CSED211: Lab. 3

BombLab (Supplement)

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Port Forwarding

- The purpose of port fowarding is to access the bomb lab server

Port Forwarding (Terminal Version)

- In the terminal (local session, not remote session), follows below
  - `cd ~` # Go to the home directory
  - `ssh-keygen` # This is required to generate `.ssh` directory in the home directory
    - You can check whether the `.ssh` directory is generated by `ls -ald ~/.ssh`

```
ls -ald ~/.ssh
drwx------@ 15 sungjun  staff  480 Sep 25 23:46 /Users/sungjun/.ssh
```

  - `vi ~/.ssh/config` # Open the config file in the `~/.ssh` directory
  - In the config file, write below (Inside `vi`, you can save the content by `esc:wq!`)

```
Host myserver
    HostName programming2.postech.ac.kr
    Port 2022
    User allencho1222
    LocalForward 15213 127.0.0.1:15213
```

→ You can use other names

→ Your account name (programming server)

→ This enables port forwarding

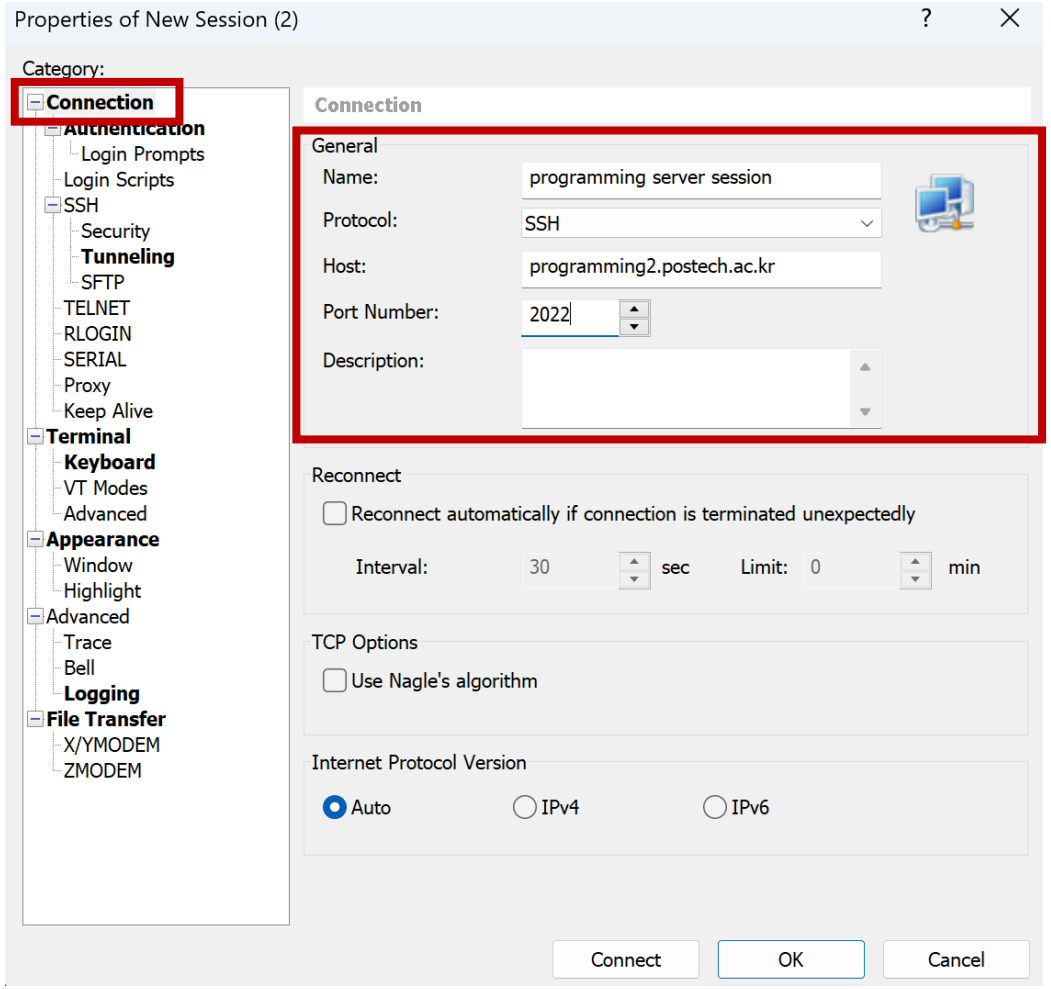
→ Indentation (e.g., tab key)

