

Node.js

Lesson 03—Shrinkwrap



Lesson Overview

In this lesson, you will be able to understand Shrinkwrap, NPMVet, and the outdated npm command.

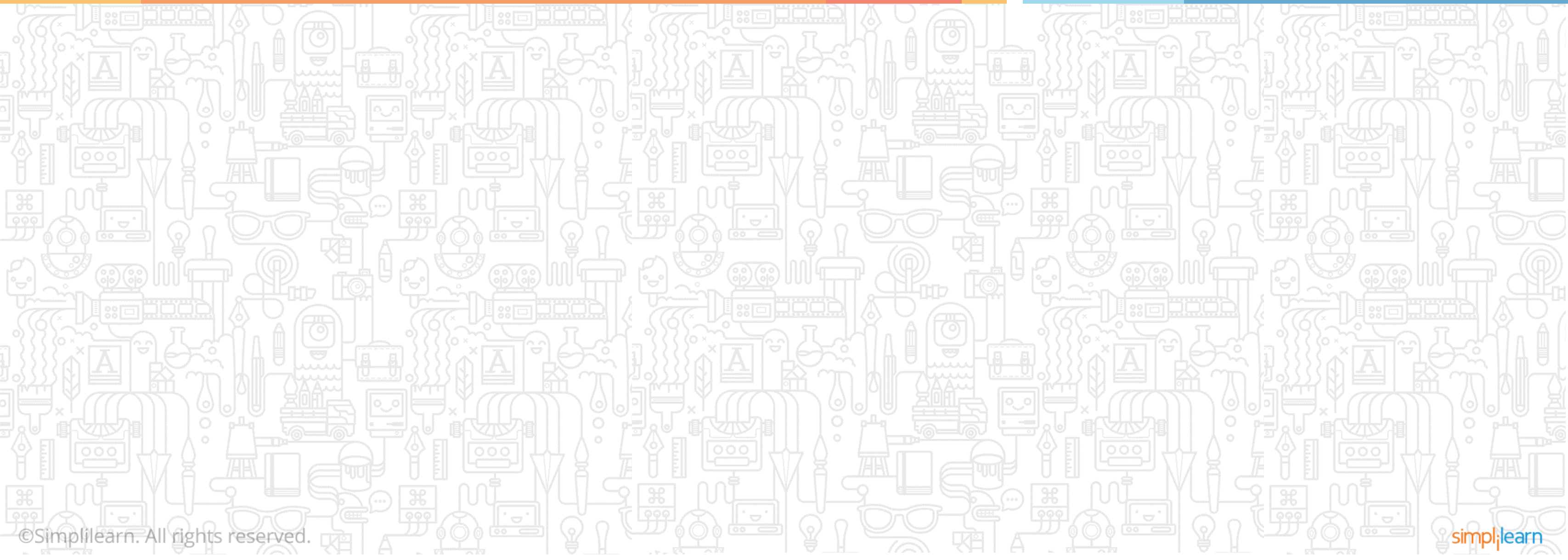
Learning Objectives

