

# Building ToDo app

Note: Keep the Login implementation as it is  
welcome.jsp

```
<html>
    <head>
        <title>First web application</title>
    </head>

    <body>
        Welcome !!! ${name}
        <a href = "/list-todos">Click here</a> to manage your
todo's.
    </body>
</html>
```

A user logs in and welcome message is shown along with the name of the user. When the user clicks the link it should sent request to list-todos view

## Create HTTP request class

```
@Controller
public class TodoController {

    @Autowired
    private TodoService todoService;

    @RequestMapping(value = "/list-todos", method =
RequestMethod.GET)
    public String showTodos(ModelMap modelMap) {
        modelMap.put("todos", todoService.listTodo("Nagaraj S
Kharvi"));
        return "list-todos";
    }
}
```

## Service class

```
@Service
public class TodoService {

    private static List<Todo> todos = new ArrayList<>();
    private static int todoCount = 5;

    static {
        todos.add(new Todo(1, "Nagaraj S Kharvi", "Java New
Features", new Date(), false));
        todos.add(new Todo(2, "Nagaraj S Kharvi", "Spring Boot",
new Date(), false));
        todos.add(new Todo(4, "Nagaraj S Kharvi", "Hibernate",
new Date(), false));
        todos.add(new Todo(4, "Prashanth Kharvi", "Docker", new
Date(), false));
    }
}
```

```
        todos.add(new Todo(5, "Prashanth Kharvi", "Kubernates",
new Date(), false));
    }
```

```
    public Todo addTodo(Todo todoResource) {
        int id = ++todoCount;
        Todo todo = buildTodo(new Todo(), todoResource, true);
        todo.setId(id);
        todos.add(todo);
        return getTodo(id);
    }
```

```
    public Todo updateTodo(Todo todoResource) {
        Todo todo = getTodo(todoResource.getId());
        buildTodo(todo, todoResource, false);
        return getTodo(todoResource.getId());
    }
```

```
    public Todo getTodo(int id) {
        Todo findTodo = null;
        for (Todo todo : todos) {
            if (todo.getId() == id) {
                findTodo = todo;
            }
        }
        return findTodo;
    }
```

```
    public List<Todo> listTodo(String user) {
        List<Todo> filteredTodos = new ArrayList<>();
        for (Todo todo : todos) {
            if (todo.getUser().equals(user)) {
                filteredTodos.add(todo);
            }
        }
        return filteredTodos;
    }
```

```
    public boolean deleteTodo(int id) {
        for (Todo todo : todos) {
            if (todo.getId() == id) {
                todos.remove(todo);
            }
        }
        return true;
    }
```

```
    private Todo buildTodo(Todo todo, Todo todoResource, boolean
isNew) {
        if (isNew) {
            todo.setUser(todoResource.getUser());
        }
        todo.setDesc(todoResource.getDesc());
        todo.setTargetDate(todoResource.getTargetDate());
    }
```

```
        todo.setDone(todo.isDone());  
        return todo;  
    }  
}
```

Controller sends the data (Received from service) to  
list-todos view (list-todos.jsp page)  
list-todos.jsp

```
<html>  
  <head>  
    <title>First web application</title>  
  </head>  
  
  <body>  
    Here are the list of your todos:  
    ${todos}  
  </body>  
</html>
```