# **README**

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### **Versions used**

- Ruby -> 3.4.1 (2024-12-25 revision 48d4efcb85) +PRISM [arm64-darwin24]
- Rails -> 8.0.1
- Gem -> 3.6.2
- Bundler -> version 2.6.2

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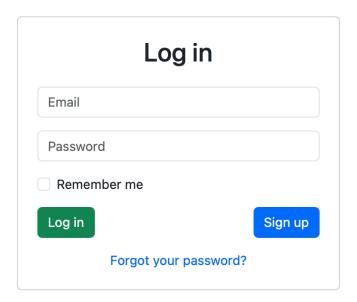
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# **Application documentation**

### Login page

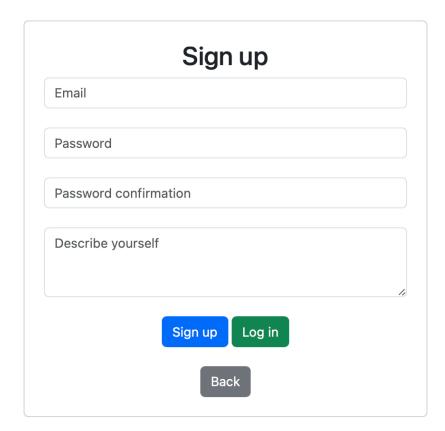
As seen in the screenshot bellow, the login page allows the user to connect to our application. Each user can either create a new account - by clicking the sign-up button, or reset his/her password. The password reset is not implemented because we chose that to implement a mailer with an actual mail is out of scope.



Login page

# Sign-up page

To create a new user in the sign-up page, you must provide your email and password. Optionally, you can provide a short description to let others know what you are up to, but you can leave the field empty if you don't want to!



Sign-up page

# The main page

When you login to our application, you first meet the main page - aka the INDEX page. The index page has a short overview of the functions our application offers. These include

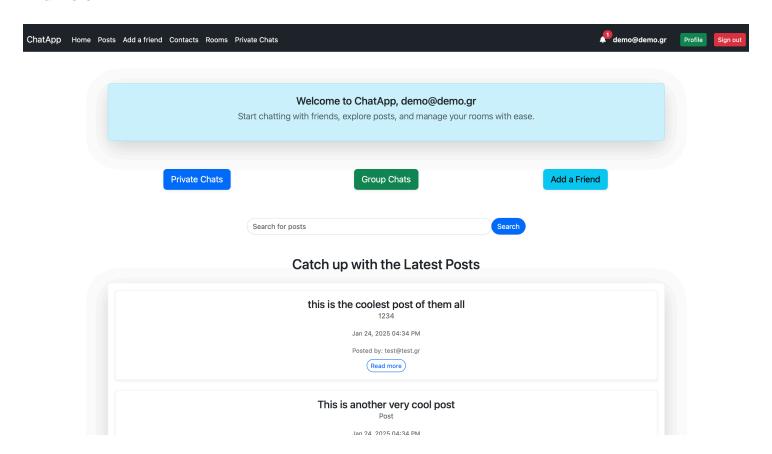
- Posting
- Friends system
- Contacts

- Notifications
- Profiles
- Public or private rooms
  - Public rooms are available for everyone to join and can be created by anyone
  - Private rooms are available only to those who are participants, aka private messages

When it comes to catching up, the login page is a great place! You can access every single function immediately!

- You can access your private chats, group chats and even add a friend!
- You can search for a post or catch up with the latest 3!
- You can see your three (3) latest private chats

#### And more!



Main page

this is the coolest post of them all	
Jan 24, 2025 04:34 PM	
Posted by: test@test.gr	
Read more	
This is another very cool post	
Jan 24, 2025 04:34 PM	
Posted by: test@test.gr Read more	
This year's tests LEAKED!!!!	
This year's tests GOT LEAKED MATES. Please send me a PM so I can send you the leaks to study!	
Jan 24, 2025 04:33 PM	
Posted by: test@test.gr	
Read more	
View All Posts	
Decemb Drivete Decemb	
Recent Private Rooms	
demo@demo.gr - test@test.gr	(Join)