- ✔ Define Shrinkwrap
- ✔ Work with NPMVet
- ✔ Understand 'npm outdated' Command



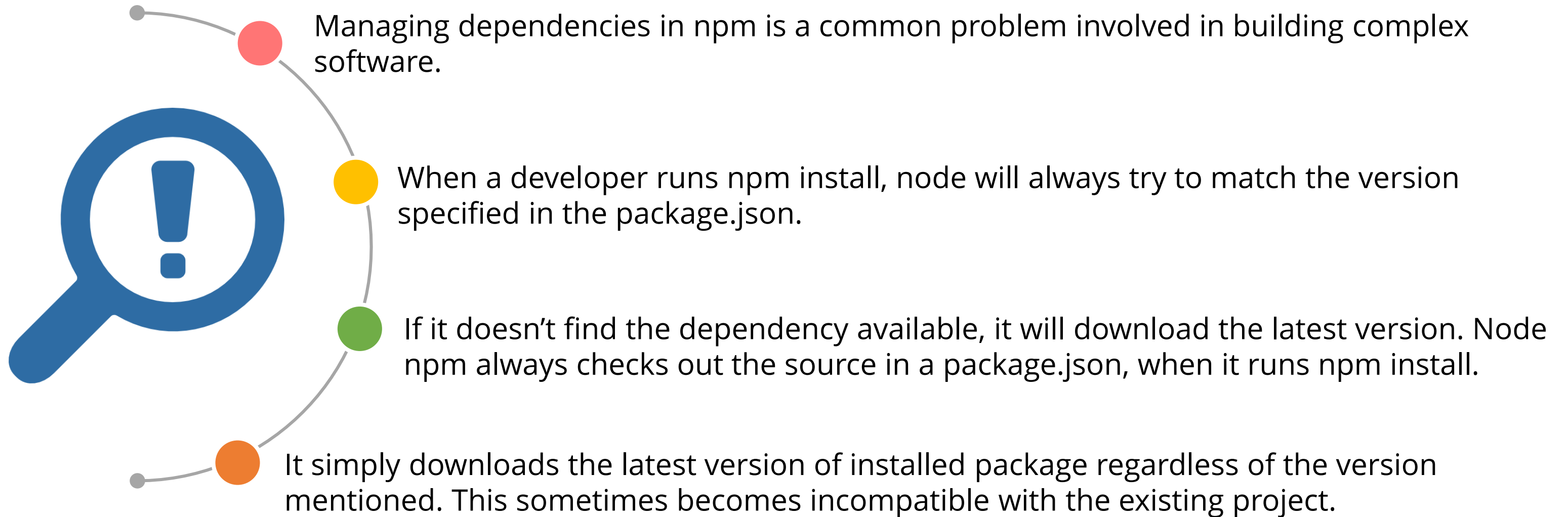
Shrinkwrap

Topic 1—What is Shrinkwrap?



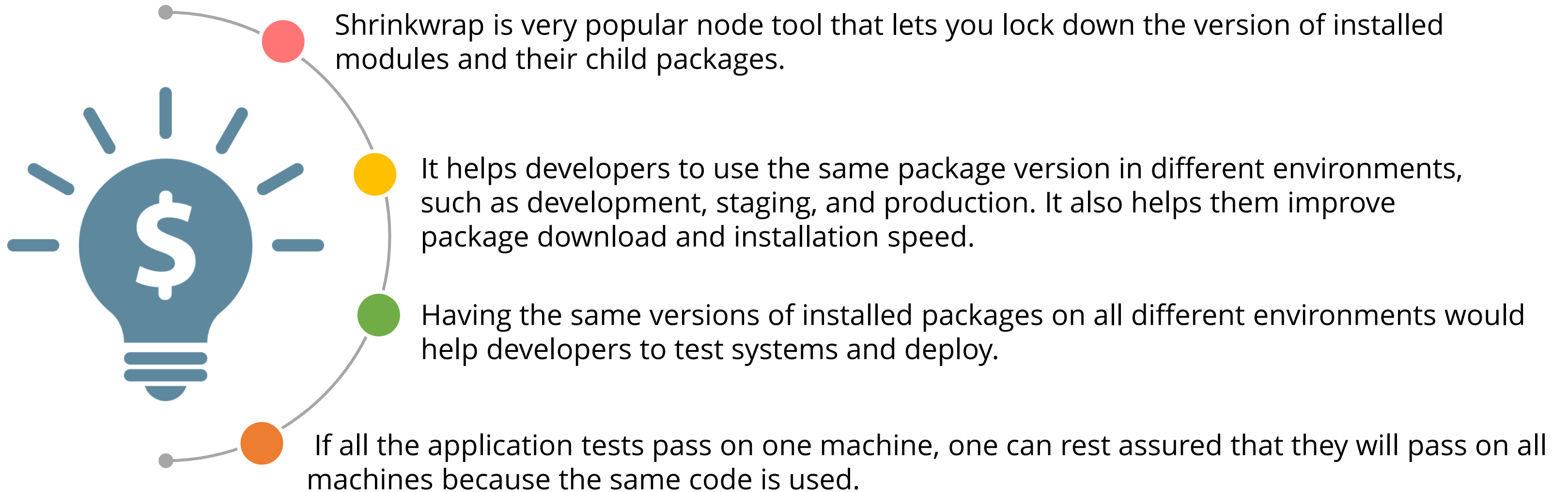
What Is Shrinkwrap?

