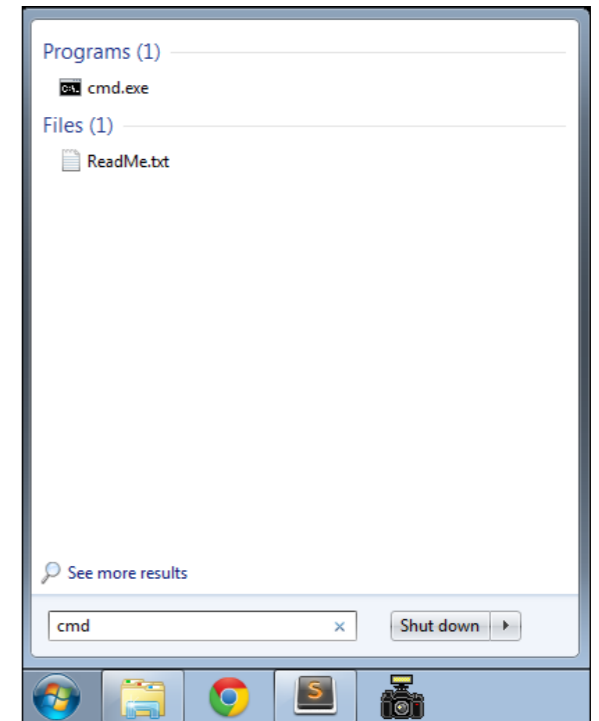
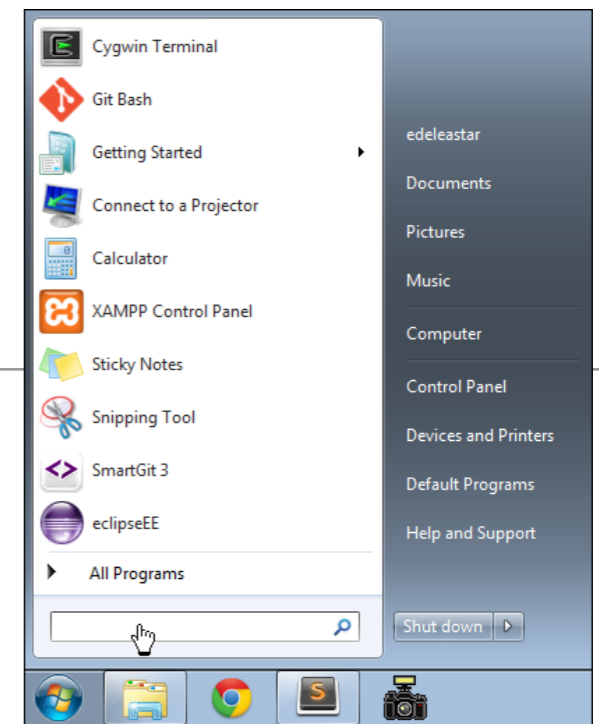