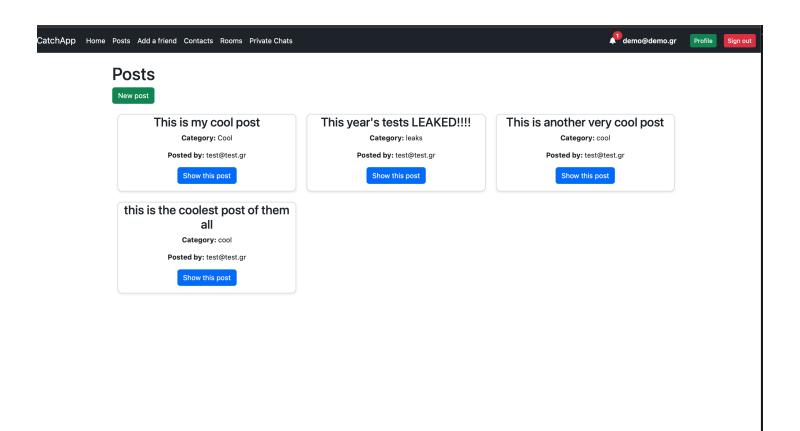
Main page

#### **Posts overview**

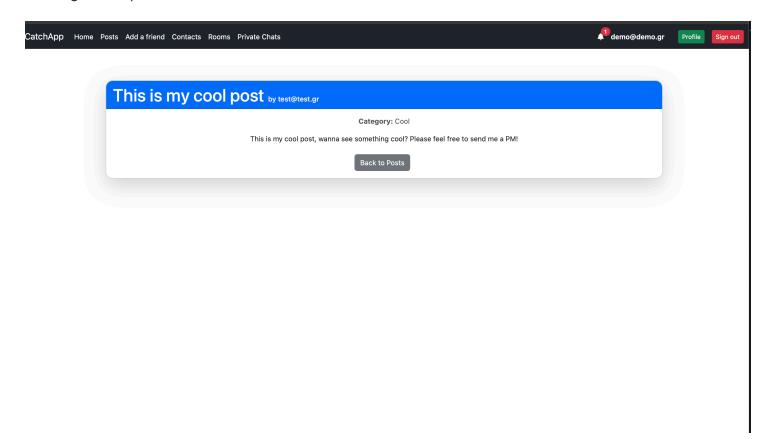
With the posts function, anyone can easily create, modify and delete their posts. To see all the posts available right now, you simply need to click the posts link in your hotbar or access them via the index page using the view all posts button.

Please note that you can only modify a post or even delete it *ONLY* if you are the owner of that post. The rest of the users, as seen in the images below, have no rights to modify or delete the posts made by another user as they can only view them.

You can also easily create a post if you want to by clicking on the New posts button.



#### Viewing all the posts





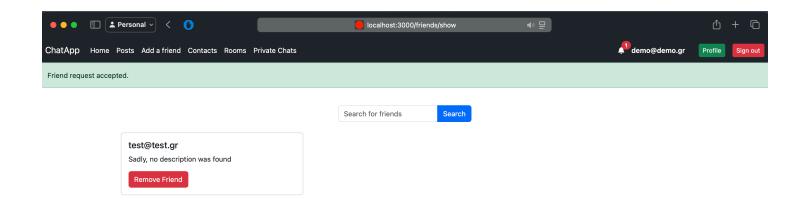
Creating a new post

# Friends functionality

As we mentioned above, the app offers a cool friend functionality! As seen in the images below, anyone can search for a friend - by looking up their email, or check their contacts and see any updates on their friend requests!

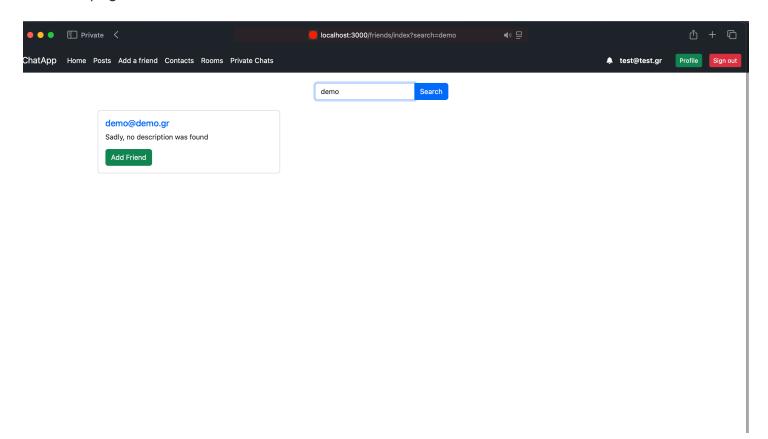
You can find friends by clicking the add a friend link in the hotbar or click the add a friend button in the main page.

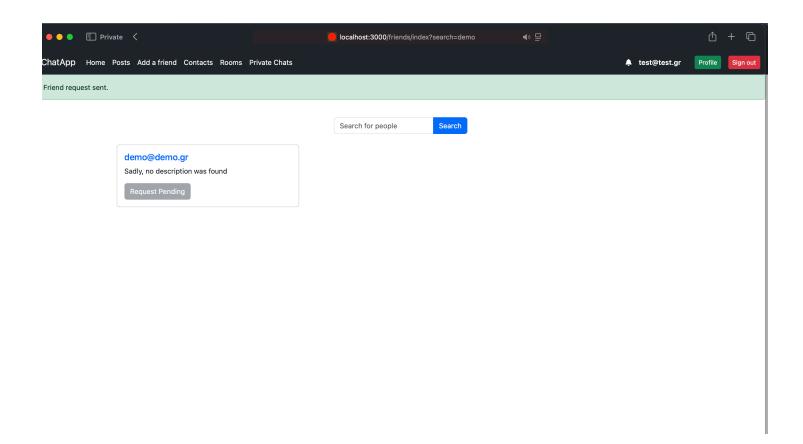
Either way, you are redirected to the search a friend page, where you can easily type anything and relevant users will be loaded, thus giving you the option to spectate their profile - by clicking on their email - or to add them as a friend!



