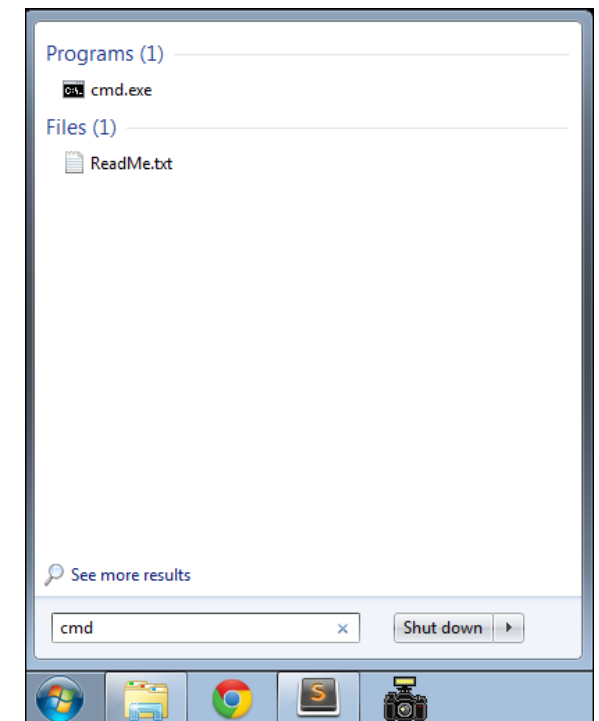
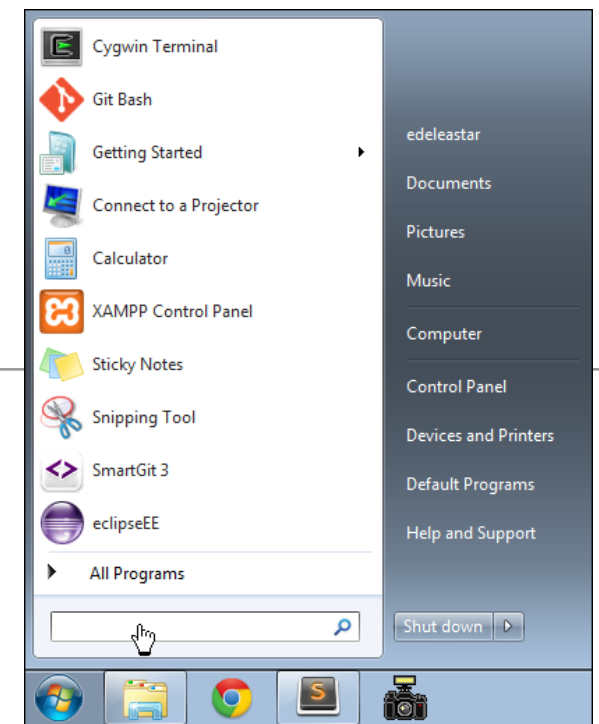
