

Using the Terminal

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```
MINGW64:/c/Users/balistef
balistef@mzes072 MINGW64 ~
$ cd www/

balistef@mzes072 MINGW64 ~/www
$ ls
_nodegame-mt/      log/
artex/             nodegame/
atom-packages/   nodegame.wiki/
chrome-extensions/ nodegame.wiki-old-versions/
dash/            nodegame-api-mturk/
eslintrc/        nodegame-digitalocean/
her/             nodegame-heroku/
ineq-heroku/     nodegame-installer.js*
jsprogramming/  nodegame-mturk/

nodegame-test/
nodegame-v5.0.0-dev/
nodegame-website/
nodegame-workshop/
old/
package-lock.json
stefanobalietti.com/
The-Elusive-Green-Experiment/

balistef@mzes072 MINGW64 ~/www
$ pwd
/c/Users/balistef/www

balistef@mzes072 MINGW64 ~/www
$ cd

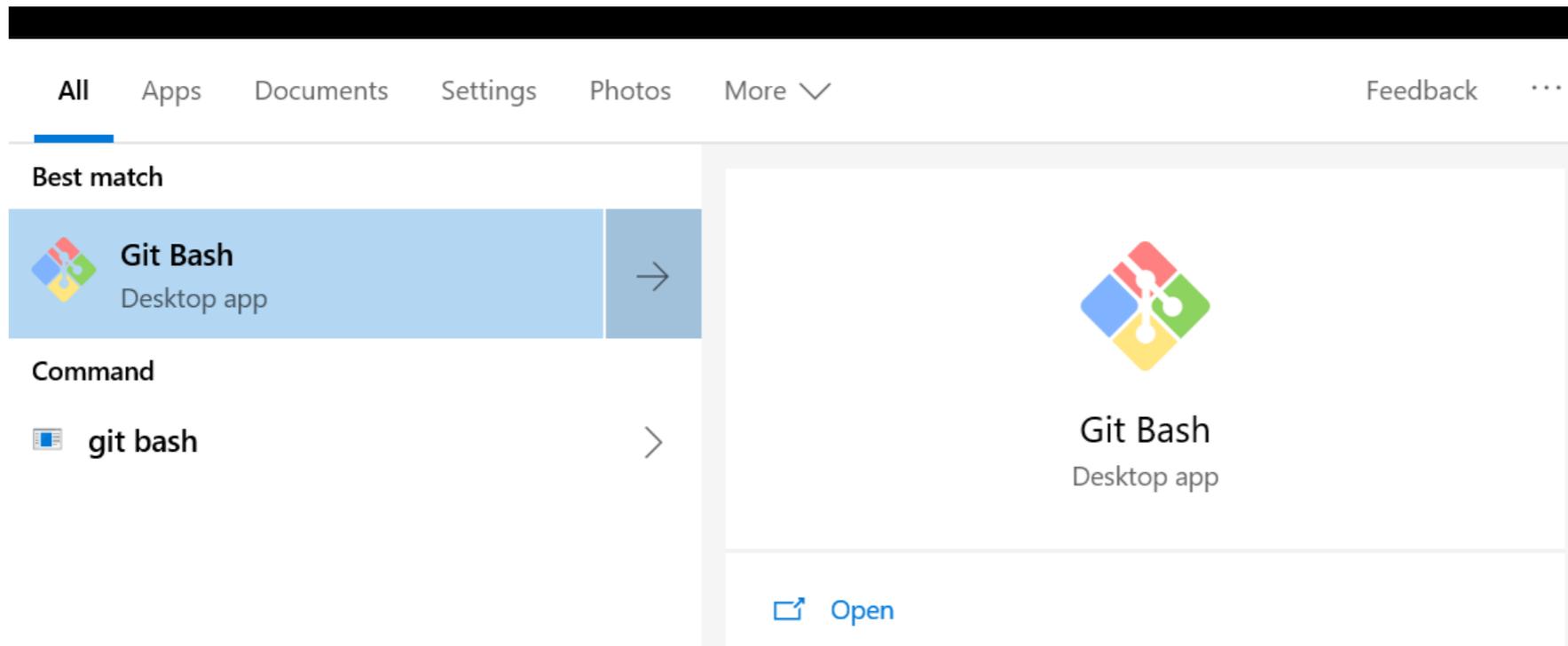
balistef@mzes072 MINGW64 ~
$
```

Design and Implementation of Online Experiments

The Terminal

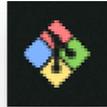
The terminal is a window in which you can type in commands that are **interpreted and executed** by your machine.

- Windows: Git Bash
- Mac / Linux: Terminal



The Terminal

Navigate your way in the Terminal



1. Open Git Bash
2. As you as you open it, you might either be in your **home folder** or in **top directory**. *How to know where you are?*