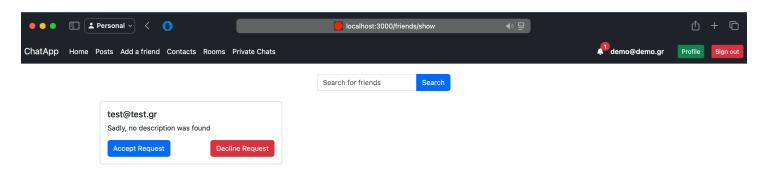


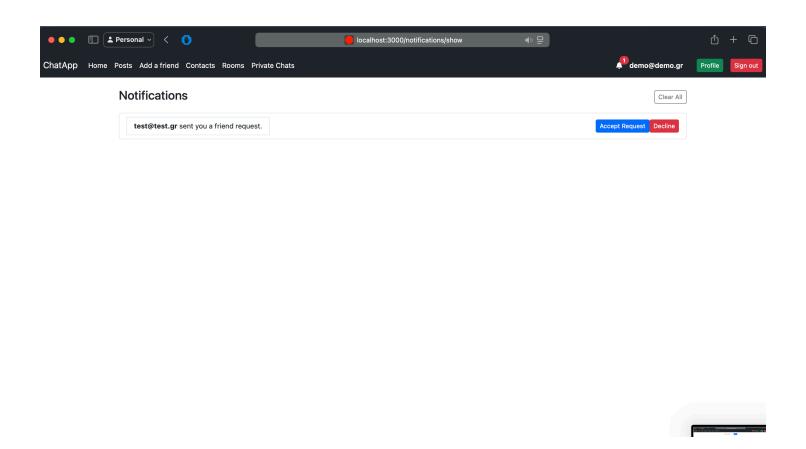
#### Contacts page





#### Friend request sent!



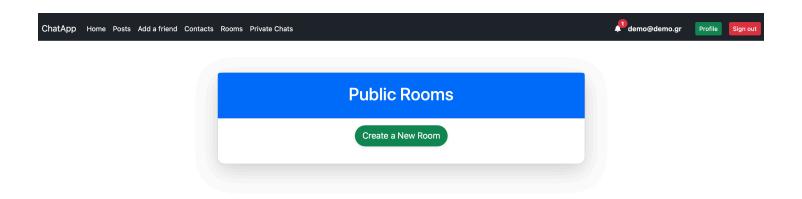


Receiving a friend request notification!

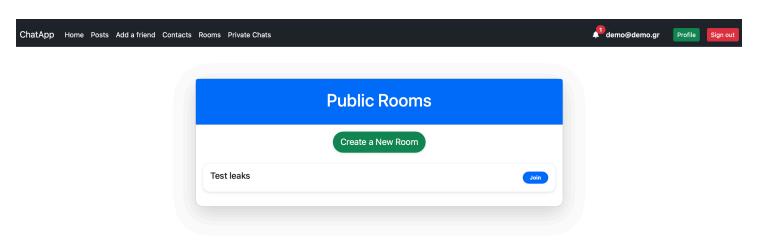
# **Group chats**

To access the currently available and open group chats, you can click on the Rooms button in your hotbar. Doing so, will redirect you to the group chats page. Here, anyone can join the available group chats or even create a new one!

Please note that the group chats support real time messaging - using action cable! Cool right? 
The messages that are sent by you will appear on the right side of the chat, whereas the messages that are sent by other users will appear on the left!