PROBLEM



What Is Shrinkwrap?

SOLUTION - SHRINKWRAP



What Is Shrinkwrap?

SHRINKWRAP IN ACTION

- 1 Npm shrinkwrap is used to lockdown the versions of installed modules.
- 2 Executing npm shrinkwrap command in a current project after running npm install creates a file called npm-shrinkwrap.json .
- 3 This file maintains the exact versions of installed packages in the hierarchy.
- 4 After cross-checking this into version control and other clones, execute npm install. It will get the exact package version for the complete hierarchy as mentioned in the npm-shrinkwrap.json file.
- 5 Re-running the npm shrinkwrap command will update the npm-shrinkwrap.json file.

What Is Shrinkwrap?

SHRINKWRAP COMMAND

Create package.json

```
npm init -yes
```

Install packages by fixing the versions

```
npm install body-parser underscore --save --save-exact
```

Execute shrinkwrap command to lockdown the versions

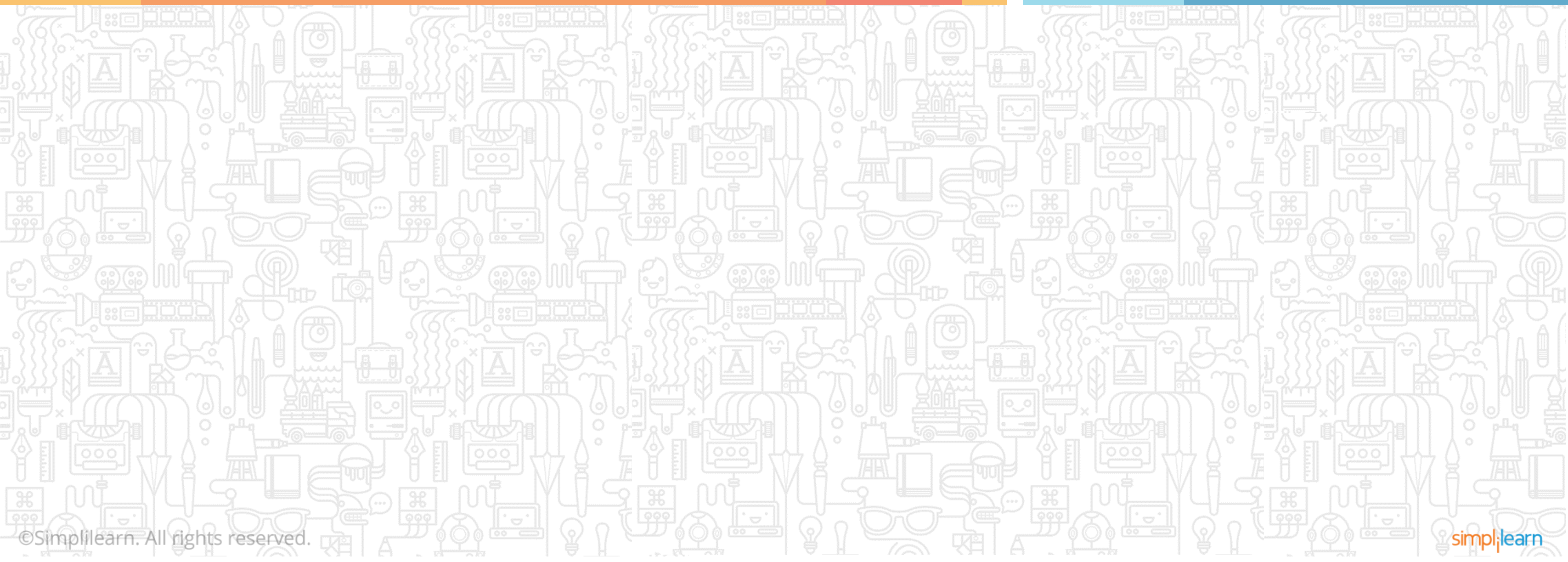
```
npm shrinkwrap
```


Demo for Shrinkwrap



Shrinkwrap

Topic 2—NPMVet



NPMVet

INTRODUCTION

NPMVet is a simple Node CLI tool used to match npm package versions

NPMVet is either used for local development or as a CI-based build to avoid building unmatched module versions.

Problem Statement:

During package installation for a project, the module, and the version, that has been installed will be traced inside the package.json file.

1. Installed package versions are mostly prefixed with either ^ or ~
2. ^ and ~ will install the most recent version of the package.

This causes version discrepancies between what is being installed and what actually gets installed.

