제13강 Messaging (2)

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텍스트 메시지 송신

```
def send_message(chat_id, text):
    r = requests.get(f'{telegram_url}/sendMessage', params={'chat_id' : chat_id, 'text': text})
    if r.ok:
        print(json.dumps(r.json()['result'], indent=4, ensure_ascii=False))
    else:
        print(f'FAIL : {r.json()}')



# send message to master
send_message(6964349173, '안녕하세요. 봇입니다.')
```

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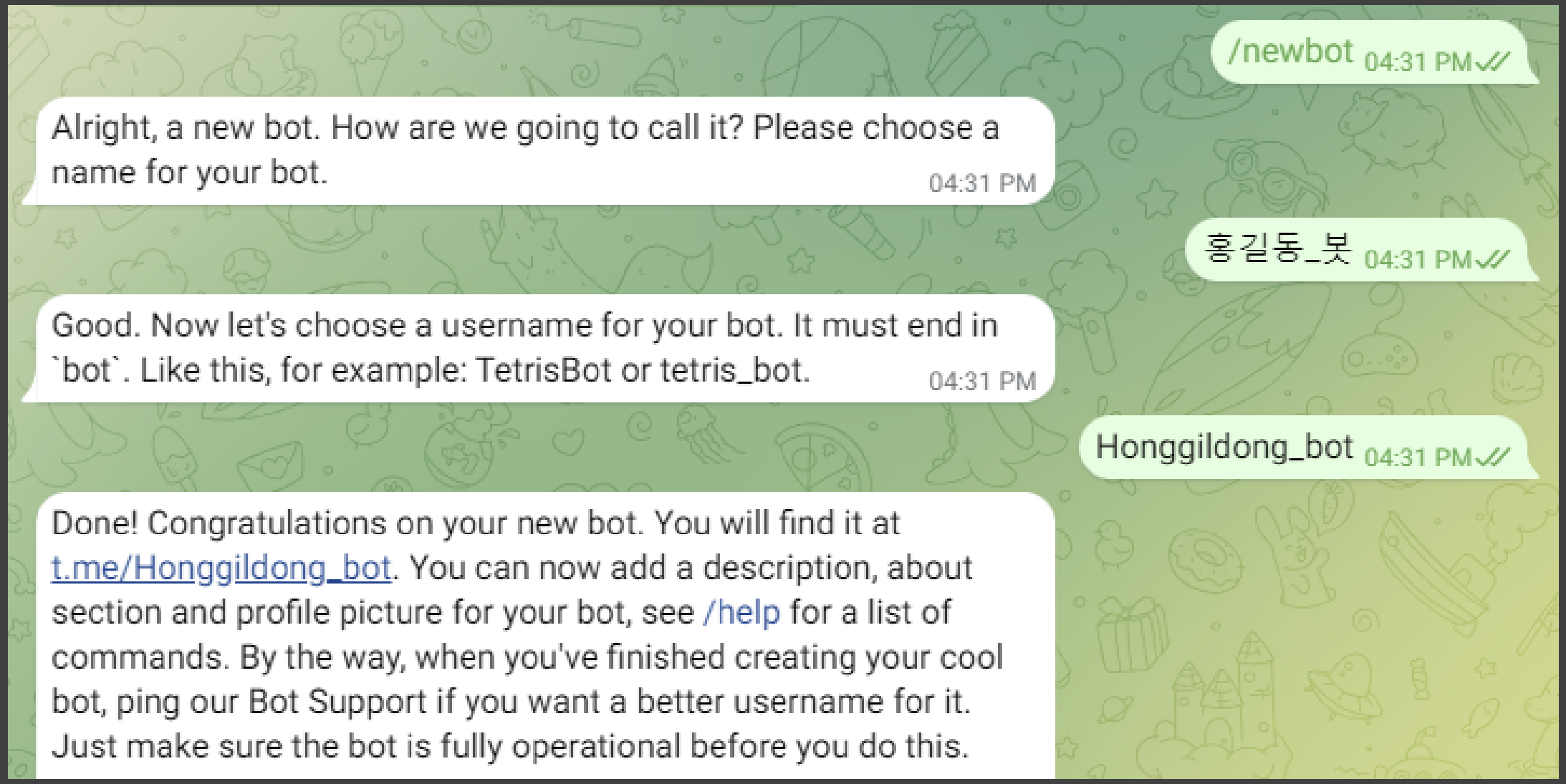
기존 봇 삭제(deletebot) 및 신규 봇 추가(newbot)