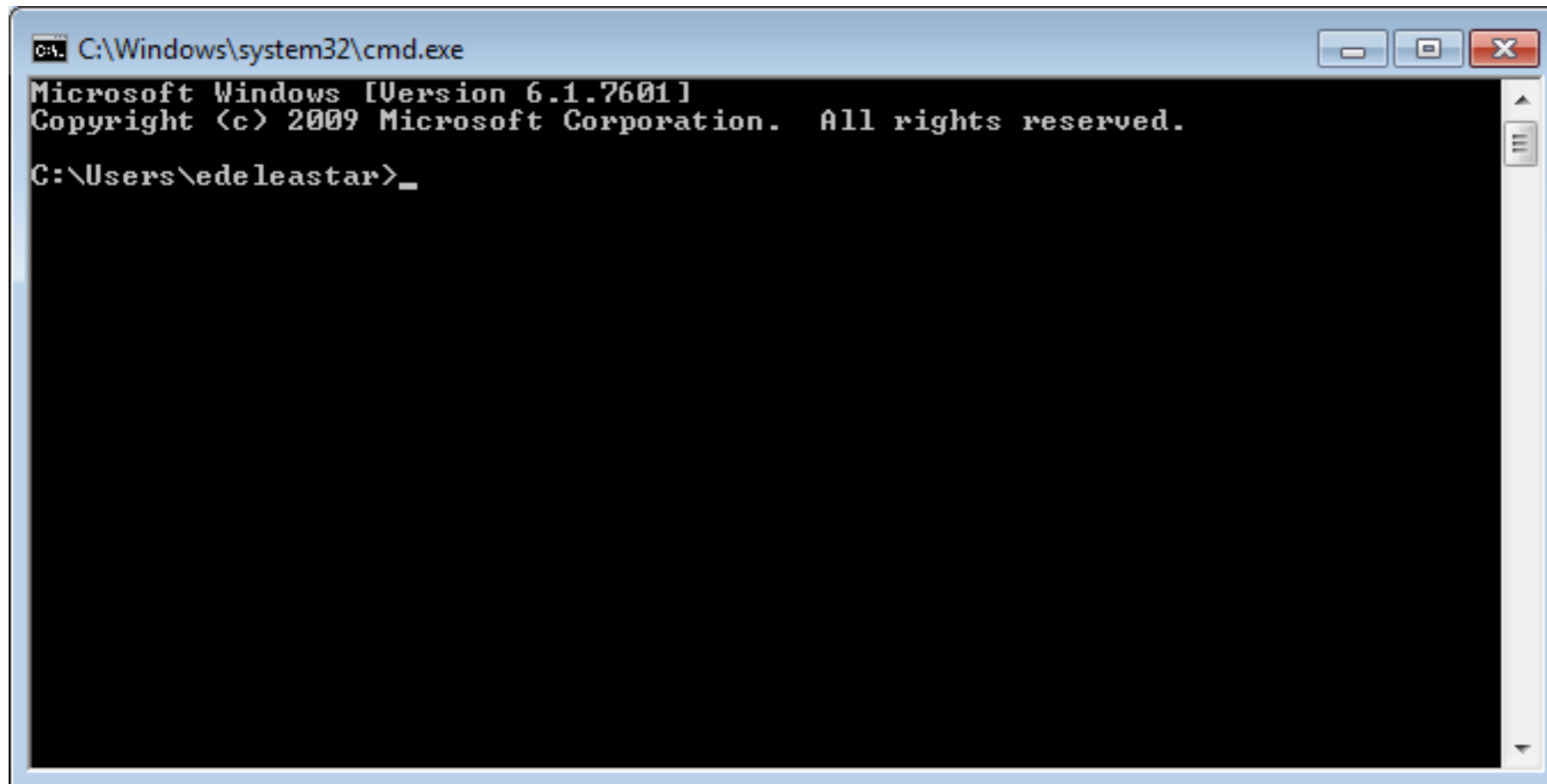