```
balistef@mzes072 MINGW64 /  
$ |
```

```
balistef@mzes072 MINGW64 ~  
$ |
```

Note. Interface from Git Bash on Windows, other terminals might look slightly different.

The Terminal

Navigate your way in Git Bash

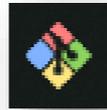


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The Terminal

Navigate your way in Git Bash



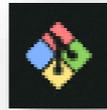
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Your
username

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```

The Terminal

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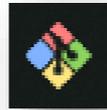
Your
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Your computer
name

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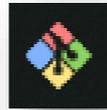
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Some Git Bash technical term (you can ignore it)
<https://en.wikipedia.org/wiki/MinGW>

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The Terminal

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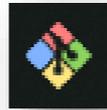
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```
balistef@mzes072 MINGW64 /  
$
```

The "Command Prompt" (or just "Prompt"): a character indicating that the computer is ready to accept commands
https://en.wikipedia.org/wiki/Command-line_interface#Command_prompt

The Terminal

Navigate your way in Git Bash



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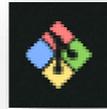


Your location on
your computer

The "Command Prompt" (or just "Prompt"): a character indicating that the computer is ready to accept commands
https://en.wikipedia.org/wiki/Command-line_interface#Command_prompt

The Terminal

Navigate your way in Git Bash



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Top Directory

In Windows C : /

```
balistef@mzes072 MINGW64 /  
$ |
```

This sign is called **slash**. It is used to separate nested directory names. Since there is no name after it, it means it is the root (top) directory of your computer.

Home Directory

In Windows: C : /Users/yourusername

```
balistef@mzes072 MINGW64 ~  
$ |
```

This sign is called **tilde**. It means your home directory.

The Terminal

Navigate your way in Git Bash

1. Open Git Bash
2. As you as you open it, you might either be in your **home folder** or in **top directory**. *How to know where you are?*
3. If you are in top directory (or any other), *how do you get back to your home directory?*

The command `cd`
(without arguments)
brings you back home

The command `pwd`
prints the **working directory**

```
balistef@mzes072 MINGW64 /  
$ cd  
  
balistef@mzes072 MINGW64 ~  
$ pwd  
/c/Users/balistef  
  
balistef@mzes072 MINGW64 ~  
$ |
```

Locating Folders on the Terminal

The Terminal

Locate your nodeGame installation folder with Git Bash



1. Open Git Bash
2. *As you know from the previous slides*, you might either be in your **home folder** or in **top directory**.
3. If you are in top directory (or any other), *how do you get back to your home directory?*
4. Enter the nodeGame installation directory. *How?* Let's assume you saved it on your desktop.

Begin Typing...

```
balistef@mzes072 MINGW64 ~  
$ cd De|
```

The Terminal

Locate your nodeGame installation folder with Git Bash

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Begin Typing...

```
balistef@mzes072 MINGW64 ~  
$ cd De|
```

Press the TAB key
for autocomplete



The Terminal

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3. *If you are in top directory (or any other), **how do you get back to your home directory?***
4. *Enter the nodeGame installation directory. **How?** Let's assume you saved it on your desktop.*

Begin Typing...

```
balistef@mzes072 MINGW64 ~  
$ cd De|
```

TA DA!