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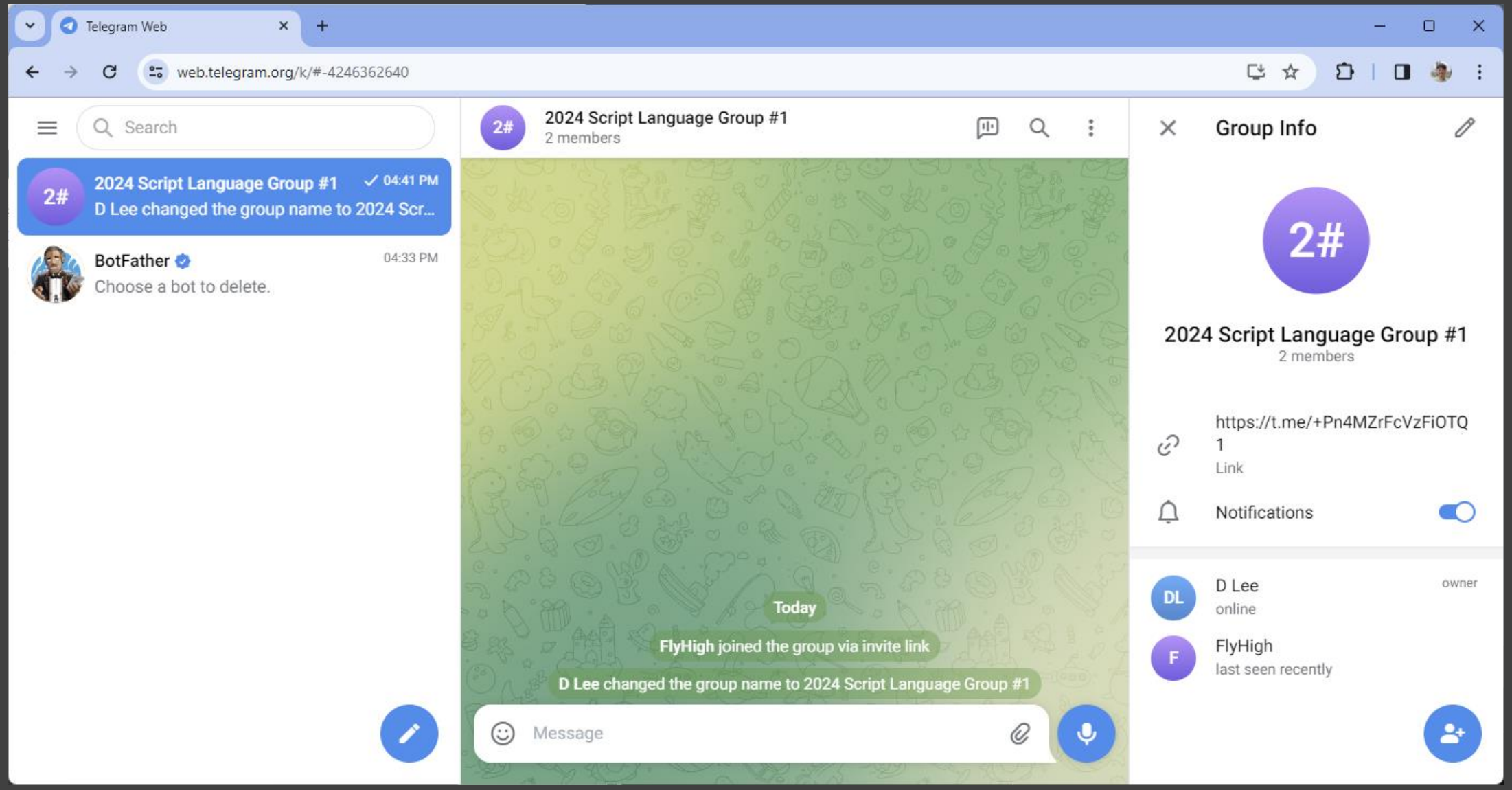
단체방 조인 : https://t.me/+Pn4MZrFcVzFiOTQ1