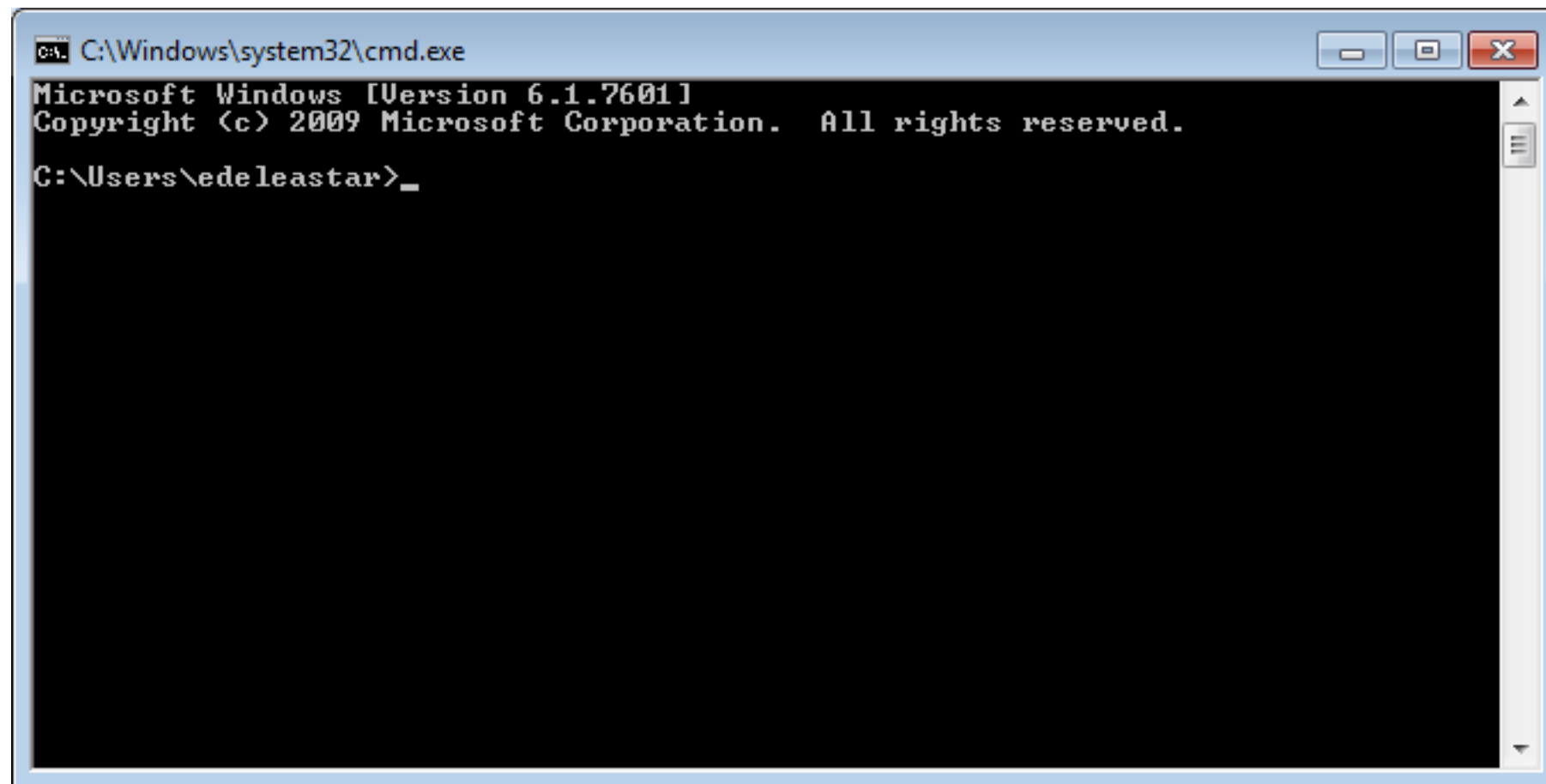