Port Forwarding (Terminal Version)

- To do port forwarding, connect to the programming server
  - `ssh myserver` # You might not use `myserver` (due to different `Host`)

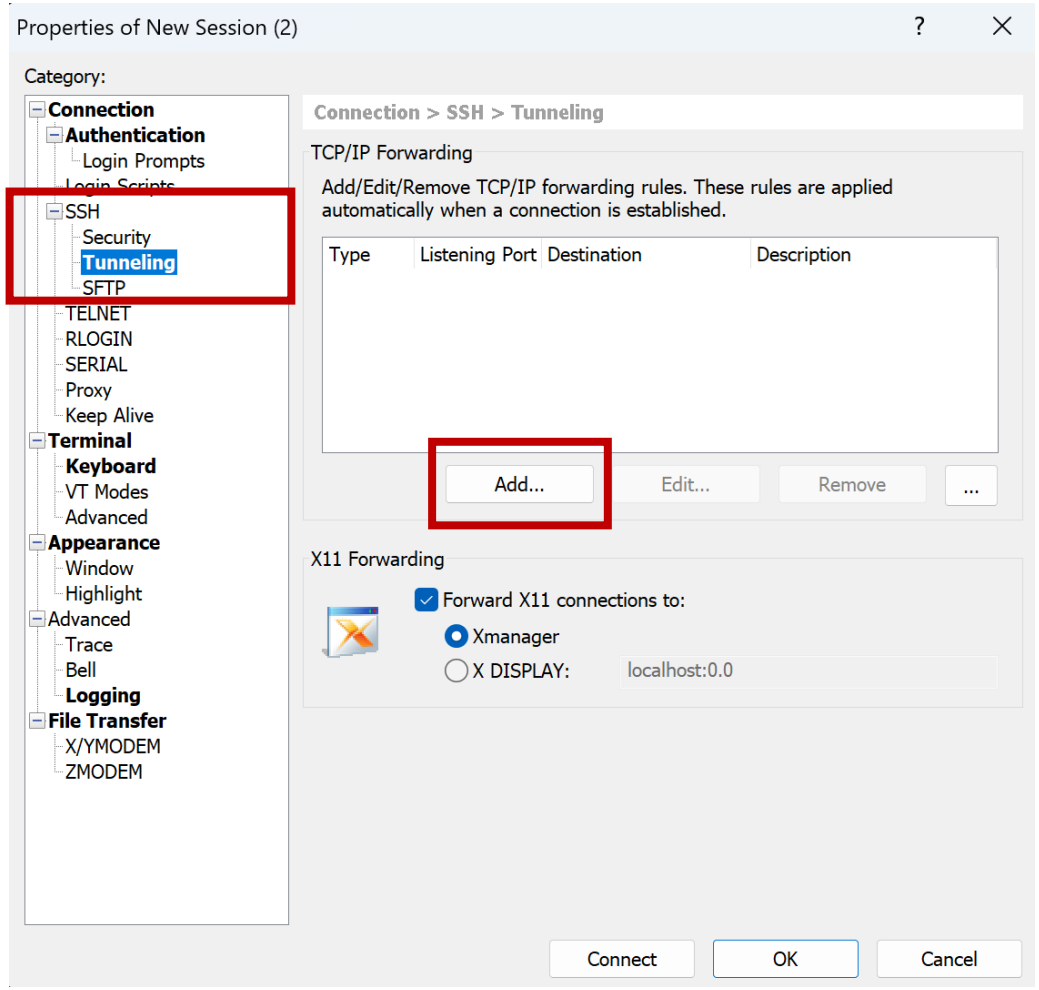
Port Forwarding (XShell Version)