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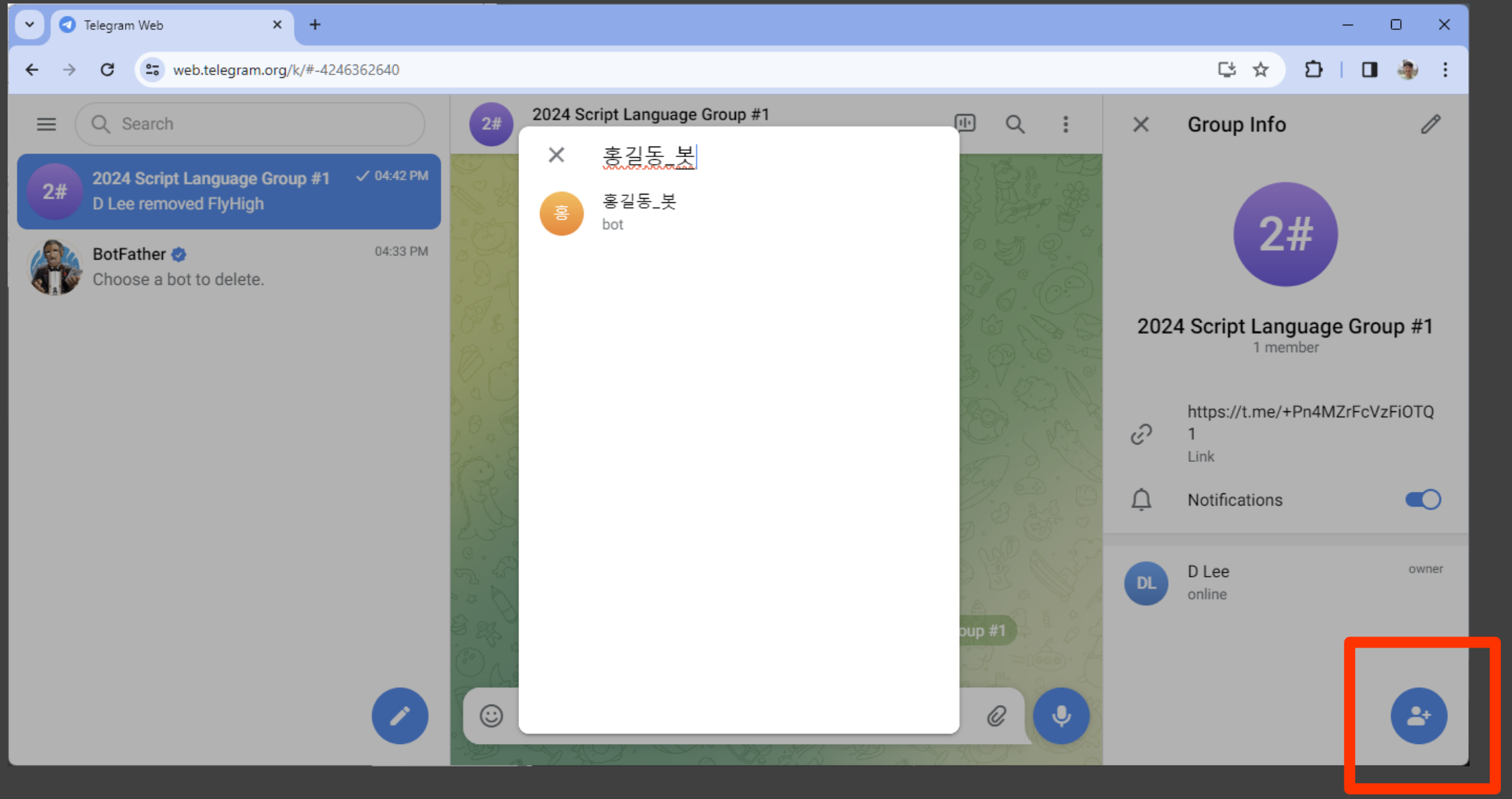
자신 봇 초대


Telegram Web
web.telegram.org/k/#-4246362640
Search
2024 Script Language Group #1
04:42 PM
D Lee removed FlyHigh
BotFather
04:33 PM
Choose a bot to delete.
2024 Script Language Group #1
홍길동_봇
홍길동_봇
bot
Group Info
2024 Script Language Group #1
1 member
https://t.me/+Pn4MZrFcVzFiOTQ1
Link
Notifications
D Lee
owner
online