Getting Started with Play

Web Development

DOS Commands




- This is the Command Line Interface for Windows (CLI)
- In Mac/Linux it is called “Terminal”
- Learning to use the CLI is an **essential** skill for a programmer

Example DOS Commands

- **dir**
 - list all files in a directory
- **cd ..**
 - change to a parent directory
- **cd <directory name>**
 - change to a specific directory
- **mkdir <directory name>**
 - create a directory
- **rmdir <directory name>**
 - delete a directory
- On Mac/Linux:
 - use **ls** instead of **dir**

- These commands always have a 'current directory' in mind
- A directory is another name for a folder.
- On Windows, the current directory appears in the 'prompt'



```
C:\workspace>_
```

- In Mac/Linux, type '**pwd**' to find out the current directory.
- On Windows, '\' or '/' can be used to separate directory names
- On Mac/Linux, only '/' is accepted
- So --> always is '/' to avoid confusion

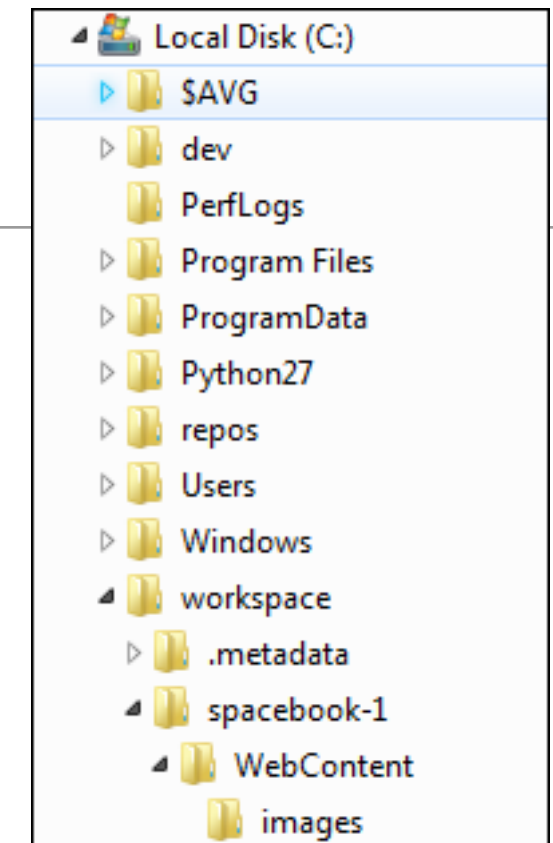
```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\edelestar>cd ..
C:\Users>cd ..
C:\>cd workspace
C:\workspace>dir
Volume in drive C has no label.
Volume Serial Number is 6C80-5ECD

Directory of C:\workspace

23/09/2012  15:59    <DIR>          .
23/09/2012  15:59    <DIR>          ..
23/09/2012  15:58    <DIR>          .metadata
23/09/2012  15:59    <DIR>          spacebook-1
                0 File(s)              0 bytes
                4 Dir(s)      8,778,682,368 bytes free

C:\workspace>_
```



C:\Users\edelestar>cd ..

C:\Users>cd ..

C:\>cd workspace

C:\>workspace>dir

...

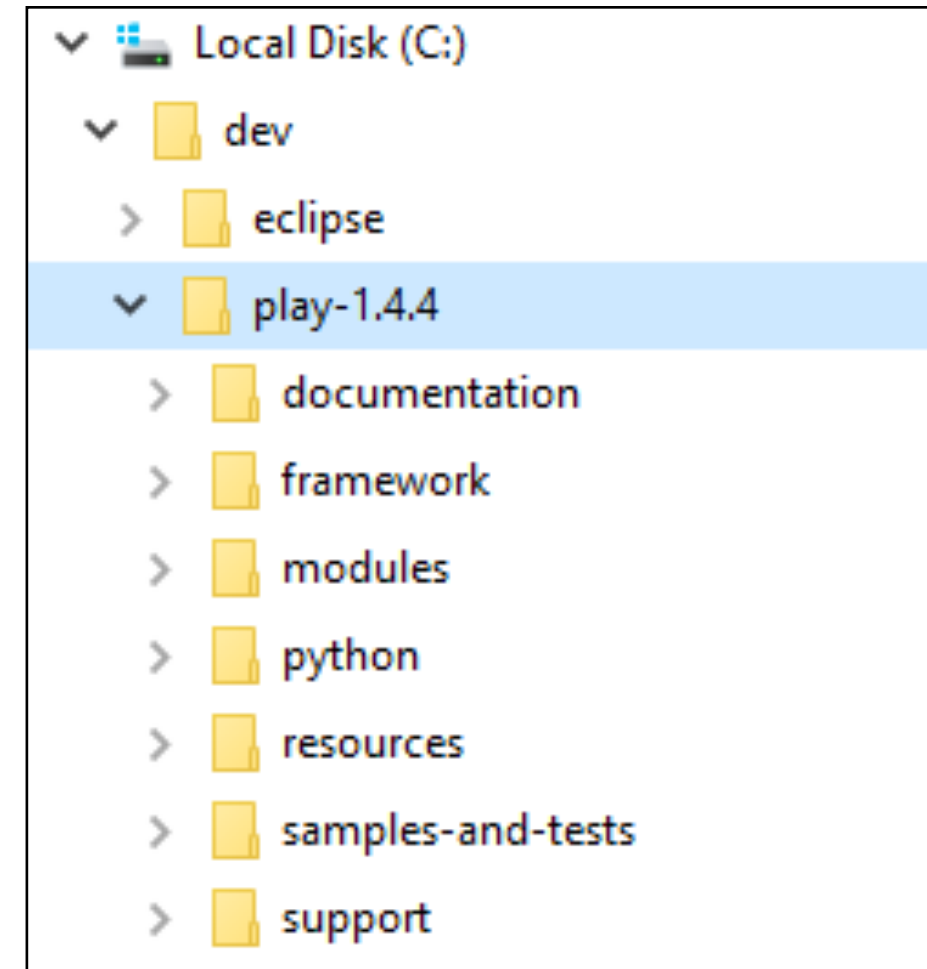
...