- Create new session



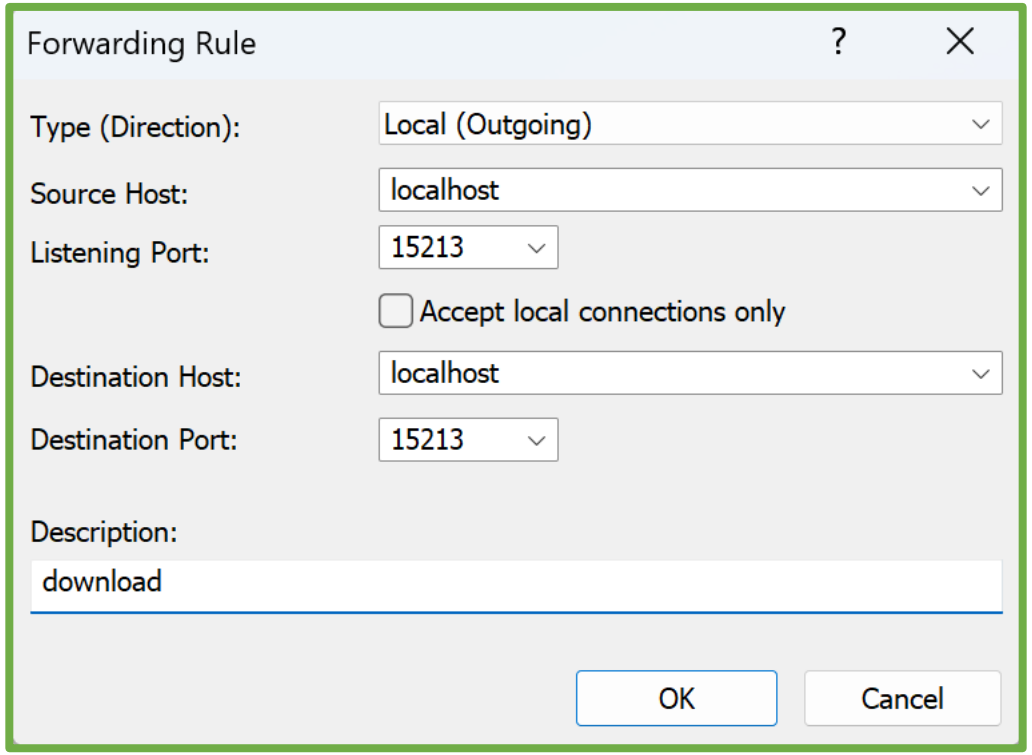
Port Forwarding (XShell Version)

- Go to SSH->Tunneling to setup port forwarding



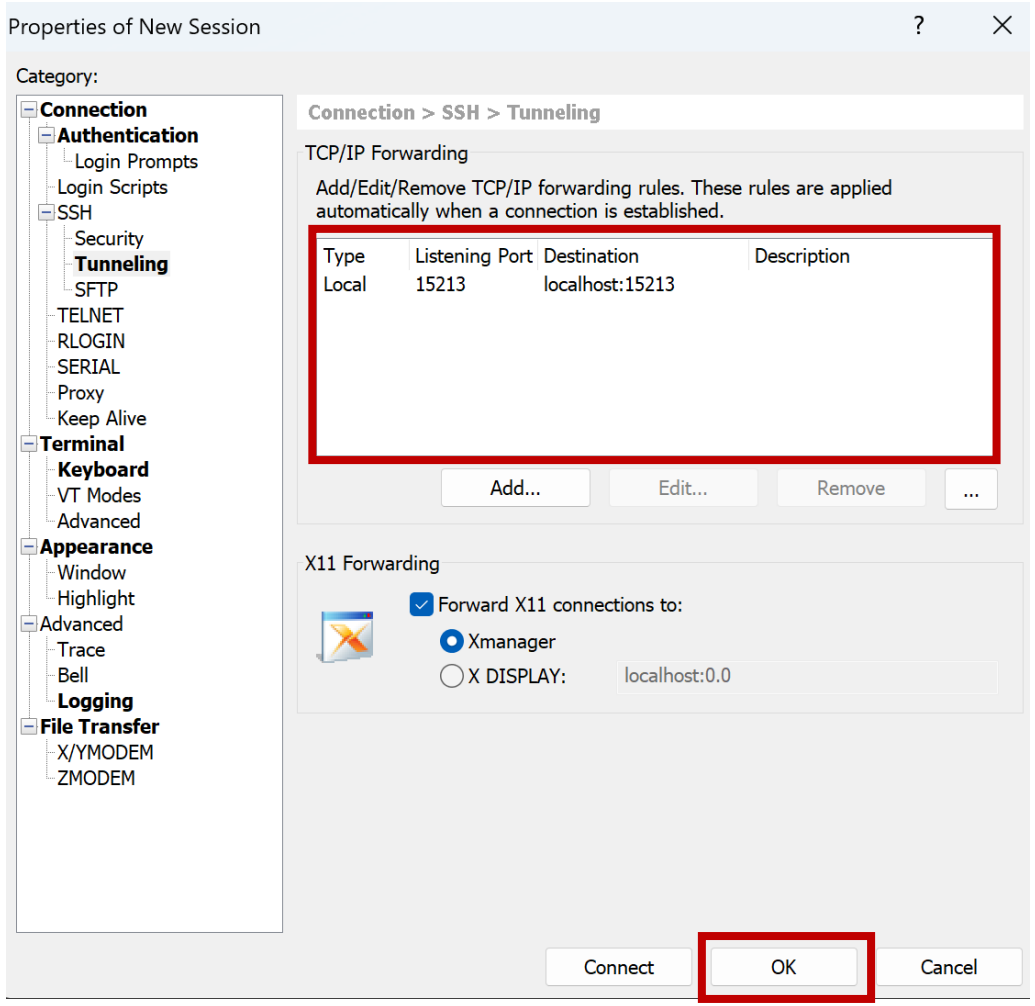
Port Forwarding (XShell Version)