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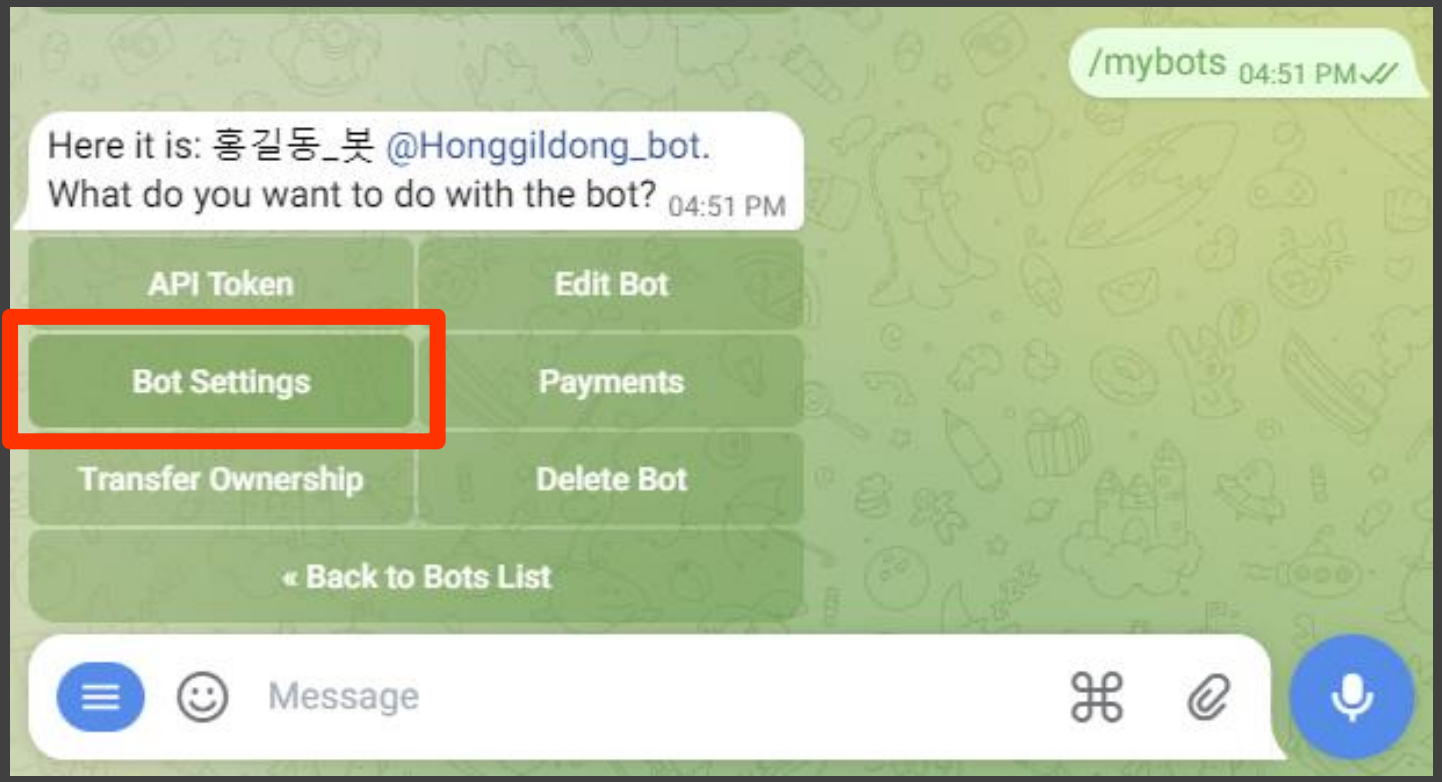
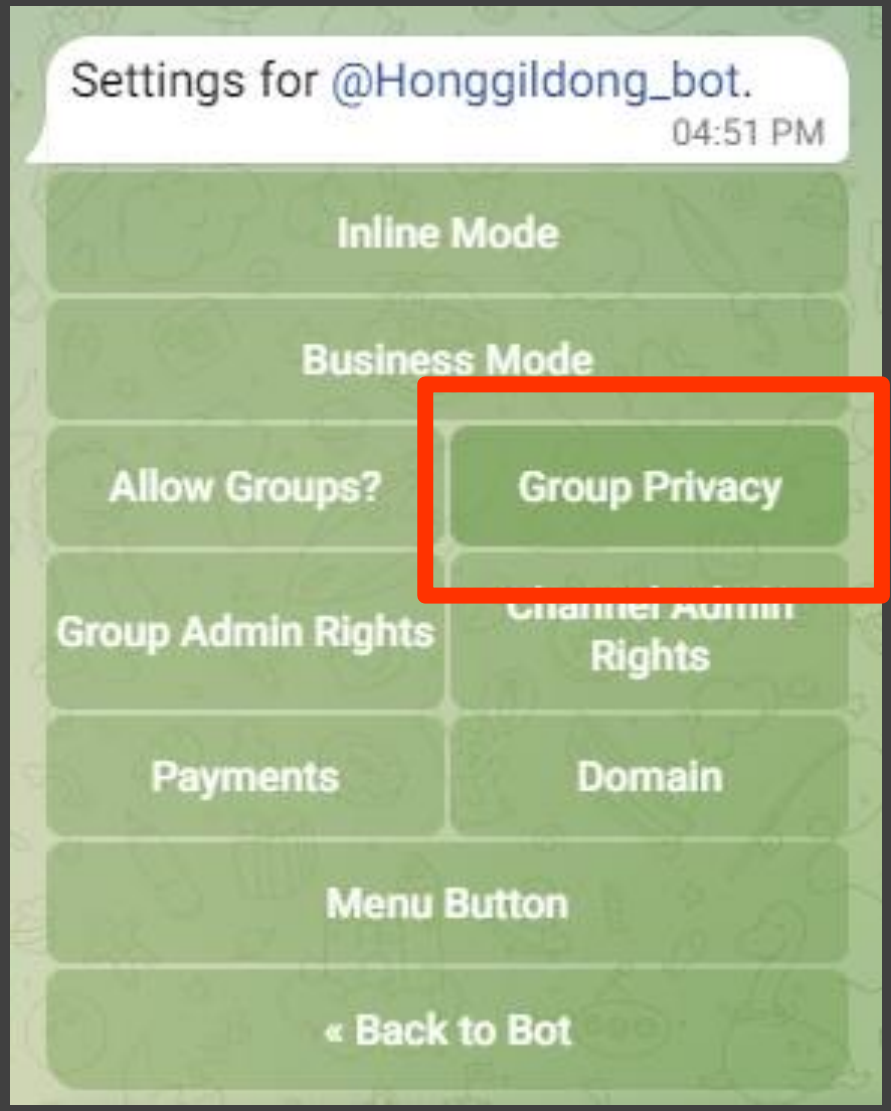
봇 설정 변경


