

# Database application: Documentation

# Introduction

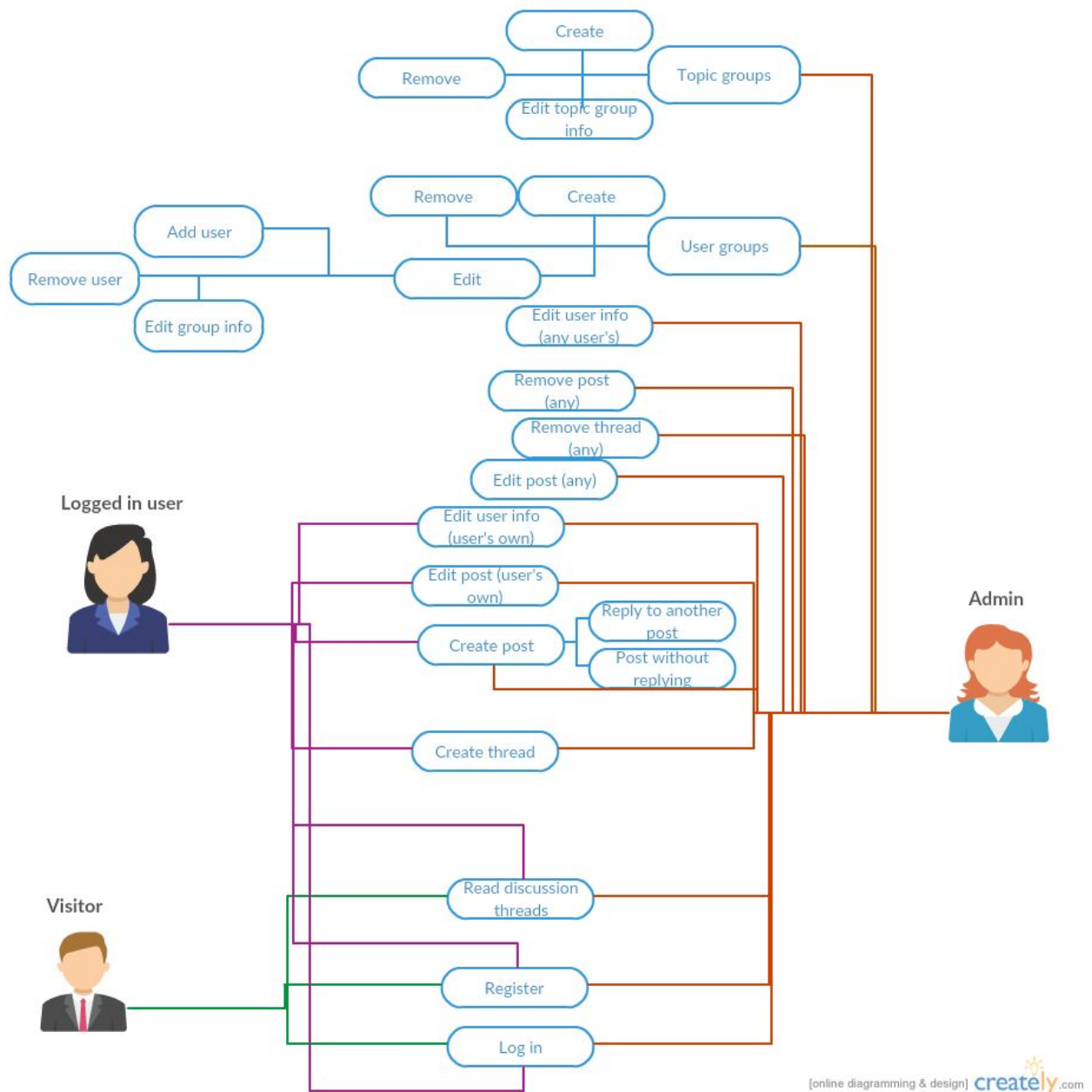
This app is for a discussion forum database application. The key function of the app is to have users being able to create and read discussion threads and make posts in them for others to read.

The app is written in PHP using PostgreSQL as the database. The application runs at the users.cs.helsinki.fi server of the Department of Computer Science of University of Helsinki.

# Use cases

There are three kind of users:

- Visitor is any user who hasn't logged in (and potentially hasn't registered).
- Logged in users are basic users of the site.
- Admin users are administrators with full rights to everything.



## Use case descriptions:

### Visitor:

- Read discussion threads
  - Visitors can freely read any threads on the forum
- Other functions:
  - Registering
  - Logging in

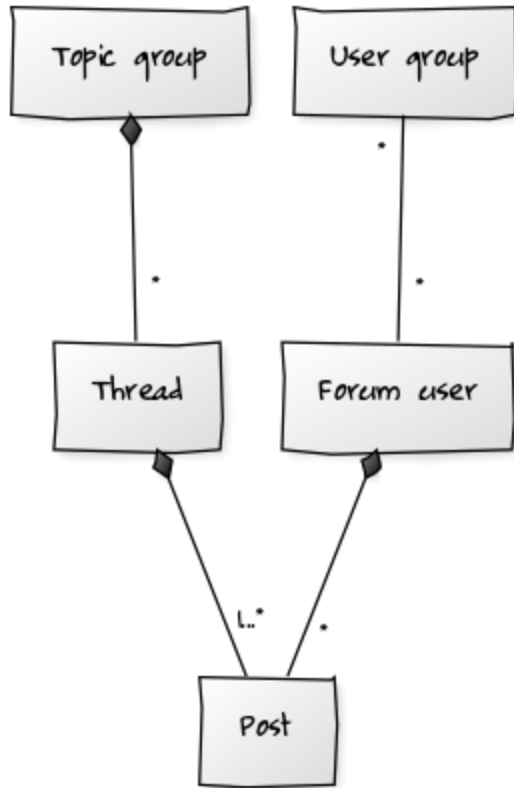
### Logged in user:

- Read discussion threads
- Create thread
  - Users can post new threads that anyone can read
  - Thread must contain a post (that will be the first one in the thread)
  - Thread must contain a title
- Create post
  - Belongs to a thread
  - Can be a reply to another post within the thread
- Edit post
  - User can freely edit any post of their own
- Other functions:
  - Seeing user info (user's own and other's)
  - Editing user's own info

### Admin:

- Edit posts
  - Admins can edit posts made by anyone
- Handle user groups
  - Admins can create groups to which users can be put
  - Group info can be edited, and users can be removed from groups
- Handle topic groups
  - Admins can create groups to which topics by which topics can be organized
  - Topic group info can be edited, and they can be removed
- Other functions:
  - Edit any post
  - Edit any user's info
  - Remove any post
  - Remove any thread

## Data schema



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### Data subject: Topic group

Attribute	Type	Description
Name	String, max 50 characters	
Info	String, max 400 characters	
Created	Date	
Edited	Date	

Topic group can have multiple threads.

### Data subject: User group

Attribute	Type	Description
Name	String, max 50 characters	
Info	String, max 400 characters	
Created	Date	
Edited	Date	

User group can have multiple users in it.

### Data subject: Thread

Attribute	Type	Description
Title	String, max 50 characters	
Created	Date	
Edited	Date	

Thread can have multiple posts in it, and must contain at least one post.

### Data subject: Forum user

Attribute	Type	Description
Username	String, max 50 characters	
Password	String, max 100 characters	
Info	String, max 400 characters	
Created	Date	
Edited	Date	

User can have multiple posts and can be in multiple user groups.

Data subject: Post

Attribute	Type	Description
Message	String, unlimited length	
Created	Timestamp	
Edited	Timestamp	

## Database relation diagram