NPMVet

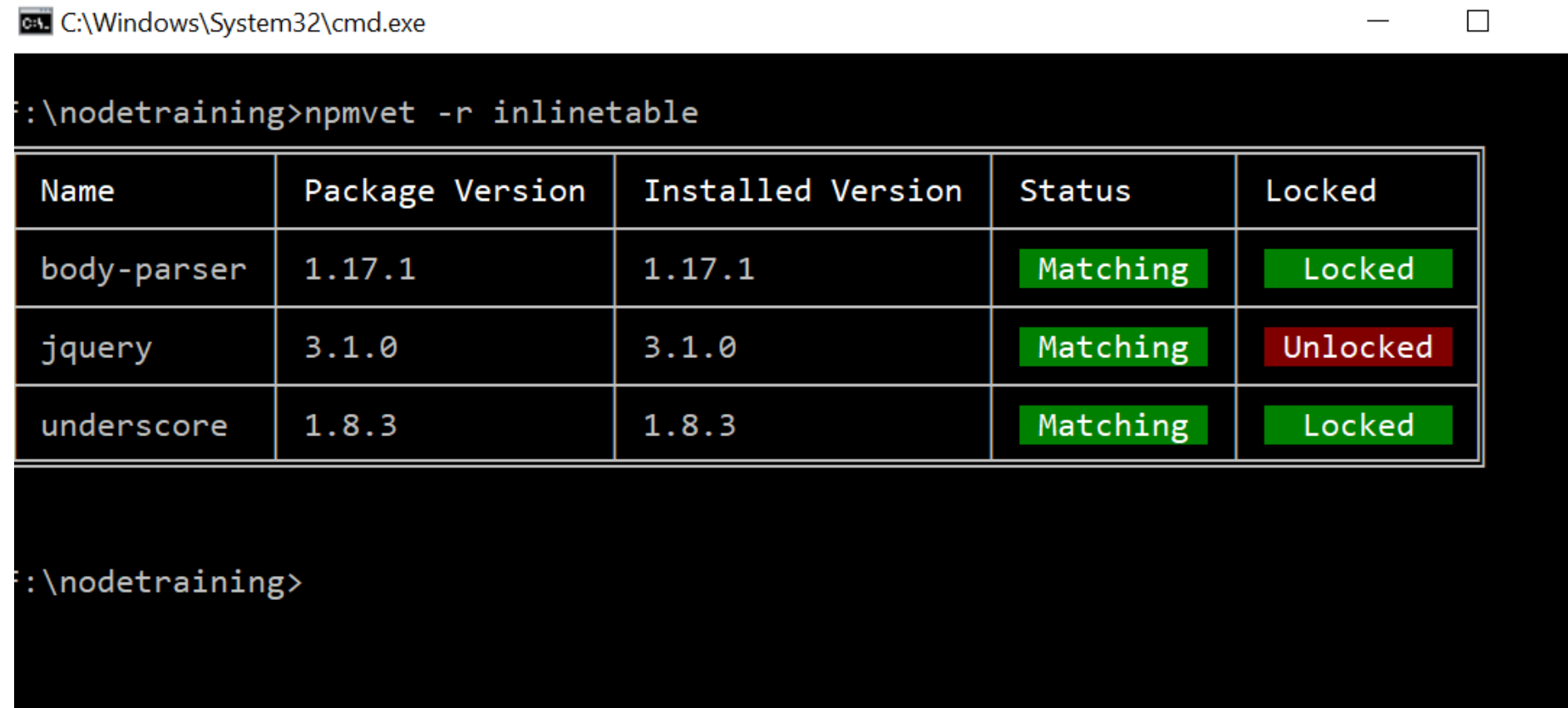
INSTALLATION

This command is used to check the installation details of npmvvet:

```
Npm install -g npmvvet
```

This default npmvvet renderer and inline table command will print a table with the version details:

```
Npmvet -r inlinetable
```



C:\Windows\System32\cmd.exe

```
f:\nodetraining>npmvet -r inlinetable
```

Name	Package Version	Installed Version	Status	Locked
body-parser	1.17.1	1.17.1	Matching	Locked
jquery	3.1.0	3.1.0	Matching	Unlocked
underscore	1.8.3	1.8.3	Matching	Locked

```
f:\nodetraining>
```

NPMVet

ADDITIONAL FEATURES OF NPMVET

The following command will prevent CI builds passing with unmatched package versions.

```
Npmvet -r ci
```

One should use the npmvet CI renderer if any installed module version mismatches are found and the build fails:

```
Npmvet -r blessed
```

```
: \nodetraining>npmvet -r blessed
```

Name	Package Version	Installed Version	Status	Locked
body-parser	1.17.1	1.17.1	Matching	Locked
jquery	3.1.0	3.1.0	Matching	Unlocked
underscore	1.8.3	1.8.3	Matching	Locked

The blessed command will render a table inside a screen. The user will exit this to escape.