# Getting Started with Play

---

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

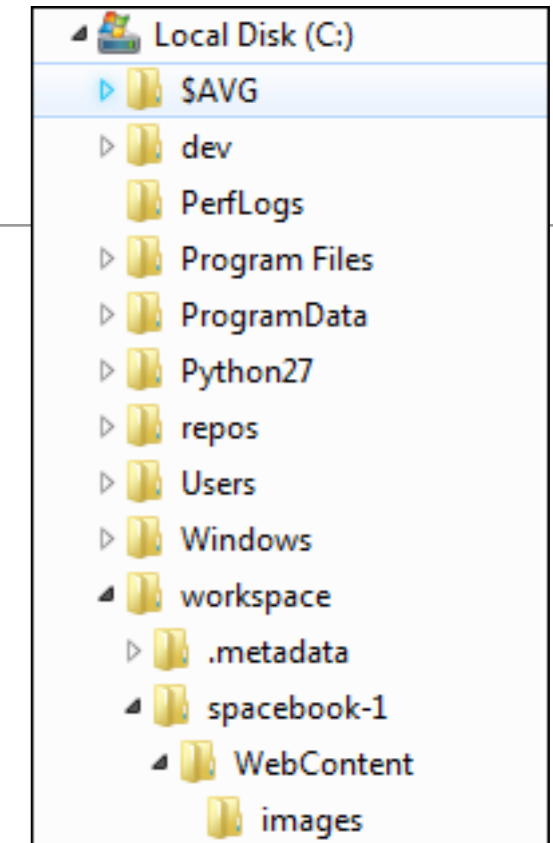
```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\edeleastar>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\edeleastar>cd ..`

`C:\Users>cd ..`

`C:\>cd workspace`

`C:\>workspace>dir`

...

...

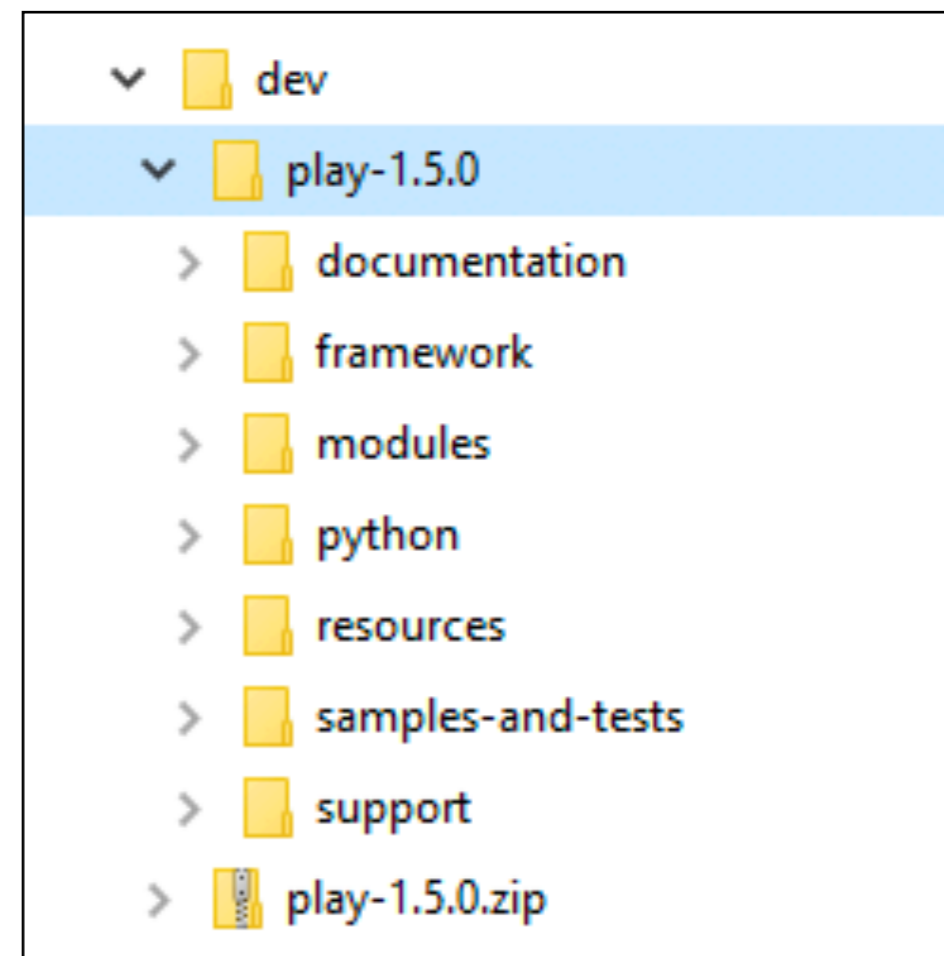
`C:\>`

- 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

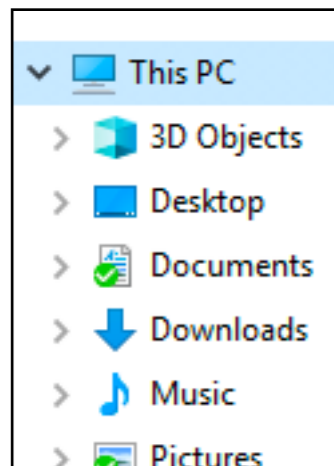
# Installing Play

---

- Play must be downloaded and installed on your PC
