

Lab 1: Using Java from the Command Line

Exercise 1: Creating your Bitbucket Account

1. Open the following link using your browser:

<https://bitbucket.org/>

2. Click **“Get started for free”** button and enter your email address in the specified field, then enter your full name and password as well. Then click the “Continue” button.

Create your account

Please complete your account details

abc@mu.edu.tr	✓
Ozgur Kilic	✓
••••••••••	✓

By clicking *Continue*, you agree to the [Customer Agreement](#) and [Privacy Policy](#).

Continue

3. You will receive email from Atlassian. Open the email and verify your email address by clicking the button.
4. Your username should be in the following format: **U#####** where U is followed by your school id. If your school id is 123456789 then your user account should be **U123456789**.

Success! Almost done.

Please choose a username for your Bitbucket account.

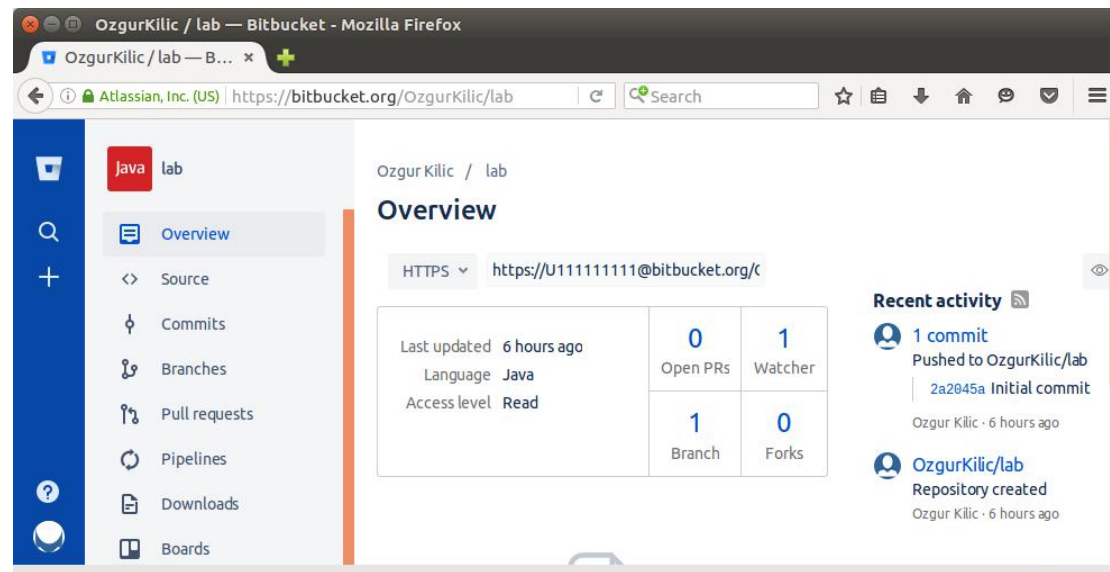
Username	I
----------	---

Continue

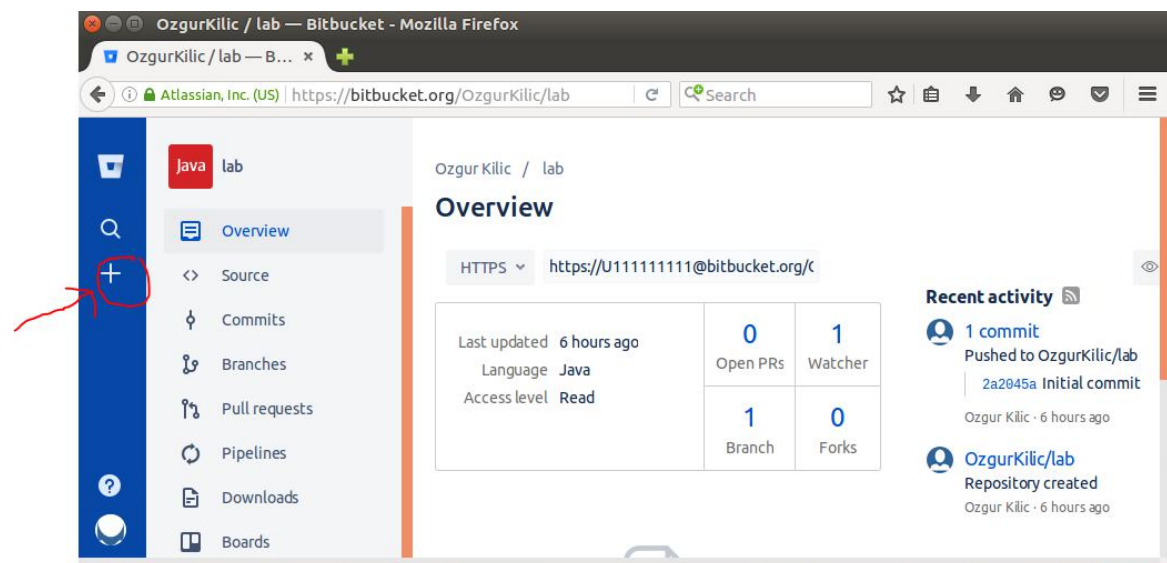
Exercise 2: Import the Template Lab Repository

This section explains how to create lab repository to submit your lab exercises. You should have created your Bitbucket account as described in Exercise 1. Note that your Bitbucket Username should start with “U” followed by your id number such as U12345678 given 12345678 is your id number. Once you have your account follow the steps below:

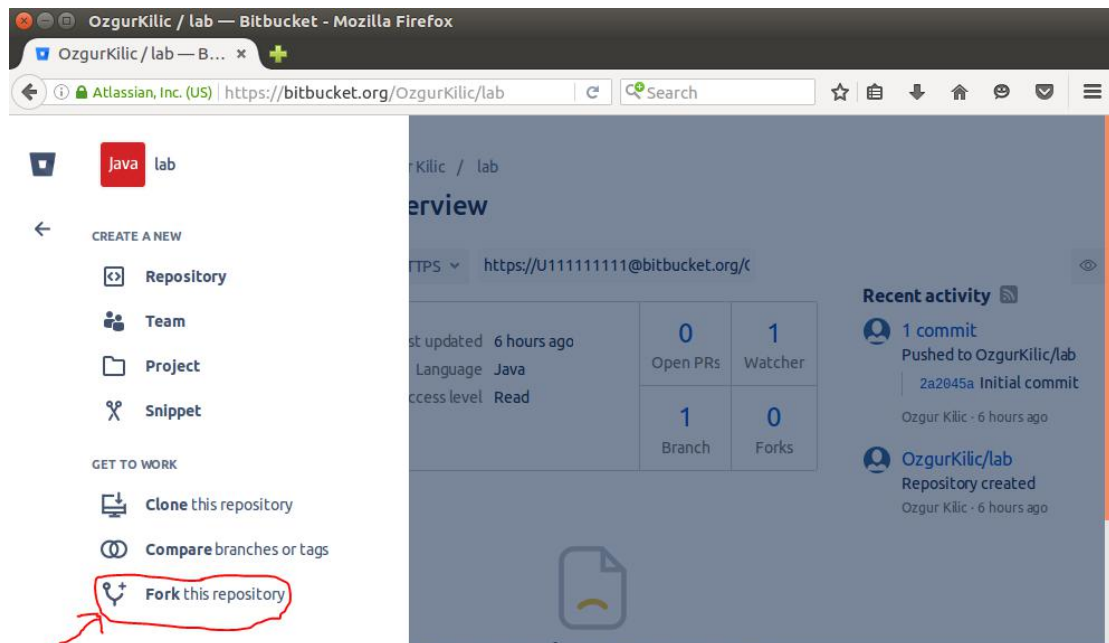
1. Type the link “<https://bitbucket.org/OzgurKilic/lab>” of my repository in the addressbar of the browser as shown below.