/mybots 04:51 PM
Here it is: 홍길동_봇 @Honggildong_bot.
What do you want to do with the bot? 04:51 PM
API Token
Edit Bot
Bot Settings
Payments
Transfer Ownership
Delete Bot
« Back to Bots List
Message


Settings for @Honggildong_bot.
04:51 PM
Inline Mode
Business Mode
Allow Groups?
Group Privacy
Group Admin Rights
Rights
Payments
Domain
Menu Button
« Back to Bot

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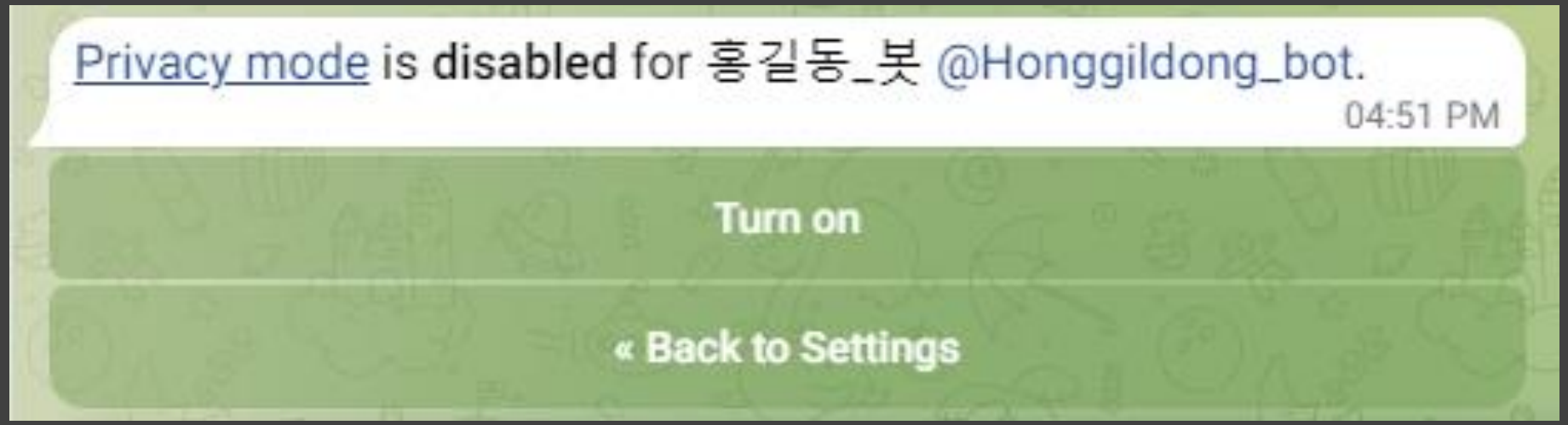
Privacy Mode – disable 되어야 함. Public 액세스 가능