Demo for Installing NPMVet



Topic 3—'npm outdated' Command

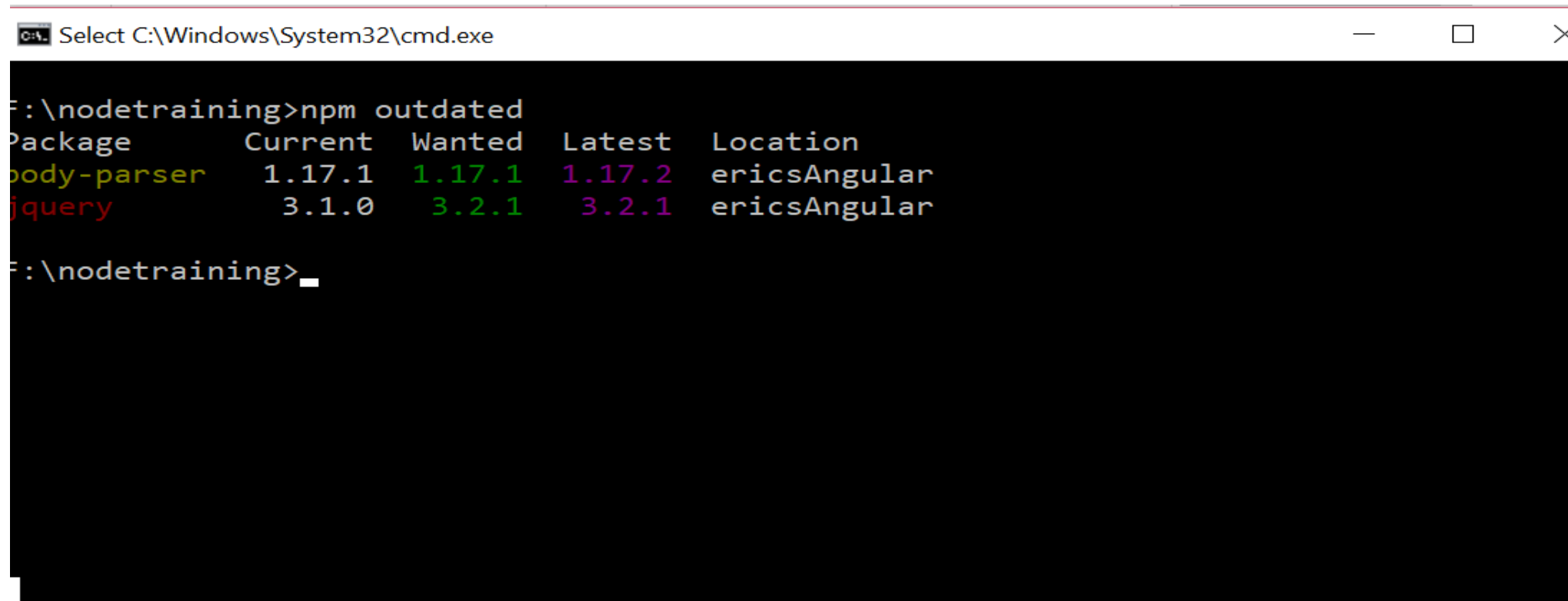
Topic 3—'npm outdated' Command

'npm outdated' Command

npm is the package manager for JavaScript based applications and one of the world's largest software registry.

Here you will find the details about the command

- ✓ Wanted: The highest version of the package that satisfies the requirement
- ✓ Latest: The module version marked as latest in the registry
- ✓ Location: Describes the location of the package in the module dependency tree



```

C:\Windows\System32\cmd.exe
F:\nodetraining>npm outdated
Package      Current  Wanted  Latest  Location
body-parser  1.17.1   1.17.1   1.17.2   ericsAngular
jquery       3.1.0    3.2.1    3.2.1    ericsAngular
F:\nodetraining>

```

Demo for 'npm outdated' Command





QUIZ
1

Shrinkwrap comes pre-loaded with Node.js.

- a. True
- b. False



QUIZ
1

Shrinkwrap comes pre-loaded with Node.js.

- a. True
- b. False



The correct answer is **a. True.**

Shrinkwrap comes pre-loaded with Node.js.

**QUIZ
2**

Which file is used to generate version locks?

- a. npm-shrinkwrap.json
- b. shrinkwrap-update.json
- c. node-shrinkwrap.json
- d. shrinkwrap.json



**QUIZ
2**

Which file is used to generate version locks?

- a. npm-shrinkwrap.json