#### Empty group chat page



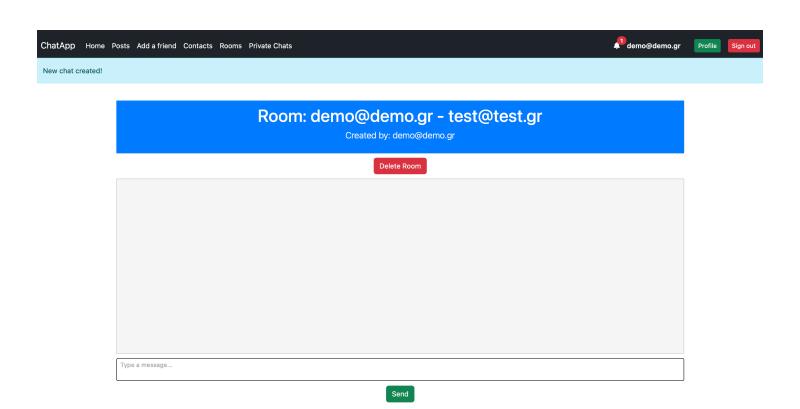
A random group chat

# Personal messaging and profiles

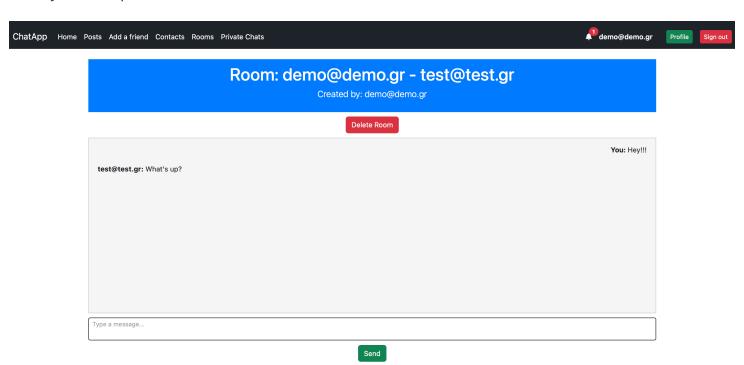
The implementation of personal messaging is an extent of the public rooms feature. Personal chats are essentially public rooms that have a parameter Private: True. This enables the application to distinguish between these two and give access only to the required parties. For example, if you try to chat with a user for the first time, we create a new private chat - based on the aforementioned logic - and only you and the other user can join the chat.

To chat with someone you need to simply click on their email - wherever it appears, all messages all clickable - and you will be presented with their profile. Their profile contains information about them - their description and their friends - while also providing a chat button.

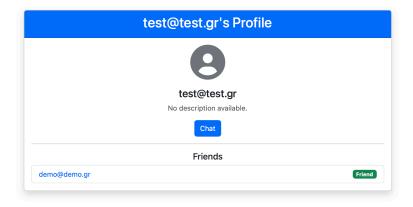
Clicking this creates the room - if not already created by the other user or in the past - and you are free to chat with the other user!



#### Freshly created private chat







A user's profile

## **API** documentation

# **Getting started**

1. We need to create the Todo & Todo\_item models. Run this in your terminal

```
rails g model Todos title:string description:text
rails g model TodoItem todo:references content:text completed:boolean
rails db:migrate
```

2. We also need to make a migration to add a user reference in TODO model

```
rails generate migration AddUserIdToTodo user:references rails db:migrate
```

3. Expose the necessary endpoints in config/routes.rb.

```
Rails.application.routes.draw do
    post "/signup", to: "registrations#create"
    post "/auth.login", to: "sessions#create"
    get "/auth.logout", to: "sessions#destroy"

resources :todo do
    resources :todo_item, only: [ :show, :create, :update, :destroy ]
    end
end
```

This will expose the endpoints as follows:

- ✓ POST /signup -> Signup
- ✓ POST /auth.login -> Login
- ✓ GET /auth/logout -> Logout
- ✓ GET /todos -> List all todos and todo items
- ✓ POST /todos -> Create a new todo
- ✓ GET /todos/:id -> Get a todo
- ✓ PUT /todos/:id -> Update a todo
- ✓ DELETE /todos/:id -> Delete a todo and its items
- ✓ GET /todos/:id/items/:iid -> Get a todo item
- ✓ POST /todos/:id/items -> Create a new todo item
- ✓ PUT /todos/:id/items/:iid -> Update a todo item
- ✓ Delete /todos/:id/items/:iid -> Delete a todo item
- 4. To handle the api requests we need to setup the necessary controllers for each action. Lets create them now

```
rails g controller Todos
rails g controller TodoItem
rails g controller Sessions
rails g controller Registrations
```

This will create 4 new controllers that will let us implement our nice functions.

- Setting up the required functions for each controller
   Each of the following controllers may have the following functions that are associated with different HTTP requests.
  - i. index function is the GET request
  - ii. create function is the post request
  - iii. show function is the GET request with a specific ID
  - iv. update function is the PUT request

v. destroy function is the DELETE request.

## todo\_controller

This controller will provide functionality for everything that involves the creation, presentation, update and deletions of the todo lists.

```
class TodoController < ApplicationController</pre>
    before_action :authenticate_user!
    def index
        @todo = current_user.todos
        render json: @todo
    end
    def create
        @todo = current_user.todos.create(todo_params)
        if @todo.save
        render json: @todo, status: :created
        else
        render json: @todo.errors, status: :unprocessable_entity
        end
    end
    def show
        @todo = current_user.todos.find(params[:id])
        render json: @todo.as_json(include: :todo_items)
    end
    def update
        @todo = current_user.todos.find(params[:id])
        if @todo.update(todo_params)
        render json: @todo
        else
        render json: @todo.errors, status: :unprocessable_entity
        end
    end
    def destroy
        @todo = current_user.todos.find(params[:id])
        @todo.destroy
        head :no_content
    end
    private
    def todo params
        params.require(:todo).permit(:title, :description)
    end
end
```

