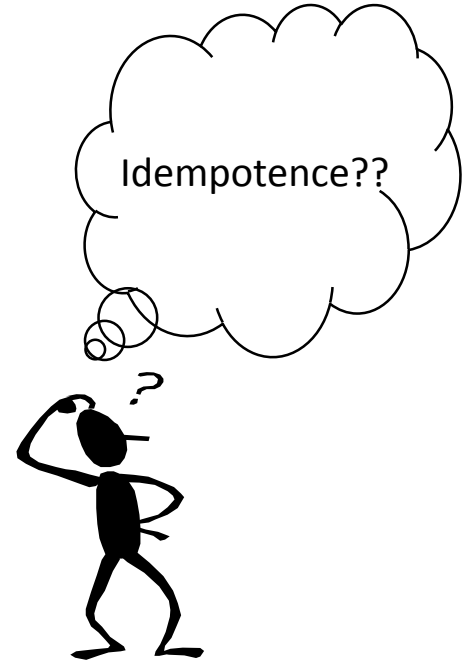


# In this lecture, we will discuss...

- ✧ Method Idempotence
- ✧ GET
- ✧ PUT
- ✧ PATCH
- ✧ DELETE
- ✧ POST

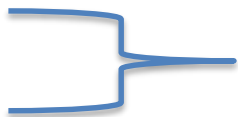
# Idempotence – Wikipedia

✧ *Idempotence* is the property of certain operations in mathematics and computer science, that can be applied multiple times without changing the result beyond the initial application.



# HTTP Methods

✧ GET



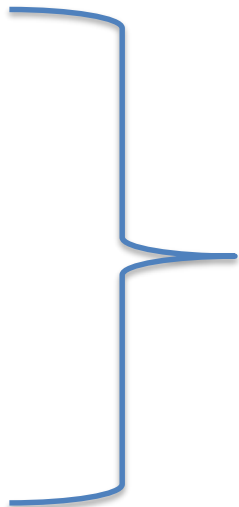
***read operation***

✧ POST

✧ PATCH


✧ DELETE

✧ PUT




***write operation***


# GET

- ✧ Definition – “...*that can be applied multiple times without changing the result*”
- ✧ GET – gets the data (no change in result)
- ✧ Idempotent 


# DELETE

- ✧ Definition – “...*that can be applied multiple times without changing the result*”
- ✧ Multiple calls – (no change in result)
  - Server side exception
- ✧ Idempotent 

# PUT

- ✧ Definition – “...*that can be applied multiple times without changing the result*”
- ✧ Multiple calls – (no change in result)
- ✧ Idempotent 

# POST

- ✧ Definition – “...*that can be applied multiple times without changing the result*”
- ✧ New resource created
- ✧ Multiple calls – problem
- ✧ Idempotent 

# Summary

- ✧ GET, PUT, PATCH and DELETE – idempotent
- ✧ POST – not idempotent

## What's Next?

- ✧ Representations