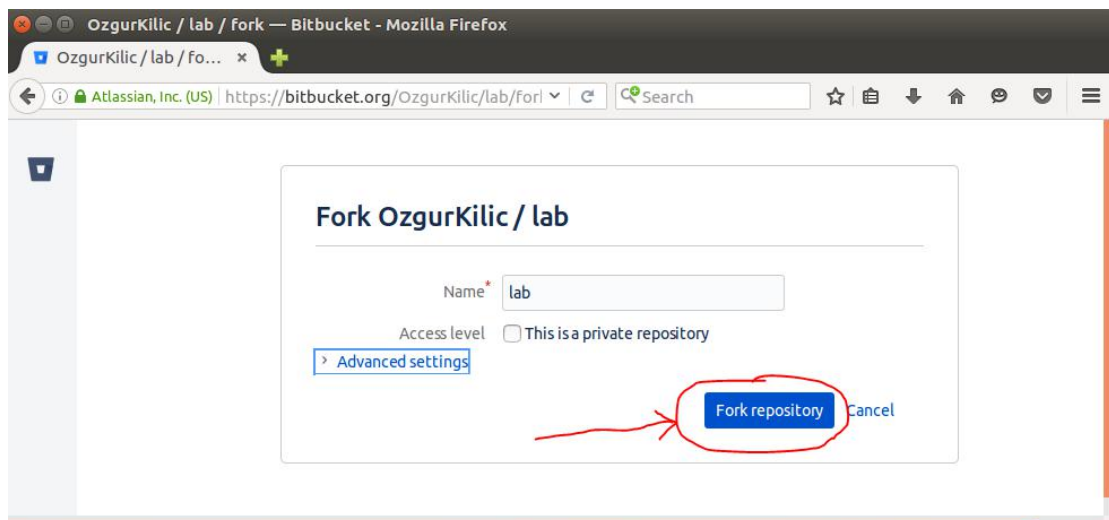
2. Click the Create button “+” in the navigation panel.



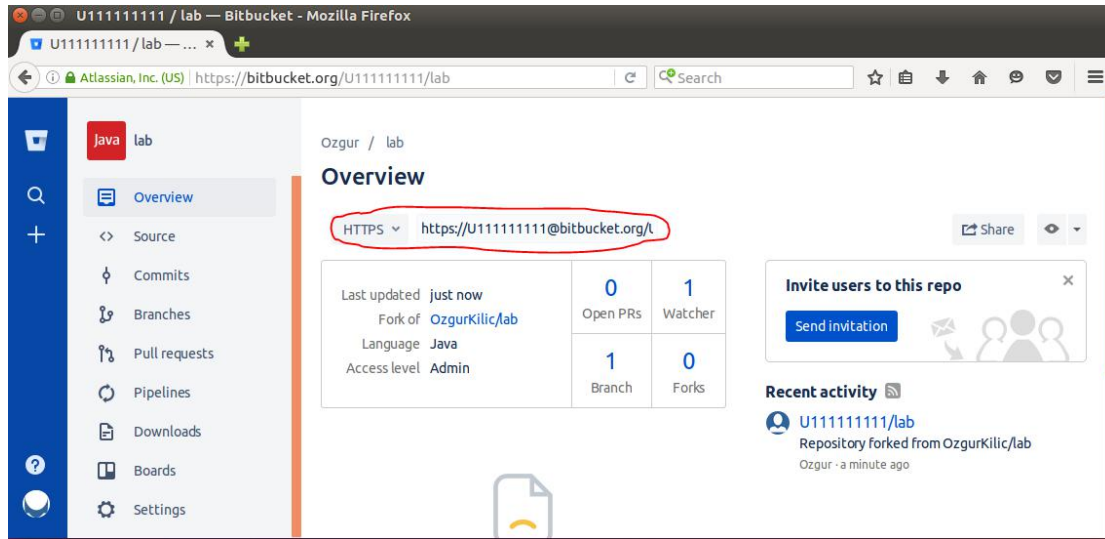
3. Then click the fork this repository link.



