Design of the database

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1 Program Description

This is a database for ordering a ticket on the events.

2 Design database for CDP program

Main entities of the database are:

- User;

- Event;

- Ticket.

2.1 User entity

User entity, illustrated on a figure 2.1, represents user in the database and have several fields:

Name	Type	Description	Constraints
id	*integer*	unique identifier of the user	**Primary Key**
name	*text*	name of the user	**Unique**
email	*text*	email of the user	**Unique**
created_date	*text*	date of instance creation in the UTC	**N\A**
updated_date	*text*	date of the last update in the UTC	

Indexes for user entity:

Name	Type
name	*B-tree*
email	*B-tree*

2.2 Event entity

Event entity, illustrated on a figure 2 , represents event in the database and have several fields:

Name	Type	Description	Constraints
id	*integer*	unique identifier of the event	**Primary Key**
title	*text*	title of the event	**Unique**
date	*text*	start date of the event in the UTC	
created_date	*text*	date of instance creation in the UTC	**N\A**
updated_date	*text*	date of the last update in the UTC	

Indexes for event entity:

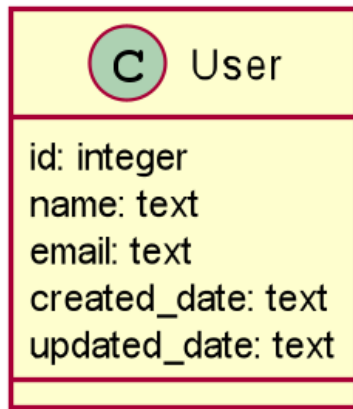| Name	Type
title	*B-tree*
date	*B-tree*

Figure 1: User representation in the database

2.3 Ticket entity

Ticket entity, illustrated on a figure 3 , represents ticket in the database and have several fields:

Name	Type	Description	Constraints	
id	*integer*	unique identifier of the ticket	**Primary Key**	
user_id	*integer*	id of the user which has ordered this ticket	**Secondary Key**	
event_id	*integer*	id of the event on which ticket is booked	**Secondary Key**	**Unique**
place	*integer*	number of place of the ticket	**N\A**	
category	*string*	category of the ticket	**N\A**	
created_date	*string*	date of instance creation in the UTC		
updated_date	*string*	date of the last update in the UTC		

Indexes for ticket entity:

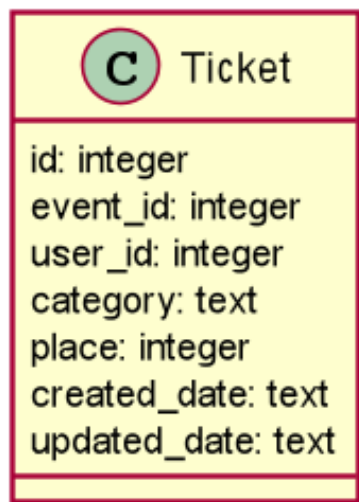| Name	Type
event_id	*B-tree*
user_id	*B-tree*
category	*B-tree*

Figure 2: Event representation in the database

Figure 3: Ticket representation in the database