- b. shrinkwrap-update.json
- c. node-shrinkwrap.json
- d. shrinkwrap.json



The correct answer is **a. npm-shrinkwrap.json.**

npm-shrinkwrap.json is used to generate version locks.

QUIZ
3

Which command helps to know the current version of module?

- a. npm version
- b. node version
- c. npm outdated
- d. node outdated



QUIZ
3

Which command helps to know the current version of module?

- a. npm version
- b. node version
- c. npm outdated
- d. node outdated



The correct answer is **c. npm outdated**.

npm outdated command helps us to know the current version of module.

QUIZ
4

___ is a simple CLI tool to help vet your npm package versions.

- a. NpmVet
- b. NodeVet
- c. cmdVet
- d. packVet



QUIZ
4

___ is a simple CLI tool to help vet your npm package versions.

- a. NpmVet
- b. NodeVet
- c. cmdVet
- d. packVet



The correct answer is **c. NpmVet.**

NpmVet is a simple CLI tool to help vet your npm package versions.

Key Takeaways



- ✓ Shrinkwrap is very popular node tool that lets you lock down the versions of installed modules and their child packages.
- ✓ NPMVet is a simple Node CLI tool used to match npm package versions.
- ✓ “npm outdated” command will inspect the existing local registry to see if any installed packages are currently outdated.



Thank You