- Add the forwarding rule for 15213



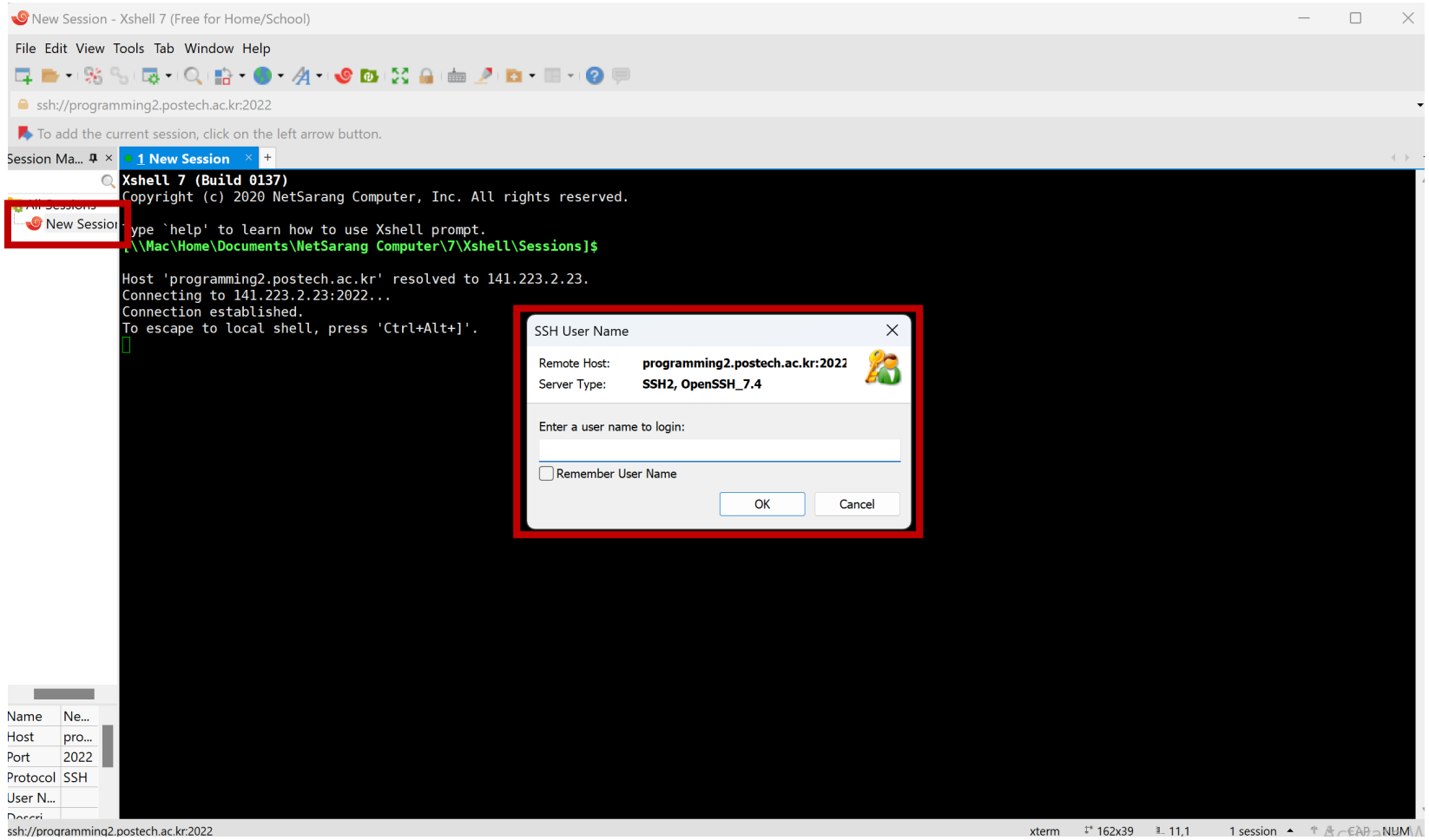
Port Forwarding (XShell Version)