C:\>

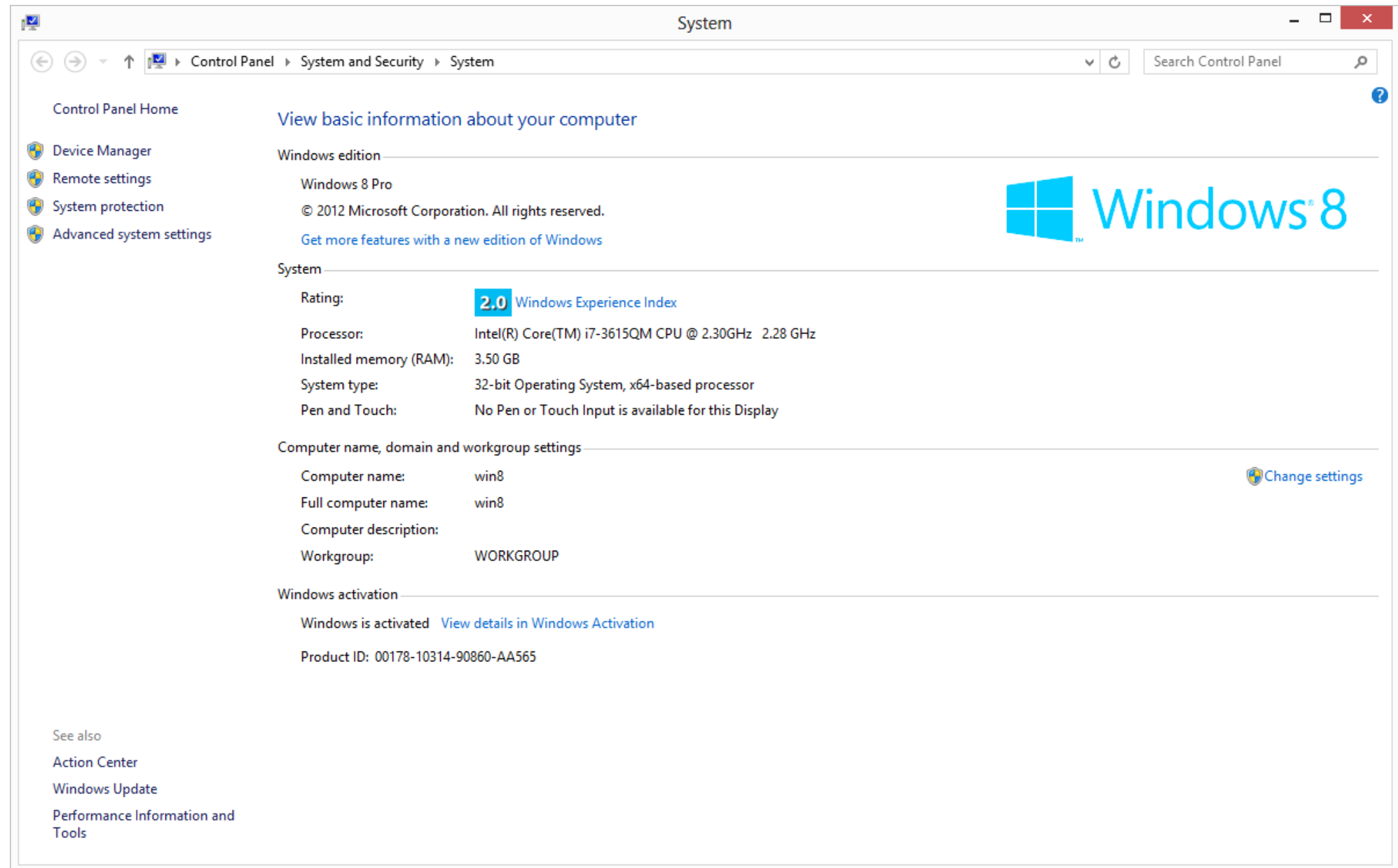
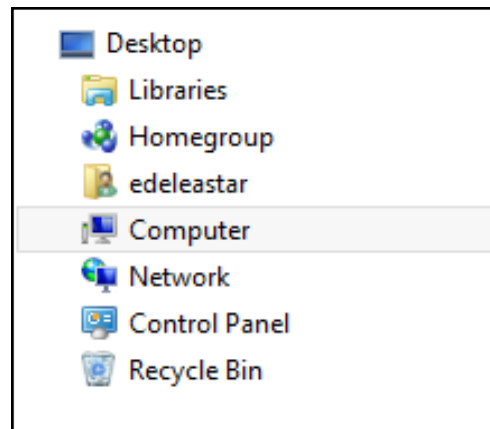
- Never use spaces in directory or file names
- Never use upper case in directory or file names
- If you wish to use readable multiple words for a directory or file name, separate the words with '-'. e.g.
 - web-development
 - java-projects