# todo\_item\_controller

This controller will provide functionality for everything that involves the creation, presentation, update and deletions of the TODO items that are present in each TODO list.

```
class TodoItemController < ApplicationController</pre>
    before_action :authenticate_user!
    def show
        @todo_item = current_user.todos.find(params[:todo_id]).todo_items.find(params[:
        render json: @todo_item
    end
    def create
        @todo = current_user.todos.find(params[:todo_id])
        @todo_item = @todo.todo_items.create(todo_item_params)
        if @todo_item.save
        render json: @todo_item, status: :created
        else
        render json: @todo_item.errors, status: :unprocessable_entity
        end
    end
    def update
        @todo_item = current_user.todos.find(params[:todo_id]).todo_items.find(params[:
        if @todo item.update(todo item params)
        render json: @todo_item
        else
        render json: @todo_item.errors, status: :unprocessable_entity
        end
    end
    def destroy
        @todo_item = current_user.todos.find(params[:todo_id]).todo_items.find(params[:
        @todo_item.destroy
        head :no_content
    end
    private
    def todo_item_params
        params.require(:todo_item).permit(:content, :completed)
    end
end
```

#### sessions\_controller

This controller is responsible for handling the sessions of each user. This means that it is responsible for the creation and deletion of each session. It does so by utilizing the devise's User table and functions.

```
class SessionsController < ApplicationController
    def create
        user = User.find_for_database_authentication(email: params[:email])
        if user&.valid_password?(params[:password])
        sign_in user
        render json: { message: "Logged in successfully" }
        else
        render json: { error: "Invalid email or password" }, status: :unauthorized
        end
    end

def destroy
    sign_out current_user
    render json: { message: "Logged out successfully" }
    end
end
end</pre>
```

#### registrations\_controller

This controller is responsible for the sign-ups of each user. This controller also utilizes devise's User table and functions.

```
class RegistrationsController < ApplicationController
    def create
        user = User.new(user_params)
        if user.save
        render json: { message: "User created successfully" }, status: :created
        else
        render json: { error: "Error creating user" }, status: :unprocessable_entit
        end
    end

private

def user_params
    params.require(:user).permit(:email, :password, :password_confirmation)
    end
end
end</pre>
```

### **Final steps**

The final step before we are ready is to make sure our models are ok. Make sure that your models look like this.