4. Then click the fork this repository Button.



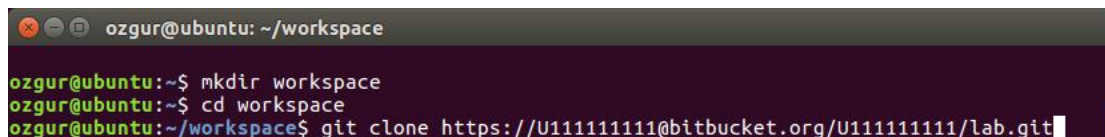
5. You will have your lab repository created as shown below. In your browser you will have your username instead of U11111111. The link circle with red line is the link of your repository.



Exercise 3: Compile and Run your first Application

1. Clone lab repository to your machine
 - Create a directory named workspace in your home folder
 - In workspace folder enter the following command, but replace username with your actual user or replace the link with your repository link.

```
git clone https://username@bitbucket.org/username/lab.git
```



- A folder named "lab" will be created after executing the command.

Note that git is already installed on linux lab machines. If you are using a machine running windows OS you can install git from <https://git-for-windows.github.io/>

2. Make sure you have the Java installed on your system by issuing the following commands:
java -version
javac -version

3. Go into the subdirectory (of the “lab” directory) named "lab1" and open the HelloWorld.java

```
ozgur@ubuntu: ~/workspace/lab/lab1
ozgur@ubuntu:~/workspace$ git clone https://U111111111@bitbucket.org/U111111111/lab.git
Cloning into 'lab'...
remote: Counting objects: 4, done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 4 (delta 0), reused 0 (delta 0)
Unpacking objects: 100% (4/4), done.
Checking connectivity... done.
ozgur@ubuntu:~/workspace$ ls
lab
ozgur@ubuntu:~/workspace$ cd lab
ozgur@ubuntu:~/workspace/lab$ cd lab1
ozgur@ubuntu:~/workspace/lab/lab1$ ls
HelloWorld.java
ozgur@ubuntu:~/workspace/lab/lab1$ gedit HelloWorld.java
```

```
HelloWorld.java (~/workspace/lab/lab1) - gedit
Open [v] [+] Save
public class HelloWorld{
    public static void main(String[] args){
        System.out.println("Hello World");
    }
}
```

Java ▾ Tab Width: 8 ▾ Ln 6, Col 2 ▾ INS

4. In the command compile the HelloWorld.java by executing the “javac HelloWorld.java”

```
ozgur@ubuntu: ~/ceng1004/ozgur/lab/lab1
ozgur@ubuntu:~/ceng1004/ozgur/lab/lab1$ javac HelloWorld.java
ozgur@ubuntu:~/ceng1004/ozgur/lab/lab1$
```

5. List the files in lab1 directory. Run the HelloWorld class by issuing the “java HelloWorld” command in the lab directory.

```
ozgur@ubuntu: ~/ceng1004/ozgur/lab/lab1
ozgur@ubuntu:~/ceng1004/ozgur/lab/lab1$ ls
HelloWorld.class HelloWorld.java
ozgur@ubuntu:~/ceng1004/ozgur/lab/lab1$ java HelloWorld
Hello World
ozgur@ubuntu:~/ceng1004/ozgur/lab/lab1$
```

Exercise 4 : Write a Class Which Prints Your Name

1. Create a file named Me.java
2. Implement the main method of the Me class to print your name.
3. Compile and run Me class

Exercise 5 : Committing your source back to Bitbucket

1. Execute the following commands in the given order but replace emailaddress and username with your email address and username which you have used during your bitbucket account creation

