

Fast API

FastAPI Cheat Sheet

Installation:

```
pip install fastapi uvicorn
```

Basic Example:

```
from fastapi import FastAPI

app = FastAPI()

@app.get("/")
async def read_root():
    return {"message": "Hello, World"}
```

Run the server:

```
uvicorn main:app --reload
```

Request Parameters:

Path Parameters:

```
@app.get("/items/{item_id}")
async def read_item(item_id: int):
    return {"item_id": item_id}

@app.get("/items/")
async def read_item(q: str = None):
    return {"q": q}
```

Request Body:

```
from pydantic import BaseModel

class Item(BaseModel):
    name: str
    price: float

@app.post("/items/")
```

```
async def create_item(item: Item):  
    return item
```

Response Model:

```
class Item(BaseModel):  
    name: str  
    price: float  
  
@app.post("/items/", response_model=Item)  
async def create_item(item: Item):  
    return item
```

Dependency Injection:

```
from fastapi import Depends, FastAPI  
  
app = FastAPI()  
  
async def get_db():  
    db = DBSession()  
    try:  
        yield db  
    finally:  
        db.close()  
  
@app.get("/items/")  
async def read_items(db: Session = Depends(get_db)):  
    return db.query(Item).all()
```

Middleware:

```
from fastapi.middleware.cors import CORSMiddleware  
  
app.add_middleware(  
    CORSMiddleware,  
    allow_origins=["*"],  
    allow_credentials=True,  
    allow_methods=["*"],  
    allow_headers=["*"],  
)
```

Static Files:

```
from fastapi import FastAPI
from fastapi.staticfiles import StaticFiles

app = FastAPI()

app.mount("/static", StaticFiles(directory="static"), name="static")
```