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/|
```

Press the TAB key
for autocomplete



When should I use
TAB and when should
I type directly?

The Terminal

Locate your nodeGame installation folder with Git Bash



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4. Enter the nodeGame installation directory. *How?* Let's assume you saved it on your desktop.

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nod|
```

1

The Terminal

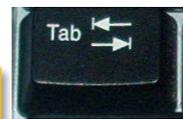
Locate your nodeGame installation folder with Git Bash



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4. Enter the nodeGame installation directory. *How?* Let's assume you saved it on your desktop.

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nod|
```

1



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-|
```

2

The Terminal

Locate your nodeGame installation folder with Git Bash

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4. Enter the nodeGame installation directory. *How?* Let's assume you saved it on your desktop.

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nod|
```

1



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-|
```

2



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-  
nodegame-installer.js nodegame-v5.4.0-dev/
```

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-|
```

3

The Terminal

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4. Enter the nodeGame installation directory. *How?* Let's assume you saved it on your desktop.

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nod|
```

1



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-|
```

2



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-  
nodegame-installer.js nodegame-v5.4.0-dev/
```

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-|
```

3

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-v|
```

4



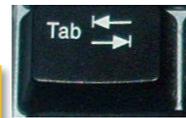
The Terminal

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```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nod|
```

1



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-|
```

2



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-  
nodegame-installer.js nodegame-v5.4.0-dev/
```

3

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-v|
```

4



```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-|
```

```
balistef@mzes072 MINGW64 ~  
$ cd Desktop/nodegame-v5.4.0-dev/|
```

5

The Terminal

Locate your nodeGame installation folder with Git Bash



1. Open Git Bash
2. *As you know from the previous slides*, you might either be in your **home folder** or in **top directory**.
3. If you are in top directory (or any other), *how do you get back to your home directory?*
4. Enter the nodeGame installation directory. *How?* Let's assume you saved it on your desktop.
5. You can now safely start nodeGame

Tells you that you are in the right folder

```
balistef@mzes072 MINGW64 ~/Desktop/nodegame-v5.4.0-dev  
$ node launcher.js  
nodeGame v.5.4.0
```

A Common Error: Cannot Find Launcher

```
balistef@mzes072 MINGW64 ~
$ node launcher.js
internal/modules/cjs/loader.js:638
  throw err;
  ^
Error: Cannot find module 'C:\Users\balistef\launcher.js'
    at Function.Module._resolveFilename (internal/modules/cjs/loader.js:636:15)
    at Function.Module._load (internal/modules/cjs/loader.js:562:25)
    at Function.Module.runMain (internal/modules/cjs/loader.js:829:12)
    at startup (internal/bootstrap/node.js:283:19)
    at bootstrapNodeJSCore (internal/bootstrap/node.js:622:3)
```

This means that you are not inside the nodeGame directory.
Let's understand how to get in there.

Terminal Commands To Remember



```
balistef@mzes072 MINGW64 /  
$ cd
```

cd = goes to home directory (without parameters)

```
balistef@mzes072 MINGW64 ~  
$ pwd  
/c/Users/balistef
```

pwd = print working directory (if you are lost)

```
balistef@mzes072 MINGW64 ~  
$ cd Pictures/
```

cd Pictures = goes into the Pictures directory

Hint! Use TAB to autocomplete the name of files

```
balistef@mzes072 MINGW64 ~/Pictures  
$ ls
```

ls = list files in directory

```
canceled_delta_hotel.PNG  conferenz_css_zurich.png  desktop.ini
```

```
balistef@mzes072 MINGW64 ~/Pictures  
$ cd ..
```

cd .. = goes one directory above

CTRL-L will clear

CTRL-D will exit