  - [www.playframework.org](http://www.playframework.org)
  - Use version 1.5.0
- 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

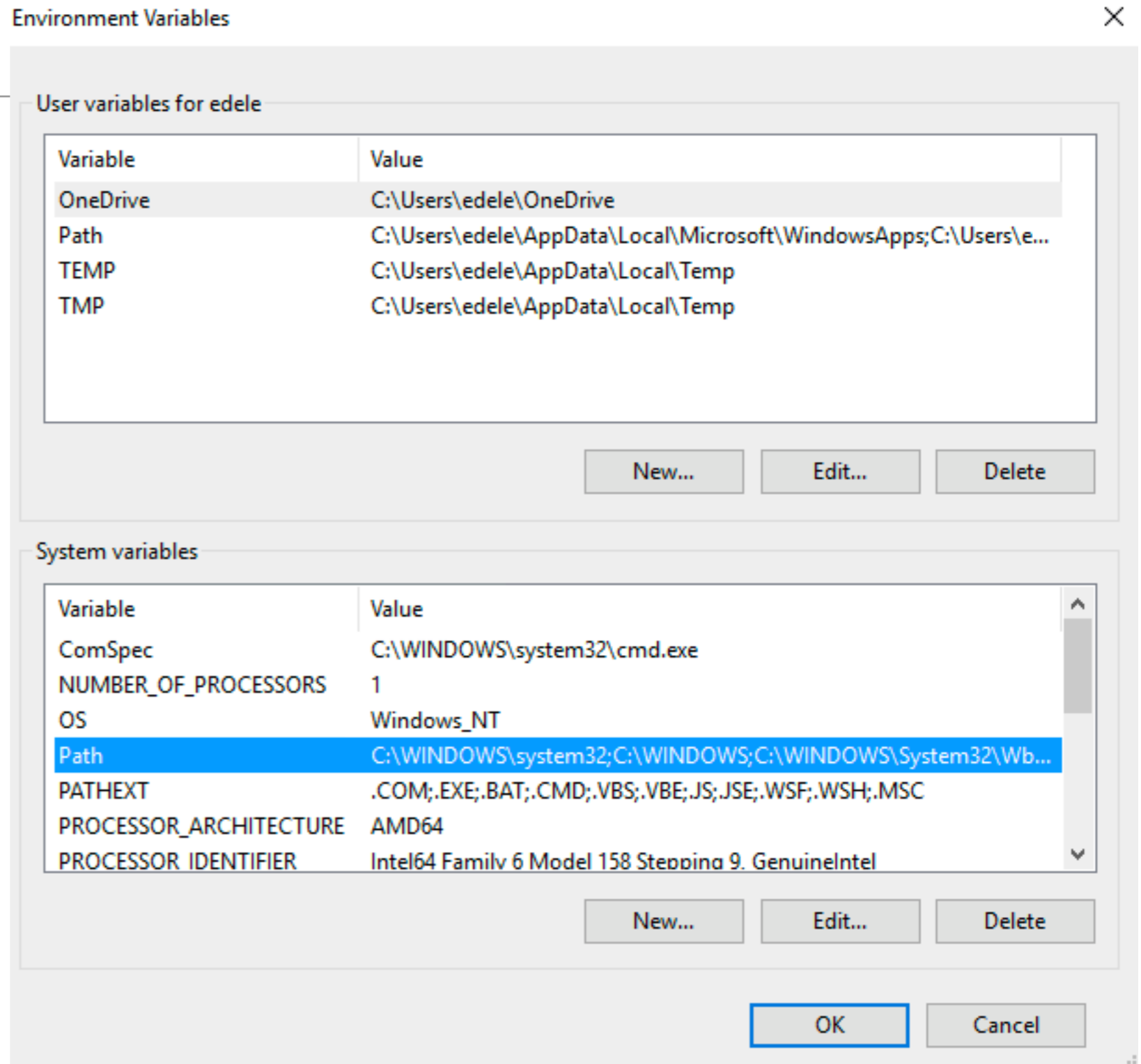
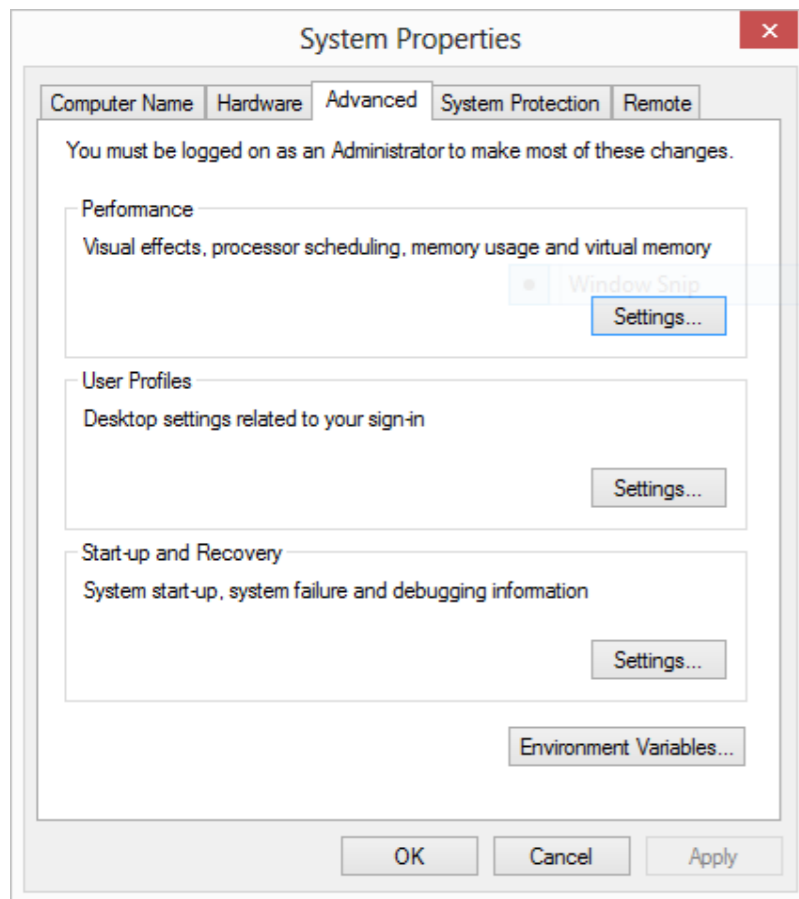


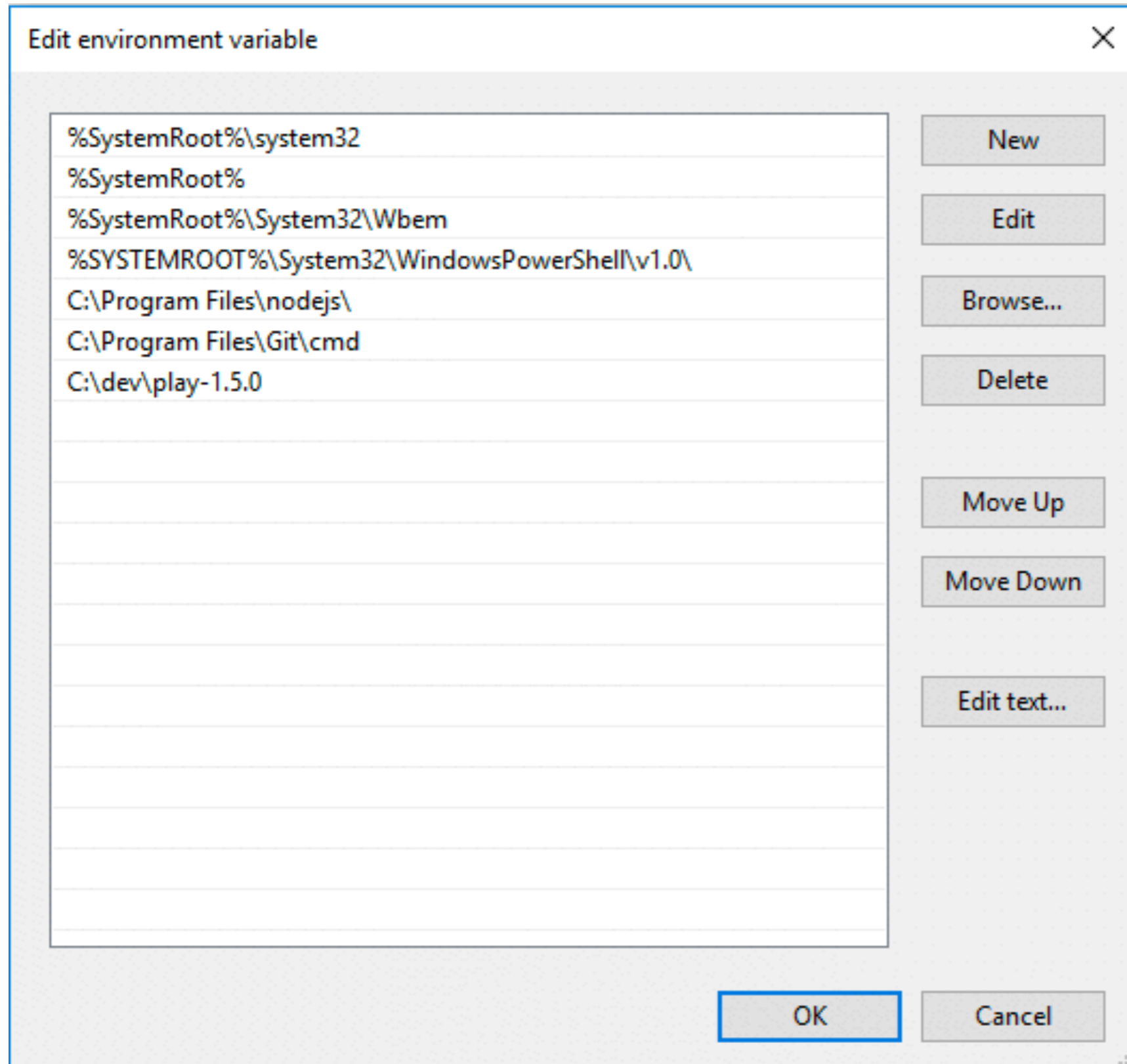
The screenshot shows the Windows System Control Panel window. The title bar reads 'System'. The breadcrumb navigation path is 'Control Panel > System and Security > System'. The main content area is titled 'View basic information about your computer'. It displays the following information:

- Windows edition:** Windows 10 Pro  
© 2017 Microsoft Corporation. All rights reserved.
- System:**
  - Processor: Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz 3.41 GHz
  - Installed memory (RAM): 8.00 GB
  - System type: 64-bit Operating System, x64-based processor
  - Pen and Touch: No Pen or Touch Input is available for this Display
- Computer name, domain and workgroup settings:**
  - Computer name: DESKTOP-PJ2E0M3 [Change settings](#)
  - Full computer name: DESKTOP-PJ2E0M3
  - Computer description:
  - Workgroup: WORKGROUP
- Windows activation:**
  - Windows is activated [Read the Microsoft Software Licence Terms](#)
  - Product ID: 00330-80187-17929-AA299 [Change product key](#)

At the bottom left, there is a 'See also' section with the link 'Security and Maintenance'.

# Path Configuration





- New entry in system path





# Create a Project

---

- This command creates a skeleton play application called 'playdemo' in the current directory
- Usually you will want to 'change into' this new directory for subsequent commands

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

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