1. User model

```
class User < ApplicationRecord
   has_many :todos
   #Other stuff ...
end</pre>
```

2. Todo model

```
class Todo < ApplicationRecord
    has_many :todo_items
    belongs_to :user
end</pre>
```

3. Todo item model

```
class TodoItem < ApplicationRecord
   belongs_to :todo
end</pre>
```

# **Testing the APIs**

## **Custom python script**

To test the api functions we used a script that we made that is named api\_script.py

```
import requests
from time import sleep
session_key = None
def create todo():
    if session key:
        title = input('Title:')
        Description = input('Description:')
        response = requests.post('http://localhost:3000/todo',cookies={'_app_session':s
          "todo[title]":title,
          "todo[description]":Description
        })
        print(response.text)
    else:
        print("No session key found, please login first")
def show_todo_id():#this also gets todo_items
    if session key:
        id = input('ID of the todo:')
        response = requests.get(f'http://localhost:3000/todo/{id}',cookies={'_app_sessi
        print(response.text)
    else:
        print("No session key found, please login first")
def update_todo():
    if session key:
        id = input("ID:")
        title = input('Title (blank for no change):')
        Description = input('Description (blank for no change):')
        data = {}
        if title:
            data["todo[title]"] = title
        if Description:
            data["todo[description]"] = Description
        response = requests.put(f'http://localhost:3000/todo/{id}',cookies={'_app_sessi
        print(response.text)
    else:
        print("No session key found, please login first")
def delete todo():
    if session key:
        id = input('ID:')
        response = requests.delete(f'http://localhost:3000/todo/{id}',cookies={'_app_se
```

```
if response.status_code == 204:
            print('Deleted!')
        else:
            print(response.text)
    else:
        print("No session key found, please login first")
def get_todo_item():
    if session key:
        id = input('ID of the todo:')
        id2 = input('ID of the todo item:')
        response = requests.get(f'http://localhost:3000/todo/{id}/todo_item/{id2}',cook
        print(response.text)
    else:
        print("No session key found, please login first")
def create_todo_item():
    if session_key:
        id = input('TODO ID:')
        while True:
            content = input('Content:')
            completed = input('Completed? (y/n)')
            if completed == 'y' or completed == 'n':
                break
            else:
                print('completed must be y or n')
        if completed == 'y':
            completed = True
        else:
            completed = False
        data = { "todo_item[content]":content, "todo_item[completed]":completed }
        response = requests.post(f'http://localhost:3000/todo/{id}/todo_item',cookies={
        print(response.text)
    else:
        print("No session key found, please login first")
def update_todo_item():
    if session_key:
        data = \{\}
        id = input('TODO ID:')
        id2 = input('TODO_ITEM ID:')
```

```
while True:
            content = input('Content: (blank to skip)')
            completed = input('Completed? (y/n) (blank to skip)')
            if completed == 'y' or completed == 'n' or completed == '':
                break
            else:
                print('completed must be y or n or blank')
        if completed == 'y':
            data['todo_item[completed]'] = True
        if completed == 'n':
            data['todo item[completed]'] = False
        if content:
            data['todo item[content]'] = content
        if data:
            response = requests.put(f'http://localhost:3000/todo/{id}/todo item/{id2}',
            print(response.text)
        else:
            print('no change provided')
    else:
        print("No session key found, please login first")
def delete_todo_item():
    if session key:
        id = input('TODO ID:')
        id2 = input('TODO_ITEM ID:')
        response = requests.delete(f'http://localhost:3000/todo/{id}/todo_item/{id2}',c
        if response.status_code == 204:
            print('Deleted!')
        else:
            print(response.text)
    else:
        print("No session key found, please login first")
def signup():
    #http POST http://localhost:3000/signup 'user[email]=l@l.gr' 'user[password]=123456
    email = input('Email:')
    password = input('Password:')
    password eval = input('Password confirmation:')
    response = requests.post("http://localhost:3000/signup",data = {
    "user[email]": email,
    "user[password]": password,
    "user[password_confirmation]": password_eval
})
```

```
print(response text)
def login():
    #http POST http://localhost:3000/auth.login email="n@n.gr" password="123456"
    global session key
    email = input('Email:')
    password = input('Password:')
    response = requests.post("http://localhost:3000/auth.login",json={"email":email, "p
    print(response.text)
    session key = response.cookies.get dict()[' app session']
def logout():
    print(requests.get('http://localhost:3000/auth.logout').json())
def get_all_todo():
    #http get http://localhost:3000/todo Cookie=' _app_session=bYNcJ58EJWUHQY%2BftD9pPy
    if session key:
        response = requests.get('http://localhost:3000/todo',cookies={'_app_session':se
        print(response.text)
    else:
        print("No session key found, please login first")
try:
   while True:
        qo = False
        qo2 = False
        num = input('''1. Login\n2. Sign up\n3. Logout\n4. List all todos\n5. Create a
        try:
            num = int(num)
            go = True
        except ValueError:
            print('Please provide a number!')
        try:
            if num < 1 or num > 13:
                raise Exception
            qo2=True
        except Exception:
            print('Number must be from 1 to 12')
        if go and go2:
            match num:
                case 1:
```

```
login()
                case 2:
                     signup()
                case 3:
                     logout()
                case 4:
                     get_all_todo()
                case 5:
                     create_todo()
                case 6:
                     show_todo_id()
                case 7:
                     update_todo()
                case 8:
                    delete_todo()
                case 9:
                    get_todo_item()
                case 10:
                     create_todo_item()
                case 11:
                     update_todo_item()
                case 12:
                     delete_todo_item()
                case 13:
                     logout()
                    exit()
                case _:
                     print('Something went wrong')
            input('Continue?...')
except KeyboardInterrupt:
    exit()
```

This serves as a testing terminal application that allows the user to test all the functions of our REST API

### How the API works

For all the functions mentioned bellow you can use HTTPie CLI or our python script. We will demonstrate how to use the API with HTTPie CLI tool, because the use of our script is really easy.

#### Login

The first thing you must do is, of course, to login to receive a session.

```
http POST http://localhost:3000/auth.login email="demo@demo.gr" password="demoPass"
```

By doing so the request returns a response like this

```
HTTP/1.1 200 OK
Content-Length: 36
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"d7798a9ef354a1fcb018db70449e0f38"
referrer-policy: strict-origin-when-cross-origin
server-timing: sql.active_record;dur=12.87, start_processing.action_controller;dur=0.01
set-cookie: app session=DaAOzKatEfTuFIDuBVKCdVmF1YbQfZBhVTuh%2F%2BPpoLKwjwsQHpHeFFxHk%
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: 944f8ca0-84fe-4e79-9c69-bb4667300539
x-runtime: 0.418303
x-xss-protection: 0
{
    "message": "Logged in successfully"
}
```

Please notice the set-cookie: variable in the response. This is our session token. This token can be used to access the rest of the app - as it serves as our authentication. You must store this somewhere in order to proceed.

### Sign-up

If you don't have an account, yet, you can create one like so

```
http POST http://localhost:3000/signup 'user[email]=demo@demo.gr' 'user[password]=demoP
```

Please note that providing user[attribute] instead of attribute is really important. It won't work otherwise!

