

```
!pip install fastapi uvicorn pyngrok nest_asyncio
```

```
Requirement already satisfied: fastapi in /usr/local/lib/python3.12/dist-packages (0.120.0)
Requirement already satisfied: uvicorn in /usr/local/lib/python3.12/dist-packages (0.38.0)
Collecting pyngrok
  Downloading pyngrok-7.4.1-py3-none-any.whl.metadata (8.1 kB)
Requirement already satisfied: nest_asyncio in /usr/local/lib/python3.12/dist-packages (1.6.0)
Requirement already satisfied: starlette<0.49.0,>=0.40.0 in /usr/local/lib/python3.12/dist-packages (from fastapi) (0.48.0)
Requirement already satisfied: pydantic!=1.8,!<1.8.1,!<2.0.0,!<2.0.1,!<2.1.0,<3.0.0,>=1.7.4 in /usr/local/lib/python3.12/dist-packages (from fastapi) (0.48.0)
Requirement already satisfied: typing-extensions>=4.8.0 in /usr/local/lib/python3.12/dist-packages (from fastapi) (4.15.0)
Requirement already satisfied: annotated-doc>=0.0.2 in /usr/local/lib/python3.12/dist-packages (from fastapi) (0.0.3)
Requirement already satisfied: click>=7.0 in /usr/local/lib/python3.12/dist-packages (from uvicorn) (8.3.0)
Requirement already satisfied: h11>=0.8 in /usr/local/lib/python3.12/dist-packages (from uvicorn) (0.16.0)
Requirement already satisfied: PyYAML>=5.1 in /usr/local/lib/python3.12/dist-packages (from pyngrok) (6.0.3)
Requirement already satisfied: annotated-types>=0.6.0 in /usr/local/lib/python3.12/dist-packages (from pydantic!=1.8,!<1.8.1)
Requirement already satisfied: pydantic-core==2.33.2 in /usr/local/lib/python3.12/dist-packages (from pydantic!=1.8,!<1.8.1)
Requirement already satisfied: typing-inspection>=0.4.0 in /usr/local/lib/python3.12/dist-packages (from pydantic!=1.8,!<1.8.1)
Requirement already satisfied: anyio<5,>=3.6.2 in /usr/local/lib/python3.12/dist-packages (from starlette<0.49.0,>=0.40.0->fastapi) (3.6.2)
Requirement already satisfied: idna>=2.8 in /usr/local/lib/python3.12/dist-packages (from anyio<5,>=3.6.2->starlette<0.49.0,>=0.40.0->fastapi) (3.3.0)
Requirement already satisfied: sniffio>=1.1 in /usr/local/lib/python3.12/dist-packages (from anyio<5,>=3.6.2->starlette<0.49.0,>=0.40.0->fastapi) (3.2.0)
Downloading pyngrok-7.4.1-py3-none-any.whl (25 kB)
Installing collected packages: pyngrok
Successfully installed pyngrok-7.4.1
```

```
!ngrok config add-authtoken 33gIBhr6wU4dYniiWVpjGBqdEbt_3ZdmNGK2V4Rswr8K3bAYm
```

```
Authtoken saved to configuration file: /root/.config/ngrok/ngrok.yml
```

```
import nest_asyncio
from pyngrok import ngrok
from fastapi import FastAPI
from pydantic import BaseModel
from typing import List
import uvicorn
import asyncio
```

```
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```

```
import nest_asyncio
import uvicorn
import asyncio
from fastapi import FastAPI, HTTPException
from pydantic import BaseModel
from typing import List, Optional
from pyngrok import ngrok
from datetime import datetime
import uuid

# Allow nested event loops
nest_asyncio.apply()

# Configure ngrok with your authtoken
NGROK_AUTHTOKEN = "33gIBhr6wU4dYniiWVpjGBqdEbt_3ZdmNGK2V4Rswr8K3bAYm"
ngrok.set_auth_token(NGROK_AUTHTOKEN)
print("✅ Ngrok authtoken configured successfully!")

# FastAPI app
app = FastAPI(
    title="Chat App",
    description="A simple real-time chat application",
    version="1.0.0"
)

# Enhanced message storage
chat_history = []

class Message(BaseModel):
    sender: str
    text: str
    message_id: Optional[str] = None
    timestamp: Optional[str] = None

@app.post("/chat", response_model=dict)
async def send_message(message: Message):
    """Send a new message to the chat"""
    try:
        # Add metadata
        message_dict = message.dict()
        message_dict["message_id"] = str(uuid.uuid4())
        message_dict["timestamp"] = datetime.now().isoformat()
    except:
        raise HTTPException(status_code=500, detail="Error sending message")
```



```
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✓ Ngrok authtoken configured successfully!
WARNING:pyngrok.process.ngrok:t=2025-10-29T03:47:18+0000 lvl=warn msg="failed to start tunnel" pg=/api/tunnels id=4418a71842
✗ Ngrok error: ngrok client exception, API returned 502: {"error_code":103,"status_code":502,"msg":"failed to start tunnel"}
```

- ✖ Trying to run without public URL...
- ✓ Server starting... Press Ctrl+C to stop