```
play new playdemo
```

You should get:

```
~
~
~  _ _ _ _ _
~  |   \   /   |   |   |
~  |   \   /   |   |   |
~  |   \   /   |   |   |
~  |   \   /   |   |   |
~
~  play! 1.5.0, http://www.playframework.org
~
~ The new application will be created in c:\course-work\
~ What is the application name? [playdemo]
```

Press return when prompted for the name to accept the default (playdemo)

```
~
~ OK, the application is created.
~ Start it with : play run playdemo
~ Have fun!
~
```

# Idealize

---

Now, making sure you are still in the playdemo folder, run this command:

```
play idealize
```

The system will respond with:

```
~
~  _ _ _ | | _ _ _ | |
~ | ' _ \ | / _ ' | | | |
~ | _ _ / | \ _ _ \ _ _ ( )
~ | _ | _ _ | _ _ /
~
~
~ play! 1.5.0, https://www.playframework.com
~
~ OK, the application is ready for IntelliJ Idea
~ Use File, Open Project... to open "playdemo.ipr"
~
```

# In Idea

The screenshot shows the IntelliJ IDEA IDE interface. The title bar indicates the project is 'play-template-1' and the current file is 'Start.java'. The menu bar includes File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, and Help. The breadcrumb navigation shows the path: play-template-1 > app > controllers > Start.

The left sidebar contains the Project tool window, showing the project structure:

- 1: Project
  - play-template-1
    - docviewer C:\dev\play-1.5.0\modules\docviewer
    - play-template-1 C:\dev\play-template-1
      - app
        - controllers
          - About
          - Dashboard
          - Start
        - models
        - views
          - errors
          - tags
          - about.html
          - dashboard.html
          - main.html
          - start.html
        - conf
        - public
        - test
        - tmp
        - .gitignore
        - play-template-1.iml
        - play-template-1.ipr
        - play-template-1.iws
  - 2: Favorites

The main editor window displays the following Java code for 'Start.java':