Installing Play

- Play must be downloaded and installed on your PC
 - www.playframework.org
 - Use version 1.4.4
- Installing Play on your PC is just expanding the zip archive into a folder
- This folder must be placed on the 'System Path'
- This will equip the PC with a new command



Path Configuration



Path Configuration

Environment Variables

User variables for edele

Variable	Value
OneDrive	C:\Users\edele\OneDrive
Path	%USERPROFILE%\AppData\Local\Microsoft\WindowsApps;C:\Users\edele\AppData\...
TEMP	%USERPROFILE%\AppData\Local\Temp
TMP	%USERPROFILE%\AppData\Local\Temp

New...

Edit...

Delete

System variables

Variable	Value
ComSpec	C:\Windows\system32\cmd.exe
NUMBER_OF_PROCESSORS	1
OS	Windows_NT
Path	C:\ProgramData\Oracle\Java\javapath;C:\Windows\system32;C:\Windows;C:\Win...
PATHEXT	.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
PROCESSOR_ARCHITECTURE	AMD64
PROCESSOR_IDENTIFIER	Intel64 Family 6 Model 42 Stepping 7, GenuineIntel
PROCESSOR_LEVEL	6
PROCESSOR_REVISION	2a07
PSModulePath	%ProgramFiles%\WindowsPowerShell\Modules;C:\Windows\system32\WindowsP...

New...

Edit...

Delete

OK

Cancel

System Properties

Computer Name Hardware Advanced System Protection Remote

You must be logged on as an Administrator to make most of these changes.

Performance

Visual effects, processor scheduling, memory usage and virtual memory

Window Snip

Settings...

User Profiles

Desktop settings related to your sign-in

Settings...