This will return a message like this, so you know it is successful

```
HTTP/1.1 201 Created
Content-Length: 39
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"8778e358444656690b5d998f57f47a99"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.01, sql.active_record;dur=3.22,
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: 73e44ba5-4e99-4b6c-a12e-84596188f984
x-runtime: 0.277723
x-xss-protection: 0
{
    "message": "User created successfully"
}
```

#### Logout

Logging-out is also crucial! To do so after you are done using the api, you can simply send a GET request to auth/logout to delete your session.

```
http GET http://localhost:3000/auth.logout
```

This should return something like this

```
HTTP/1.1 200 OK
Content-Length: 37
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"28b8f3fe95843547dbb631cb6c66aaff"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.01, process_action.action_contr
set-cookie: _app_session=b5F12fxEKY1b1ggVua6NZhTnGsZD00qcXivh8wd%2BqYnVQlU3FtNm1IP2gBRw
vary: Accept
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: b29f94b9-f2db-48bf-99ef-566c8004bd1b
x-runtime: 0.048605
x-xss-protection: 0
{
    "message": "Logged out successfully"
}
```

### **Listing all TODOs**

To list all of your current TODO lists you can make a get request to /todo like so

```
http GET http://localhost:3000/todo Cookie:'_app_session{Your app session}'
```

This will return a list containing your todo items like so

```
HTTP/1.1 200 OK
Content-Length: 269
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"16ed39b1c75aa7848f6f4ed7b080ce58"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.01, sql.active_record;dur=2.59,
set-cookie: _app_session=K4frLgE9yrWhN0Paoery5ylruVcFo%2B7M4U2SKEnXYpWQKZe7levJB%2FNu0k
vary: Accept
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: e5f12fe9-4ec2-43f9-a453-dc7bb1f174db
x-runtime: 0.058747
x-xss-protection: 0
[
    {
        "created_at": "2025-01-23T21:37:02.687Z",
        "description": "t",
        "id": 4,
        "title": "t".
        "updated_at": "2025-01-23T21:37:02.687Z",
        "user id": 3
    },
    {
        "created_at": "2025-01-23T22:14:26.897Z",
        "description": "1234",
        "id": 5,
        "title": "todo",
        "updated_at": "2025-01-23T22:14:26.897Z",
        "user_id": 3
    }
]
```

#### Create a new TODO

To create a new todo you must make a post request to /todo like so

```
http POST http://localhost:3000/todo 'todo[title]'='Demo' 'todo[description]'='DemoDesc
```

This will return something like this

```
HTTP/1.1 201 Created
Content-Length: 147
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"a3b78460d3cb523819a58ec04def9fcb"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.00, sql.active_record;dur=7.78,
set-cookie: app session=l%2Fmf8ln%2BVPL9A02ljMG39BqPrmfRd%2Bpmeu920vh%2BblX8EwD7%2FbdH
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: 47afa720-2765-4046-86ef-d14496353db8
x-runtime: 0.052266
x-xss-protection: 0
{
    "created_at": "2025-01-24T13:40:24.660Z",
    "description": "DemoDescription",
    "id": 6,
    "title": "Demo",
    "updated_at": "2025-01-24T13:40:24.660Z",
    "user id": 3
}
```

### Get a specific TODO list with its TODO items

You can access any of your TODO lists by using a get request in /todo/id like so

```
http get http://localhost:3000/todo{ID} Cookie:"_app_session{Your session key}'
```

This will return something like

```
HTTP/1.1 200 OK
Content-Length: 152
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"3bee32c6b65694be75e5f289e2915184"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.01, sql.active_record;dur=0.92,
set-cookie: _app_session=BoAnhYvZz7IC4yu9ttz1km2D4000xdRcDqW6fnC%2FJev2KnsMcL4MIHgaDGjy
vary: Accept
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: dddcc658-783e-4b0d-8703-31c2938cdc10
x-runtime: 0.072019
x-xss-protection: 0
{
    "created_at": "2025-01-23T22:14:26.897Z",
    "description": "1234",
    "id": 5,
    "title": "todo",
    "todo items": [],
    "updated_at": "2025-01-23T22:14:26.897Z",
    "user id": 3
}
```

### **Update a TODO**

To update a todo you can simply make a PUT request to /todo/id with the field you want to change like so

```
http PUT http://localhost:3000/todo{ID} 'todo[title]'='ChangedDemo' Cookie:"_app_sessio
```

This will return something like this

```
HTTP/1.1 200 OK
Content-Length: 143
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"804fbce768e779921810dfcc5ac6b47d"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.03, sql.active_record;dur=2.59,
set-cookie: app session=UmJuMBnQGucFt8LPSMW3UgaMvF4%2BJiKvcx5G0Z5an7QHhy7W05SNQME5GGTp
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: 505689f2-3fd9-4a06-b46d-4005527d1021
x-runtime: 0.064931
x-xss-protection: 0
{
    "created_at": "2025-01-23T22:14:26.897Z",
    "description": "1234",
    "id": 5.
    "title": "ChangedDemo",
    "updated at": "2025-01-24T13:45:41.851Z",
    "user id": 3
}
```

Please keep in mind that you must only include the field you want to change. If you include a field it WILL get changed! For example if you type 'todo[title]'='ChangedDemo', it will only change the title of your TODO NOT the description and vice versa.