```
1 package controllers;
2
3 import ...
4
5
6 public class Start extends Controller
7 {
8     public static void index() {
9         Logger.info( message: "Rendering Start");
10        render ( ...args: "start.html");
11    }
12 }
13
```

The right sidebar contains tool windows for Ant Build, Database, Maven Projects, and Bean Validation. The bottom status bar shows 'Start' as the current file name, and the bottom right corner displays '6:14 CRLF UTF-8 Git: master'.

# Running the Play Application

- We have generated a “Web App” NOT a “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

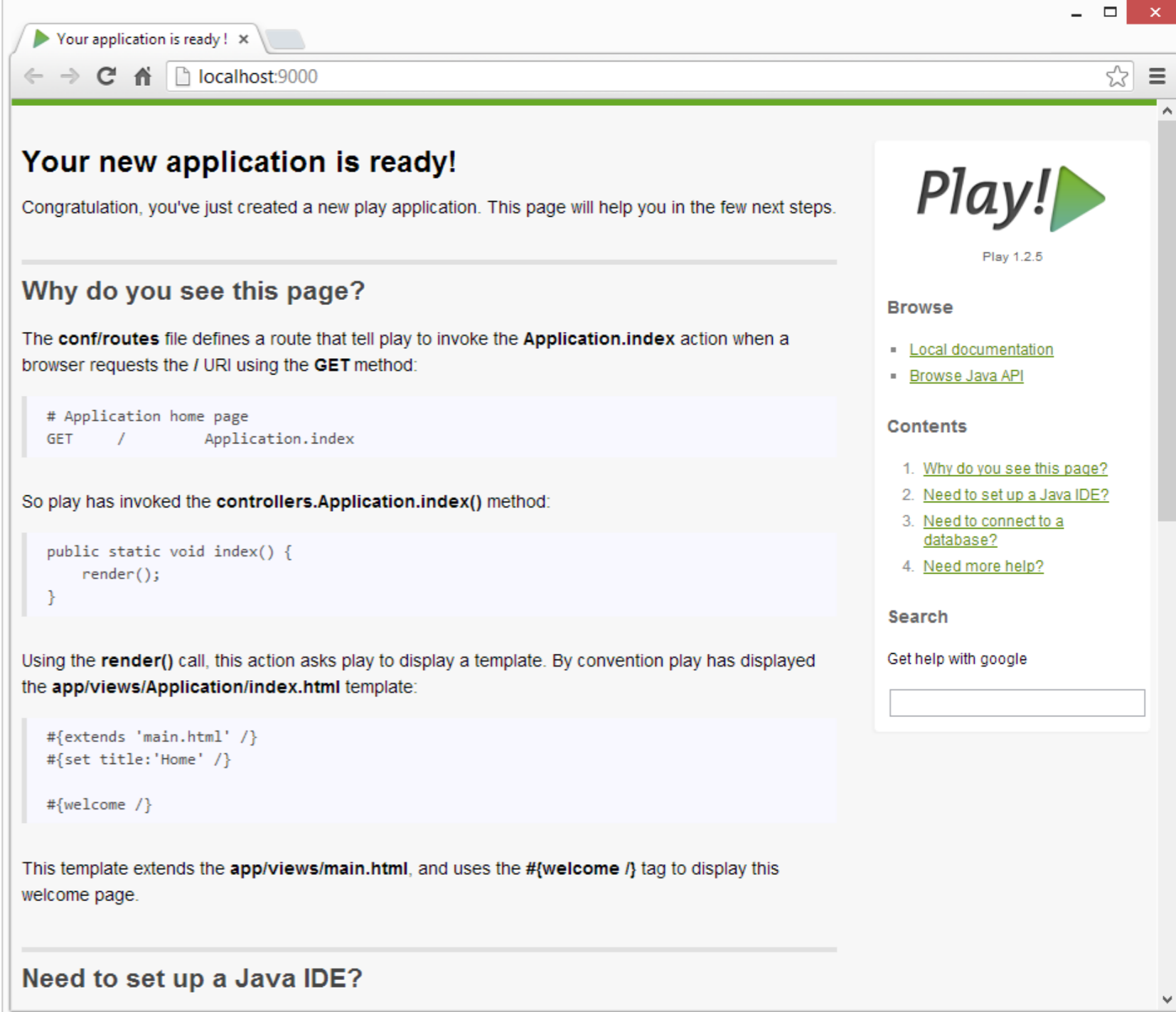
```
play run
```

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/edelestar/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 !
```

# 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



Your application is ready! x

localhost:9000

## Your new application is ready!

Congratulation, you've just created a new play application. This page will help you in the few next steps.

### Why do you see this page?

The **conf/routes** file defines a route that tell play to invoke the **Application.index** action when a browser requests the / URI using the **GET** method:

```
# Application home page
GET    /      Application.index
```

So play has invoked the **controllers.Application.index()** method:

```
public static void index() {
    render();
}
```

Using the **render()** call, this action asks play to display a template. By convention play has displayed the **app/views/Application/index.html** template:

```
#{extends 'main.html' /}
#{set title:'Home' /}

#{welcome /}
```

This template extends the **app/views/main.html**, and uses the **#{welcome /}** tag to display this welcome page.

### Need to set up a Java IDE?

## Play!

Play 1.2.5

#### Browse

- [Local documentation](#)
- [Browse Java API](#)

#### Contents

1. [Why do you see this page?](#)
2. [Need to set up a Java IDE?](#)
3. [Need to connect to a database?](#)
4. [Need more help?](#)

#### Search

Get help with google