Start-up and Recovery

System start-up, system failure and debugging information

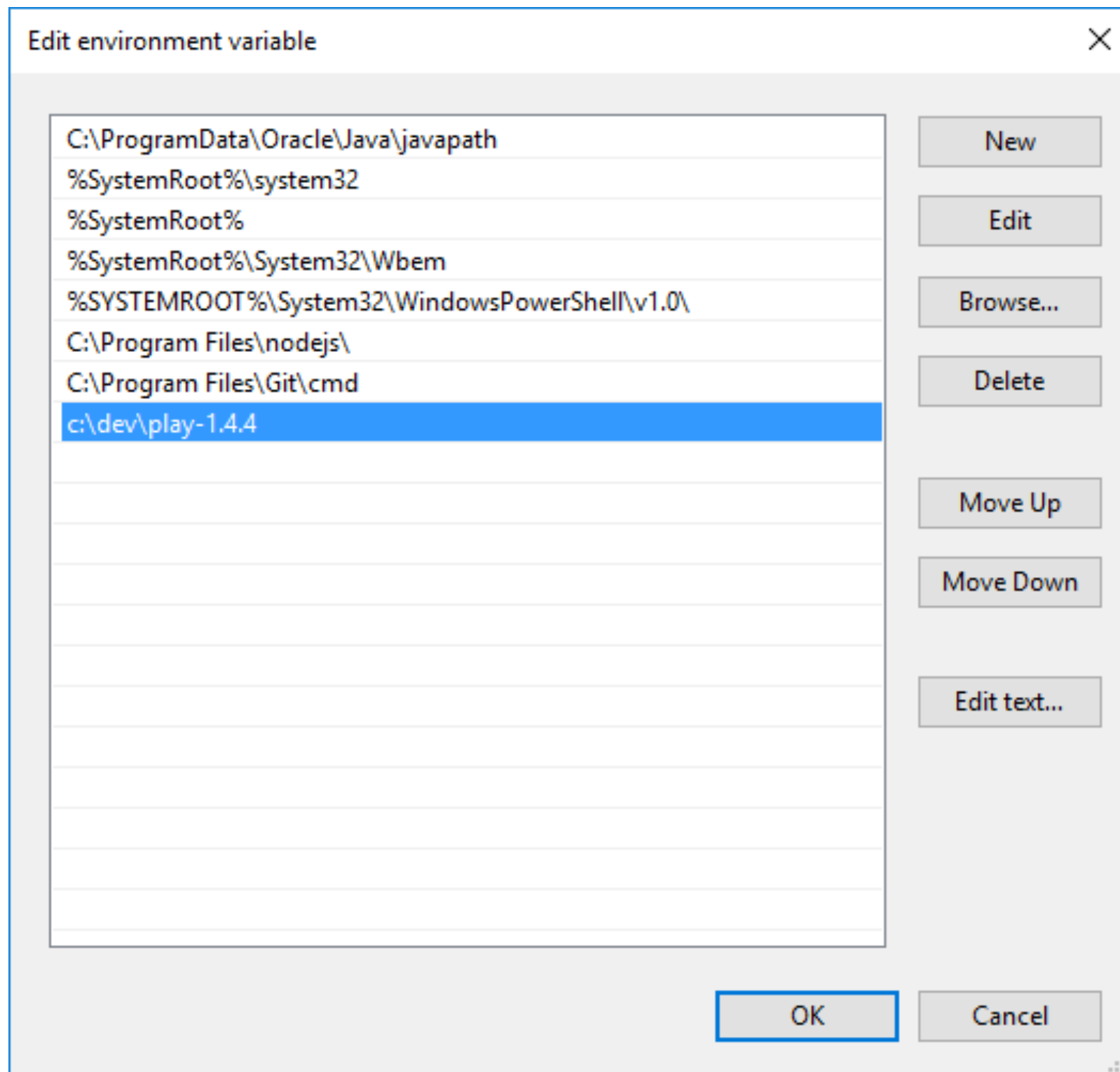
Settings...

Environment Variables...

OK

Cancel

Apply



- New entry in system path

Verifying Play

- Play applications are created and tuned using the shell (i.e. DOS on windows)
 - You must be able to navigate your folder structure using the shell
 - If you are having difficulty - fix this immediately (i.e. learn basics of DOS)!
- To verify play, just type **play** on command line
 - This works if play is 'on the path'
- If no response (error), then type
 - **c:\dev\play-1.4.4\play**
 - This is an 'explicit path' - ie. a fully qualified path to the play program

[illegible]

In DOS

[illegible]

- This command creates a skeleton play application called 'playdemo' in the current directory (c:\dev\ws in the above example)
- Usually you will want to 'change into' this new directory for subsequent commands

```
c:\dev\ws>cd playdemo
```

```
c:\dev\ws\playdemo>
```