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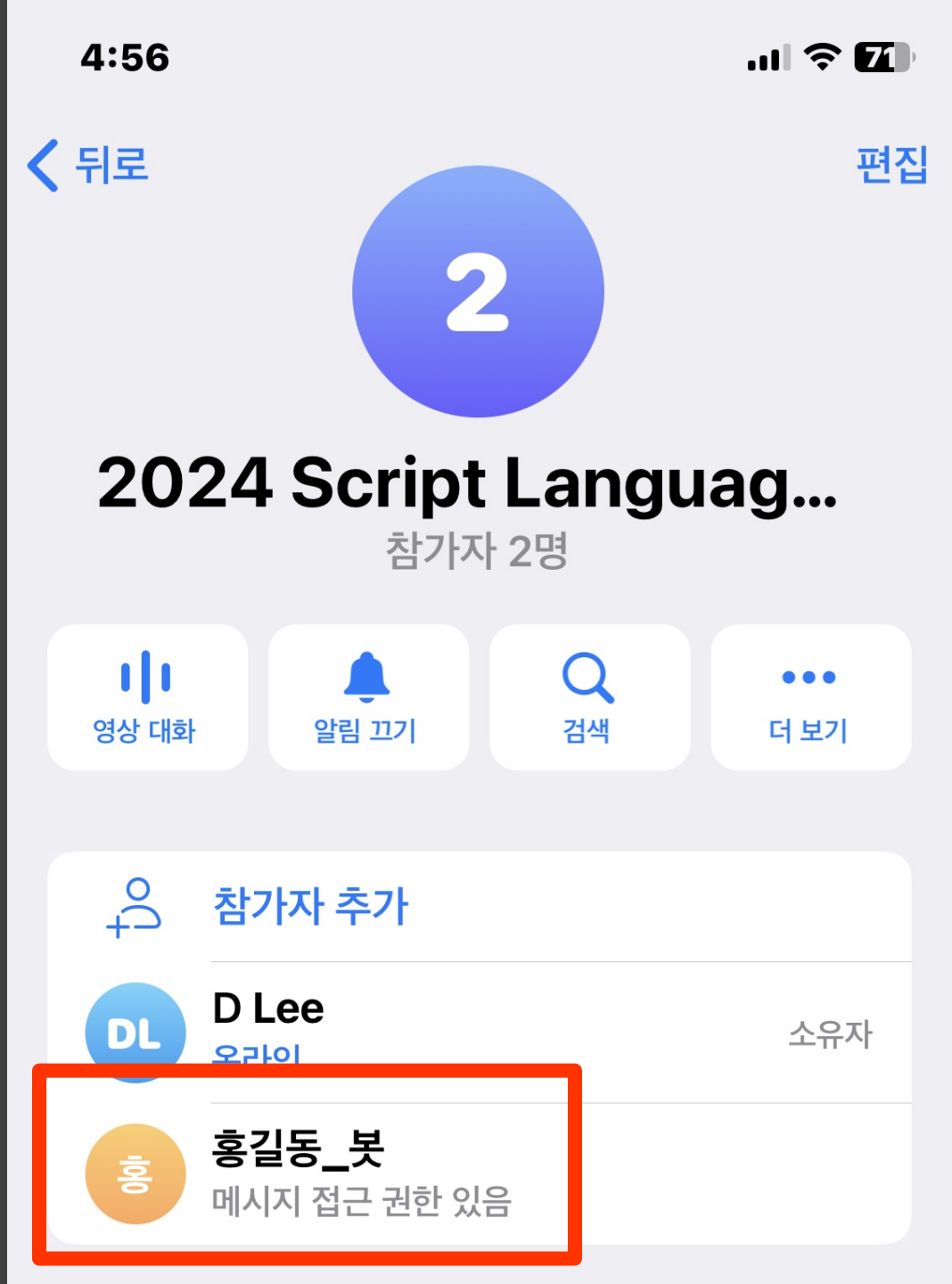
스마트폰에서 확인


