

## Week 8: Lab Sheet 5

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**Watch the lab lecture video on link**  
**<https://brunel.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=2660007a-f578-4e47-b825-ac7600ce2d70>**  
**and then come back and we will do lab sheet 5**

# Week 8: Lab Sheet 5

## Open Lab sheet 5



### Week 8: Spring Boot, Spring Data, MySQL (Lab) - Web Services and REST APIs (Lecture) ⌵ ⬆

Enabled: Statistics Tracking

This week, we will start learning about web services and REST APIs.

This week:

- Make sure you attend the lecture on web services and REST APIs. [Here](#) ⌵ ⬆ is a preview of the slides.
- Make sure you attend the lab on Spring Boot, Spring Data, MySQL. [Here](#) is the lab sheet, and [a preview of slides](#) ⌵ ⬆ . You can also find the recording for the lab lecture inside this folder.
- Do not forget to submit your fourth deliverable: [Sprint 1 Plan](#) ⌵ ⬆ due on 20/11 11:00 a.m.
- Recommended reading for this week: [How to design a RESTful API architecture from a human-language specification](#)

Quote of the week:

Build End-to-End, Not Top-Down or Bottom Up: We strongly believe that the only way to build software is incrementally. Build small pieces of end-to-end functionality, learning about the problem.

-From Pragmatic Programmer

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### Install MySQL on Windows:

- <https://dev.mysql.com/downloads/mysql/>
- Pick your operating system (Windows) and download.
- Follow the step-by-step installation tutorial here: <https://www.mysqltutorial.org/install-mysql/>

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**Install MySQL on Mac:**

- <https://dev.mysql.com/downloads/mysql/>
- **Pick your operating system (Mac) and download (macOS 10.15 (x86, 64-bit), DMG Archive).**
- **Open Terminal**

```
export PATH=${PATH}:/usr/local/mysql/bin/
```

```
mysql -u root -p
```

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```
Last login: Wed Nov 18 22:04:38 on ttys001
```

```
The default interactive shell is now zsh.
```

```
To update your account to use zsh, please run `chsh -s /bin/zsh`.
```

```
For more details, please visit https://support.apple.com/kb/HT208050.
```

```
(base) Nadines-MacBook-Pro:~ nadine$ open -t .bash_profile
```

```
(base) Nadines-MacBook-Pro:~ nadine$ export PATH=${PATH}:/usr/local/mysql/bin/
```

```
(base) Nadines-MacBook-Pro:~ nadine$ mysql -u root -p
```

```
Enter password:
```

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
```

```
Your MySQL connection id is 17
```

```
Server version: 8.0.22 MySQL Community Server - GPL
```

```
Copyright (c) 2000, 2020, Oracle and/or its affiliates. All rights reserved.
```

```
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affiliates. Other names may be trademarks of their respective  
owners.
```

```
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

```
mysql> \sql
```

```
-----
```

```
mysql  Ver 8.0.22 for macos10.15 on x86_64 (MySQL Community Server - GPL)
```

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## Creating a MySQL Database

Open a MySQL Shell and run the following steps in order to connect to the MySQL server. Remember that you would have set your root password when you installed the MySQL server either on your machine or VM.

Step	Command	Comment
1	<code>\sql</code>	Switches to SQL processing mode
2	<code>\connect root@localhost</code>	Connects the shell to MySQL server with user=root, host=localhost You will need to enter the root password after executing this statement
3	<code>create database genderdecoder_app;</code>	SQL statement for creating a new database called "genderdecoder_app"
4	<code>create user 'springuser'@'%' identified by 'ThePassword';</code>	Creates user springuser; % matches any hostname; authenticated by its password. You may want to change 'ThePassword' to a stronger password.
5	<code>grant all on genderdecoder_app.* to 'springuser'@'%';</code>	Gives all privileges to the new user on the newly created database