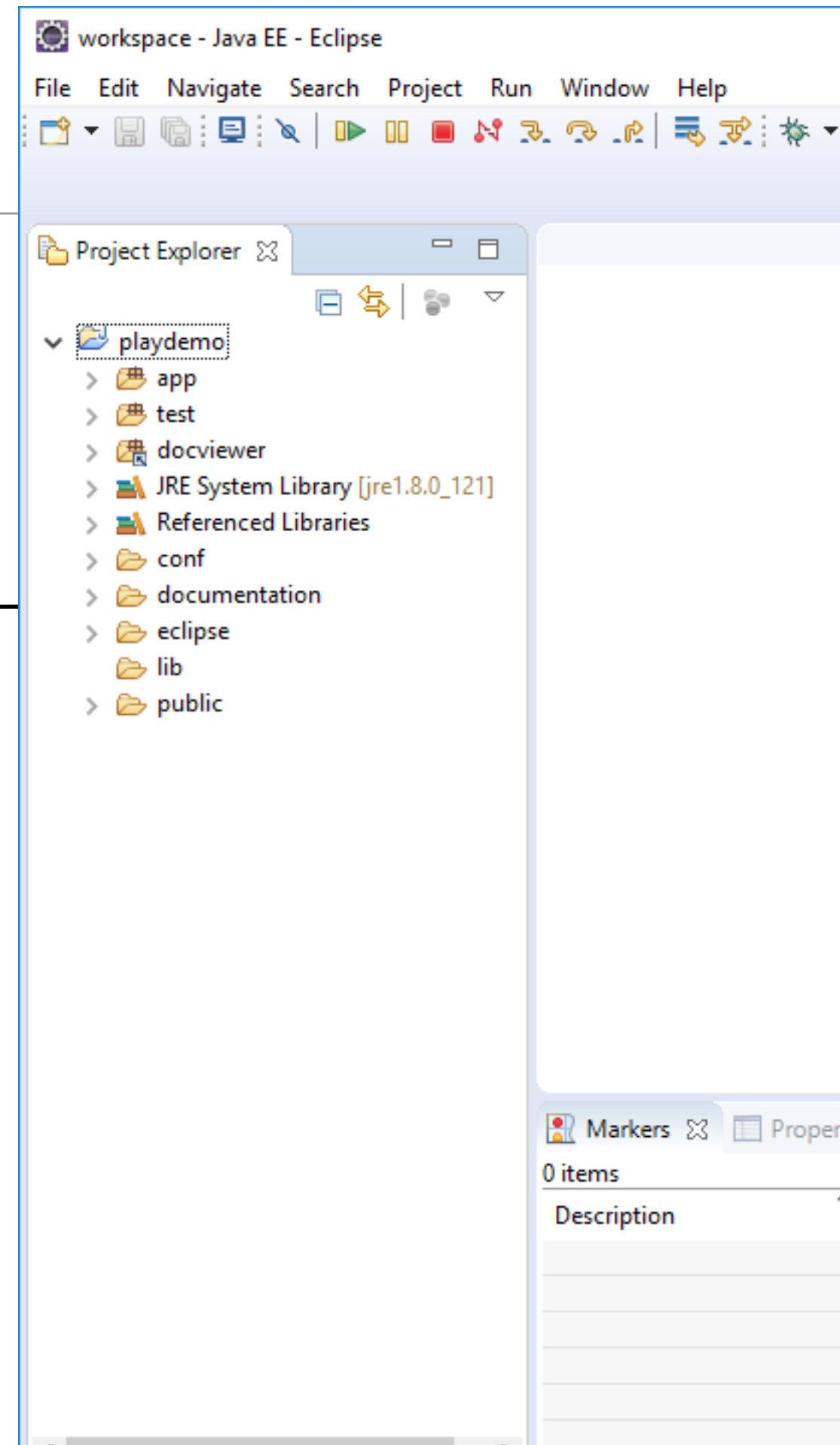
Eclipsify

- In order to make the new project visible to Eclipse
 - “*play eclipsify*”

[illegible]

In Eclipse

- If we 'import' the newly created project into eclipse, we can now develop the application in the IDE (Eclipse is an IDE).
- The project may not look like this initially.



Running the Play Application

- We have generated an “Web App” NOT at “Web Site”
- A Web App requires an ‘Application Server’ to run
- Play has one built-in, so running the server + the web app is a single command

Back in the shell, from inside the `playdemo` folder, type the following command:

play run

Play will respond with something like this:

```
~  
~  
~ | _ _ _ | _ | _ _ _ _ _ | _ |  
~ | ' _ \ | / _ ' | | | | _ |  
~ | _ _ / | \ _ _ _ | \ _ _ ( _ )  
~ | _ | _ _ _ | _ _ /  
~  
~ play! 1.4.4, http://www.playframework.org  
~  
~ Ctrl+C to stop  
~  
Listening for transport dt_socket at address: 8000  
16:30:33,586 INFO ~ Starting /Users/edeleastar/Dropbox/webdev/2012/dev/projects/spacebook  
16:30:34,646 WARN ~ You're running Play! in DEV mode  
16:30:34,894 INFO ~ Listening for HTTP on port 9000 (Waiting a first request to start) ...  
16:30:58,912 INFO ~ Application 'Spacebook' is now started !
```

You may get a dialog from the firewall, asking for permission to run, which you should agree to.

Now run the browser, and navigate to:

- <http://localhost:9000/>

you should see something like this:

The Skeleton App:

- The application is now 'hosted' on our local machine (localhost)
- To use it, we browse to:

http://localhost:9000/
- 9000 is a random 'port' number in which the app is being 'served'
- The 'default' app is documentation on play itself

