registration
student_code	varchar(20)		Unique identifier for each course. For example, if we have the Artificial Intelligence and Data Science course, this would be recorded as follows: IACD-2025 IACD = Course Name 2025 = year
course_code	varchar(20)		
enrollment_date	timestamp		Date of creation of the Registration

2.4. Table module

Description:

Modules that make up a course

2.4.1. Columns

Column name	Type	Properties	Description
module_id	serial	PK	Unique identifier for each module
course_code	varchar(10)		Unique identifier for each course. For example, if we have the Artificial Intelligence and Data Science course, this would be recorded as follows: IACD-2025 IACD = Course Name 2025 = year
title	varchar(200)	null	Course title
sequence_number	int		Number indicating the sequence of the module within the course

2.5. Table student_progress

Description:

Student progress by module

2.5.1. Columns

Column name	Type	Properties	Description
progress_id	serial	PK	Unique progress identifier
enrollment_id	serial		
module_id	serial		
completed	bool		Indica si el estudiante ha completado el módulo (TRUE) o no (FALSE)
completion_date	int		Date and time the student completed the module

3. References

3.1. Reference course_module

Description:

A course is made up of several modules

course	0..*	module
course_code	<->	course_code

3.2. Reference module_student_progress

Description:

A module can have many students recording their progress in it.

module	0..*	student_progress
module_id	<->	module_id

3.3. Reference enrollment_student_progress

Description:

An enrollment can have many progress records (one for each module)

enrollment	0..*	student_progress
enrollment_id	<->	enrollment_id

3.4. Reference student_enrollment

Description:

A student can have many registrations

student	0..*	enrollment
student_code	<->	student_code

3.5. Reference course_enrollment

Description:

A course can have many students enrolled

course	0..*	enrollment
course_code	<->	course_code

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