4:56
71
뒤로
편집
2
2024 Script Languag...
참가자 2명
영상 대화
알림 끄기
검색
더 보기
참가자 추가
D Lee
DL
소유자
홍길동_봇
홍
메시지 접근 권한 있음

업데이트 분석

```
def get_name(e):
    username = e.get('username', 'NOUSERNAME')
    fullname = e.get('first_name', '') + ' ' + e.get('last_name', '')
    return f'{fullname}({username})'

def show_update(u):
    if 'message' in u: # message data
        msg = u['message']
        chat_id = msg['chat']['id']
        sender_name = get_name(msg['from'])
        if 'text' in msg:
            text = msg['text']
            print(f'[{chat_id}] {sender_name} : {text}')
        elif 'new_chat_participant' in msg:
            member_name = get_name(msg['new_chat_participant'])
            print(f'[{chat_id}] {sender_name} has invited {member_name}.')
        elif 'left_chat_participant' in msg:
            member_name = get_name(msg['left_chat_participant'])
            print(f'[{chat_id}] {sender_name} has kicked out {member_name}.')
        else:
            logging.warning('Uninterpreted message'+json.dumps(u, indent=2, ensure_ascii=False))
    elif 'my_chat_member' in u: # called when bot itself is added or removed
        my_chat_member = u['my_chat_member']
        chat_id = my_chat_member['chat']['id']
        member_name = get_name(my_chat_member['new_chat_member']['user'])
        print(f'[{chat_id}] {member_name} {my_chat_member['new_chat_member']['status']}.')
    else:
        logging.warning('Uninterpreted update'+json.dumps(u, indent=2, ensure_ascii=False))
```

텍스트 송신

```
def send_message(chat_id, text):
    r = requests.get(f'{telegram_url}/sendMessage', params={'chat_id' : chat_id, 'text': text})
    if r.ok:
        print(json.dumps(r.json()['result'], indent=4, ensure_ascii=False))
    else:
        print(f'FAIL : {r.json()}')
```

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사진 (링크) 전송

```
def send_photo(chat_id, link):
    url = f'{telegram_url}/sendPhoto'
    params = {
        'chat_id': chat_id,
        'caption': '사진',
        'photo': link
    }
    r = requests.get(url, params=params)
    print(json.dumps(r.json(), indent=4, ensure_ascii=False))
    assert(r.ok)
```

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문서 전송

```
def send_file(chat_id, fname):
    url = f'{telegram_url}/sendDocument'
    params = {
        'chat_id': chat_id,
        'caption': fname
    }
    with open(fname, 'rb') as f:
        files = {'document':f}
        r = requests.get(url, params=params, files=files)
        print(json.dumps(r.json(), indent=4, ensure_ascii=False))
        assert(r.ok)
```

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봇에게 전송한 문서 파일


```
"document": {
  "file_name": "\ubcbd\ub3cc\uc9d1 \uc2e4\uc2b5\uc2dc\ud5d8.pdf",
  "mime_type": "application/pdf",
  "thumbnail": {
    "file_id": "AAMCBQADGQEAAw1kTe1cnWo9tFHMMjpaVSpQQlSFUwACeQsAAtfnaFbJu_4DmRMBCQEAB20AAy8E",
    "file_unique_id": "AQADeQsAAtfnaFZy",
    "file_size": 11441,
    "width": 227,
    "height": 320
  },
  "thumb": {
    "file_id": "AAMCBQADGQEAAw1kTe1cnWo9tFHMMjpaVSpQQlSFUwACeQsAAtfnaFbJu_4DmRMBCQEAB20AAy8E",
    "file_unique_id": "AQADeQsAAtfnaFZy",
    "file_size": 11441,
    "width": 227,
    "height": 320
  },
  "file_id": "BQACAgUAAxkBAAMNZE3tXJ1qPbRRzDI6WlUqUEJUhVMAAnkLAALX52hWybv-A5kTAQkvBA",
  "file_unique_id": "AgADeQsAAtfnaFY",
  "file_size": 5618263
},
```