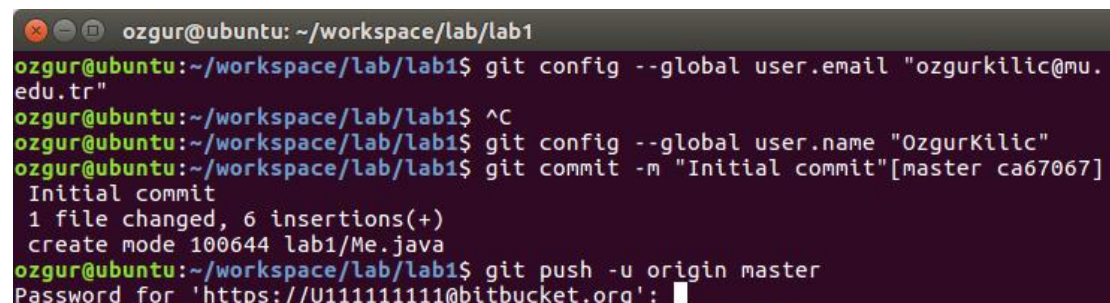
```
git add Me.java
```

```
git config --global user.email "emailaddress"
```

```
git config --global user.name "username"
```

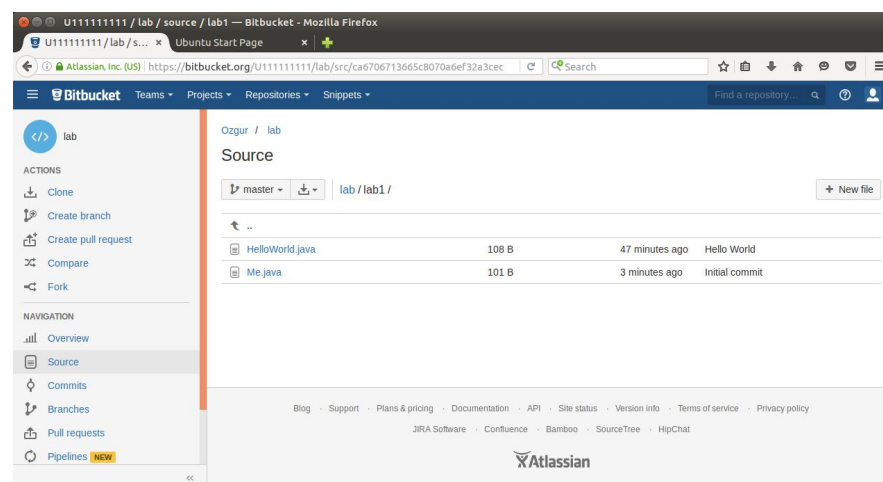
```
git commit -m "Initial commit"
```

```
git push -u origin master
```



```
ozgur@ubuntu: ~/workspace/lab/lab1
ozgur@ubuntu:~/workspace/lab/lab1$ git config --global user.email "ozgurkilog@mu.edu.tr"
ozgur@ubuntu:~/workspace/lab/lab1$ ^C
ozgur@ubuntu:~/workspace/lab/lab1$ git config --global user.name "OzgurKilog"
ozgur@ubuntu:~/workspace/lab/lab1$ git commit -m "Initial commit"[master ca67067]
Initial commit
1 file changed, 6 insertions(+)
create mode 100644 lab1/Me.java
ozgur@ubuntu:~/workspace/lab/lab1$ git push -u origin master
Password for 'https://U111111111@bitbucket.org':
```

2. Enter your bitbucket password
3. Check your repository using the Bitbucket Web site



NOTE: Your lab will **not be graded** if

- Your account name does not have the format described in lab1.pdf
- Your repository name is not lab
- Your files have compilation errors
- You have to commit sources before Wednesday 12:00
- You haven't complete the steps described in exercises
- Your added/modified files are not submitted to Bitbucket.
 - You have to add commit and push files as described in lab1.pdf