### Deleting a todo and its items

To delete a todo and its items you can simply send a DELETE request to /todos/id.

```
http DELETE http://localhost:3000/todo{ID} Cookie:"_app_session{your session key}"
```

#### Creating a new todo item

To create a new TODO item you can do so by making a POST request in todo/{id}/todo\_item.

```
http POST http://localhost:3000/todo/{ID}/todo_item "todo_item[content]"='content' "tod
```

Note that you todo\_item[completed] can only be True or False.

This will return something like this

```
HTTP/1.1 201 Created
Content-Length: 137
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"2f84c529cdb09d58745f9fa31088754e"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.01, sql.active_record;dur=1.67,
set-cookie: _app_session=fpsgTBz6CteR6Y%2Fesadh6UZlX1eDZf5URgWbUNWmZzNZ7M0ZTQQNpAlNuGIT
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: 26fcd662-b661-4f59-90e8-0a5e6dab251b
x-runtime: 0.040519
x-xss-protection: 0
{
    "completed": true,
    "content": "content",
    "created at": "2025-01-24T13:55:59.178Z",
    "id": 3,
    "todo id": 4,
    "updated_at": "2025-01-24T13:55:59.178Z"
}
```

#### Get a specific TODO item

To get a specific TODO item you must make a GET request to todo/{ID}/todo\_item{ID2} where ID2 is the id of the TODO item.

```
http GET http://localhost:3000/todo/{ID}/todo_item/{ID2} Cookie:"_app_session={Your ses
```

This will return something like this

```
HTTP/1.1 200 OK
Content-Length: 137
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"2f84c529cdb09d58745f9fa31088754e"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.01, sql.active_record;dur=0.17,
set-cookie: _app_session=o0v43%2FR%2BjNjaLaPqnsyArzNDG6HLtoQGd1TAa1TaoiwFZQKLsqzK7mLddE
vary: Accept
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: 7ad8ac64-9923-4298-9116-bb932ff2d1c5
x-runtime: 0.036748
x-xss-protection: 0
{
    "completed": true,
    "content": "content",
    "created_at": "2025-01-24T13:55:59.178Z",
    "id": 3,
    "todo id": 4,
    "updated_at": "2025-01-24T13:55:59.178Z"
}
```

### Updating a todo item

To update a todo item you must make a PUT request to /todo/{id}/todo\_item/{id2}

```
http PUT http://localhost:3000/todo/{ID}/todo_item/{ID2} "todo_item[completed]"=True Co
```

As we also saw in the other PUT request, include only the fields you want to be changed! This will return something like this

```
HTTP/1.1 200 OK
Content-Length: 137
cache-control: max-age=0, private, must-revalidate
content-type: application/json; charset=utf-8
etag: W/"443231586ea9eee471804b76499dee45"
referrer-policy: strict-origin-when-cross-origin
server-timing: start_processing.action_controller;dur=0.01, sql.active_record;dur=0.46,
set-cookie: app session=0%2FSKQwrXuN%2F8ZaV0YRcttJ4lFbXJ4XCTKhjzSAK0b9u%2B5BuE3H69F0fv
x-content-type-options: nosniff
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-request-id: 6adc4609-5656-4182-97fd-95bf8426117f
x-runtime: 0.057253
x-xss-protection: 0
{
    "completed": true,
    "content": "content",
    "created at": "2025-01-24T13:55:59.178Z",
    "id": 3,
    "todo id": 4,
    "updated at": "2025-01-24T13:55:59.178Z"
}
```

#### **Deleting a TODO item**

To delete a TODO item from a todo list you must make a DELETE request to todo/{ID}/todo item/{ID2}.

```
http DELETE http://localhost:3000/todo/{ID}/todo_item/{ID2} Cookie:"_app_session={Your
```

This will return something like this

```
HTTP/1.1 204 No Content cache-control: no-cache referrer-policy: strict-origin-when-cross-origin server-timing: start_processing.action_controller;dur=0.02, sql.active_record;dur=1.46, set-cookie: _app_session=KxqSg6hu4zcotZisVYPWLsGRyjjUCkwFkOfnX8vBjig8cYYtOfC%2FZhpurzL3 x-content-type-options: nosniff x-frame-options: SAMEORIGIN x-permitted-cross-domain-policies: none x-request-id: 750f46b9-7a8c-462b-bf13-2c81423c03c9 x-runtime: 0.066243 x-xss-protection: 0
```

If the HTTP/1.1 return code is 204 (No Content) it means you successfully deleted the TODO item.

# **Technologies used**

- Users -> Device gem
- Realtime messaging -> Action cable
- Notifications -> Noticed gem