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file info 획득

```
params = {
    'file_id': id
}
r = requests.get(f'https://api.telegram.org/bot{mybot.token}/getFile', params=params)
if r.ok:
    return r.json()
```

```
{
  'ok': True,
  'result': {
    'file_id': 'AgACAgUAAxkDAAMQZE7wckGQ5jOOZE5jUBPH3dHYKbcAAju4MRvX52hWEomY_JCZPeUBAAMCAAN5AAMvBA',
    'file_unique_id': 'AQADO7gxG9fnaFZ-',
    'file_size': 50670,
    'file_path': 'photos/file_0.jpg'
  }
}
```

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문서 파일 다운 로드

```python
def download_file(doc):
    file_name = doc['file_name']
    file_id = doc['file_id']
    r = requests.get(f'https://api.telegram.org/bot{mybot.token}/getFile', params={'file_id':file_id})
    if r.ok:
        server_file_path = r.json()['result']['file_path']
        r = requests.get(f'https://api.telegram.org/file/bot{mybot.token}/' + server_file_path)
        if r.ok:
            with open(file_name, 'wb') as wf:
                wf.write(r.content)
        else:
            print(f'FAIL : {r.json()}')
    else:
        print(f'FAIL : {r.json()}')
    return file_name


def receive_message(msg):
    chat_id = msg['chat']['id']
    chat_title = msg['chat'].get('title', 'personal')
    sender_username = msg['from'].get('username', 'NOUSERNAME')
    sender_fullname = msg['from'].get('first_name', ' ') + ' ' + msg['from'].get('last_name', ' ')
    if 'text' in msg:
        text = msg['text']
        print(f'[{chat_title}:{chat_id}] {sender_fullname}({sender_username}) : {text}')
    elif 'document' in msg:
        print(f'[{chat_title}:{chat_id}] {sender_fullname}({sender_username}) : sent file ... ', end='')
        file_name = download_file(msg['document'])
        print(f'"{file_name}" ... Downloading done!' )
    else:
        print(json.dumps(msg, indent=4, ensure_ascii=False))
```

봇에게 이미지 전송


```
"photo": [
  {
    "file_id": "AgACAgUAAxkBAAMMZE3j7uaEBvJ9w9B4iWIch_pi8DUAAju4MRvX52hWEomY_JCZPeUBAAMCAANzAAMvBA",
    "file_unique_id": "AQADO7gxG9fnaFZ4",
    "file_size": 881,
    "width": 67,
    "height": 90
  },
  {
    "file_id": "AgACAgUAAxkBAAMMZE3j7uaEBvJ9w9B4iWIch_pi8DUAAju4MRvX52hWEomY_JCZPeUBAAMCAANtAAMvBA",
    "file_unique_id": "AQADO7gxG9fnaFZy",
    "file_size": 8363,
    "width": 240,
    "height": 320
  },
  {
    "file_id": "AgACAgUAAxkBAAMMZE3j7uaEBvJ9w9B4iWIch_pi8DUAAju4MRvX52hWEomY_JCZPeUBAAMCAAN4AAMvBA",
    "file_unique_id": "AQADO7gxG9fnaFZ9",
    "file_size": 29793,
    "width": 600,
    "height": 800
  },
  {
    "file_id": "AgACAgUAAxkBAAMMZE3j7uaEBvJ9w9B4iWIch_pi8DUAAju4MRvX52hWEomY_JCZPeUBAAMCAAN5AAMvBA",
    "file_unique_id": "AQADO7gxG9fnaFZ-",
    "file_size": 50670,
    "width": 960,
    "height": 1280
  }
]
```


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이미지 파일 다운로드

```
import os
import uuid
def download_photo(photo):
    file_id = photo[-1]['file_id']
    r = requests.get(f'https://api.telegram.org/bot{mybot.token}/getFile', params={'file_id':file_id})
    if r.ok:
        server_file_path = r.json()['result']['file_path']
        file_name = f'img{uuid.uuid4().int}' + os.path.splitext(server_file_path)[-1]
        r = requests.get(f'https://api.telegram.org/file/bot{mybot.token}/' + server_file_path)
        if r.ok:
            with open(file_name, 'wb') as wf:
                wf.write(r.content)
        else:
            print(f'FAIL : {r.json()}')
    else:
        print(f'FAIL : {r.json()}')

    return file_name
```

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