- Check whether the rule is added



Port Forwarding (XShell Version)

- Connect to the programming server using configured session

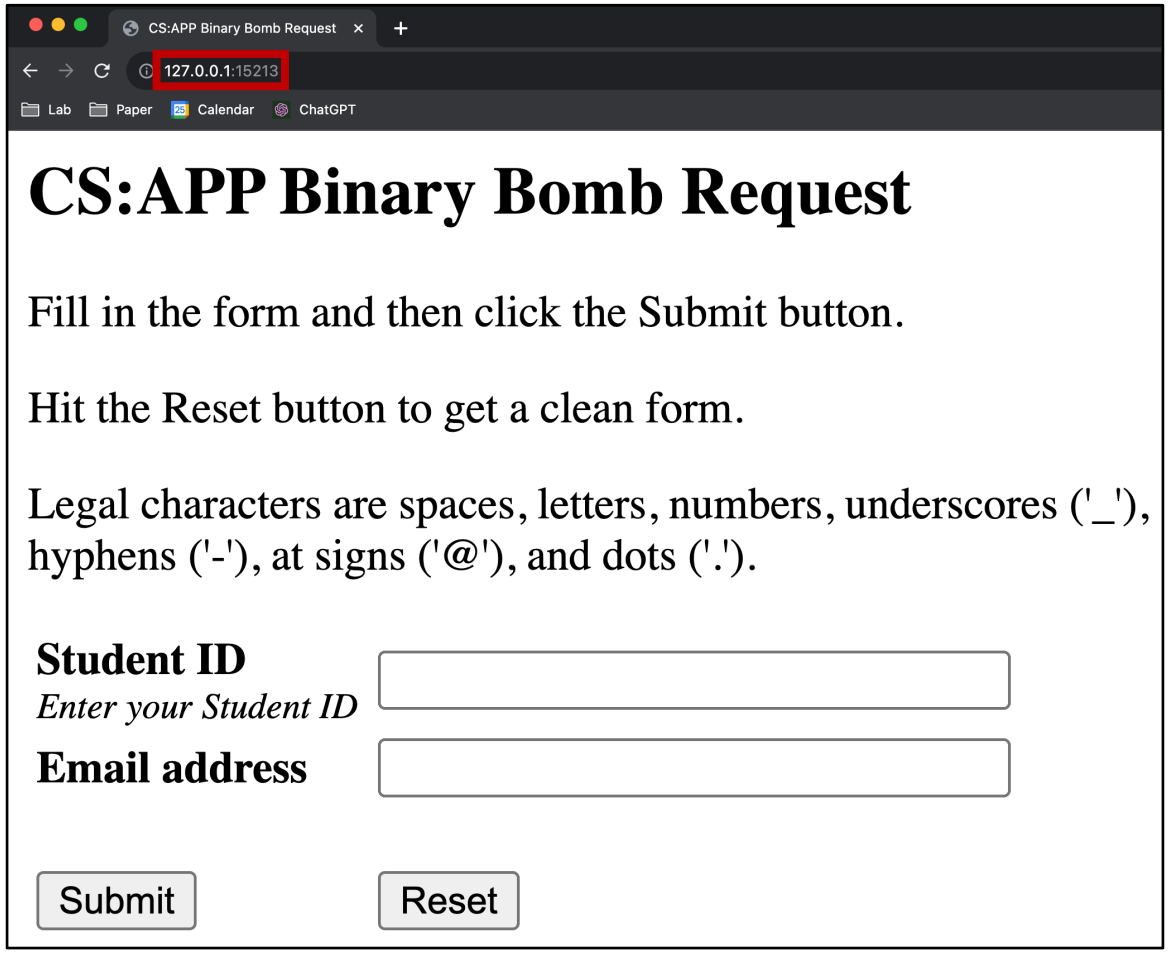


Accessing the Bomb Server

- You can access the web server only when the SSH session is alive
  - This means that you are connecting the remote machine while accessing the web server

