

Spring Boot Training

BCA 2080 4th Semester

Nepathya College

Web Server

- Facilitates remote function calls
- Any device anywhere in the network can call functions of a particular device.
- Each function call is executed in that particular device, called the server; and the function returns some output back to the caller.
- In this way, data communication and operation on the data happens seamlessly without the requirement of architecture compatibility.

Each web request is a function call

- `getImage("cat.jpg")`
- `getVideo("cat.mpeg", 55, 480)`
- `storeMyInfo({ 'name': 'Acer', 'price': 55000 })`
- `/image/cat.jpg`
- `/profile/save?name=Acer&price=55000`
- `<item name="Acer" "price"="55000"></item>`

Function ↔ Route

```
@GetMapping("/hello")  
public String greet() {  
    return "Hello World!";  
}
```

This greet() function exists in the server. But we can execute it via browser using route `"/hello"`

URL routes

- /user/123 /user/{id}
- /blog/tilottama-mun /blog/{title}
- /image/cat.jpg /image/{filename}
- ```
@GetMapping("/user/{placeholder}")
public String getData(@PathVariable("placeholder") int
userID) {
 // method body
}
```

# HTML Form

```
@GetMapping("/register")
public String getRegisterPage() {
 return ""
 <form action="/save" method="get">
 <input type="text" name="fullname" />
 <input type="text" name="address" />
 <input type="submit" value="SUBMIT" />
 </form>"";
}
```

Create a  
**getRegisterPage**  
( ) method to  
return this form  
as string

URL: /save?fullname=Prakash&address=Tilottama

```
@GetMapping("/save")
public String saveRegisterPage(
 @RequestParam("fullname") String fullname,
 @RequestParam("address") String address) {
 System.out.println(fullname); //Prakash
 System.out.println(address); //Tilottama
}
```

# Personalization

- Currently the server is storing only a single shopping list.
- How to store shopping list for multiple users?
- Alice's shopping list must only be seen and modified by Alice. But Bob also has his own shopping list in the same server. Every user has their own personal shopping list.

# Personalization

- HTTP server doesn't remember previous requests.
- So each HTTP request must be uniquely identified by the server based on request data.
- HTTP client (user) should provide identification information in every request.
- Identification information should be unique to avoid misidentification.