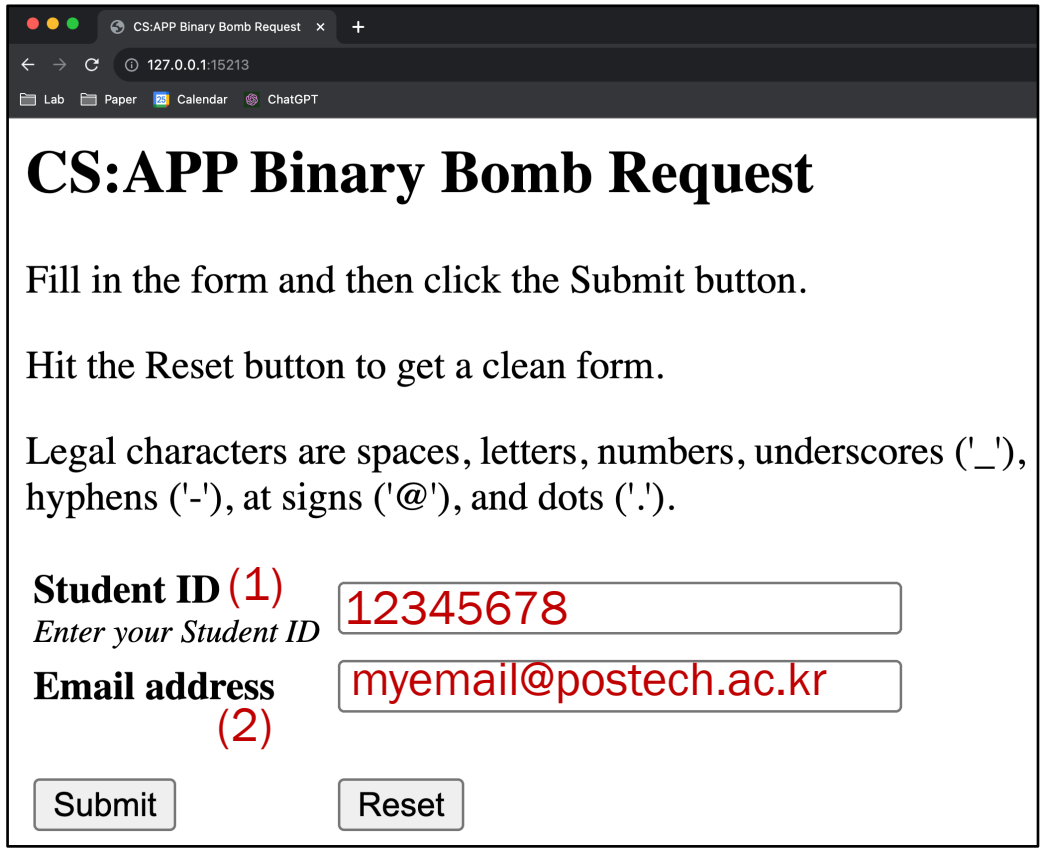
Accessing the Bomb Server

- In your web browser (e.g., Chrome), go to 127.0.0.1:15213



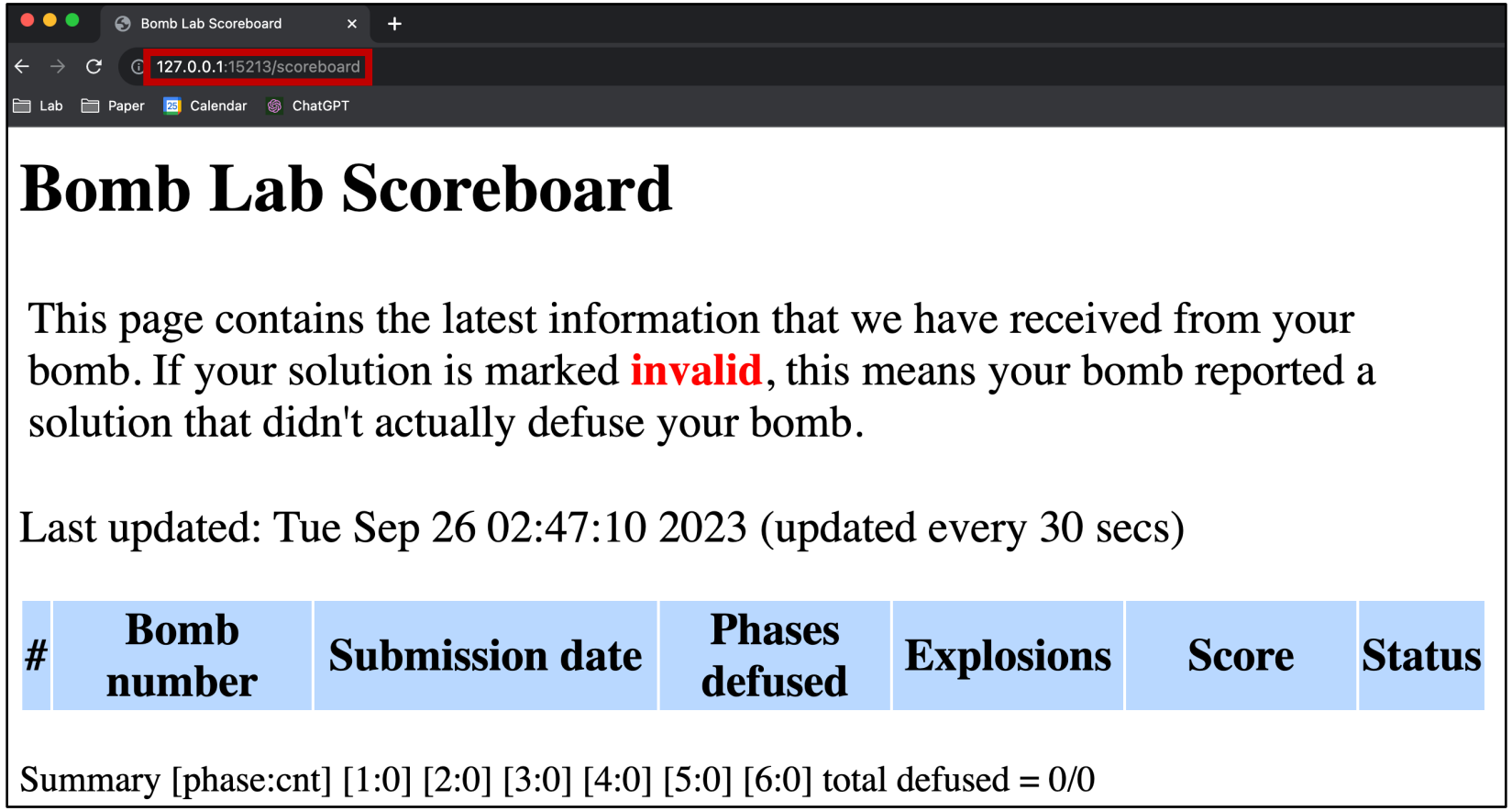
Accessing the Bomb Server

- Enter your (1) student ID and (2) POSTECH email address
  - You will download bombk.tar on the local machine
  - ‘k’s are valid only for
    - Your student ID
    - Your POSTECH email address
  - If you downloaded bomb (sumbit) multiple times, choose the first downloaded bomb



Accessing the Bomb Server

- You can check your score in the scoreboard (127.0.0.1:15213/scoreboard)



QnA

- What happens If I download bomb multiple times?
  - Each bomb has unique ID (e.g., bomb12.tar, bomb25.tar, …) based on download order.
  - While you can run both bomb12 and bomb25,
    we (TAs) only evaluate **the first downloaded** bomb (e.g., bomb12.tar).
- Is it possible to run (defuse) bomb on the local machine, and defuse it on the remote machine later?
  - Bomb from the web server cannot be executed on other machines except programming server (see below)

```
root@dev_x86 ~/bomb4 (0.017s)
./bomb
Initialization error: Running on an illegal host [2]
```