

FULL STACK

Introduction to Grunt



You Already Know

Course(s):

Hands-On Full-Stack Web Development with GraphQL and React



- Hands-On Full-Stack Web Development with GraphQL and React
 - Explain GraphQL
 - GraphQL implementation in full stack projects



A Day in the Life of a MERN Stack Developer

Joe has performed incredibly in the last sprint.

In this sprint, he is working on a web development project. But, the project is becoming lengthy because of the repetitive tasks.

So before jumping into the actual project, his manager asked him to automate the frequently used repetitive tasks.

In this lesson, we will learn how to solve this real-world scenario to help Joe complete his task effectively and quickly.



Learning Objectives

By the end of this lesson, you will be able to:

- 🕒 Explain what is Grunt and why it is used
- 🕒 Install and configure Grunt
- 🕒 Demonstrate installation of Grunt plugins
- 🕒 Test and deploy the application

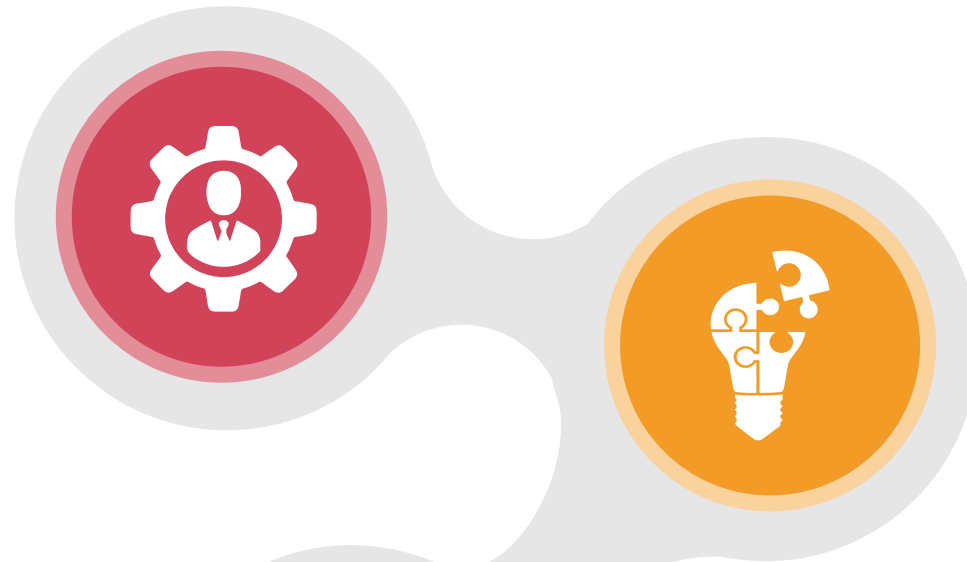


FULL STACK

Overview of Grunt

Introduction to Grunt

Grunt is a JavaScript Task Runner.

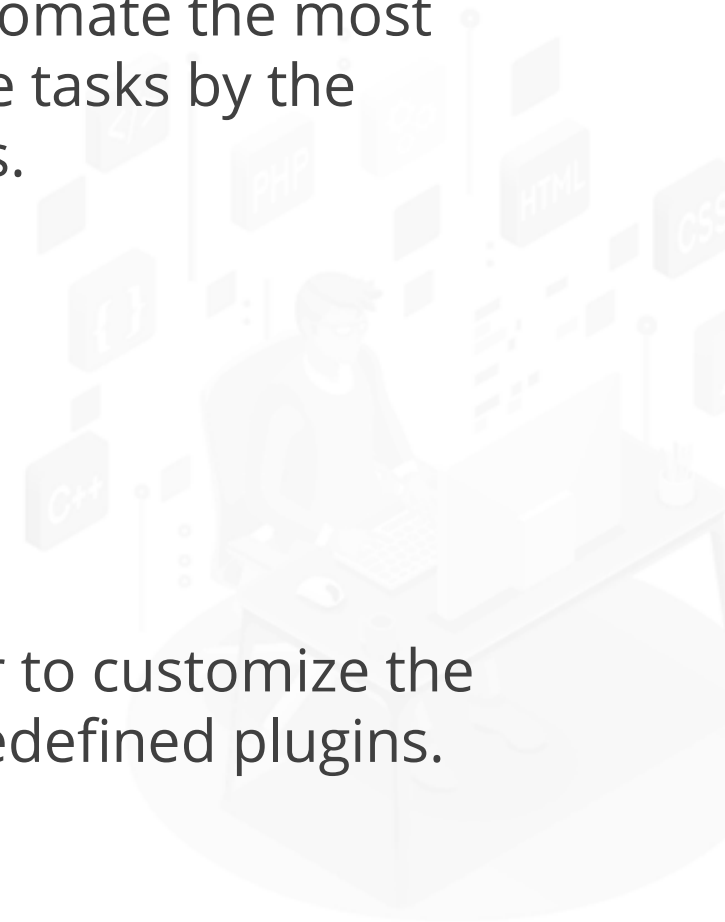


It is used to automate the most frequently done tasks by the web developers.

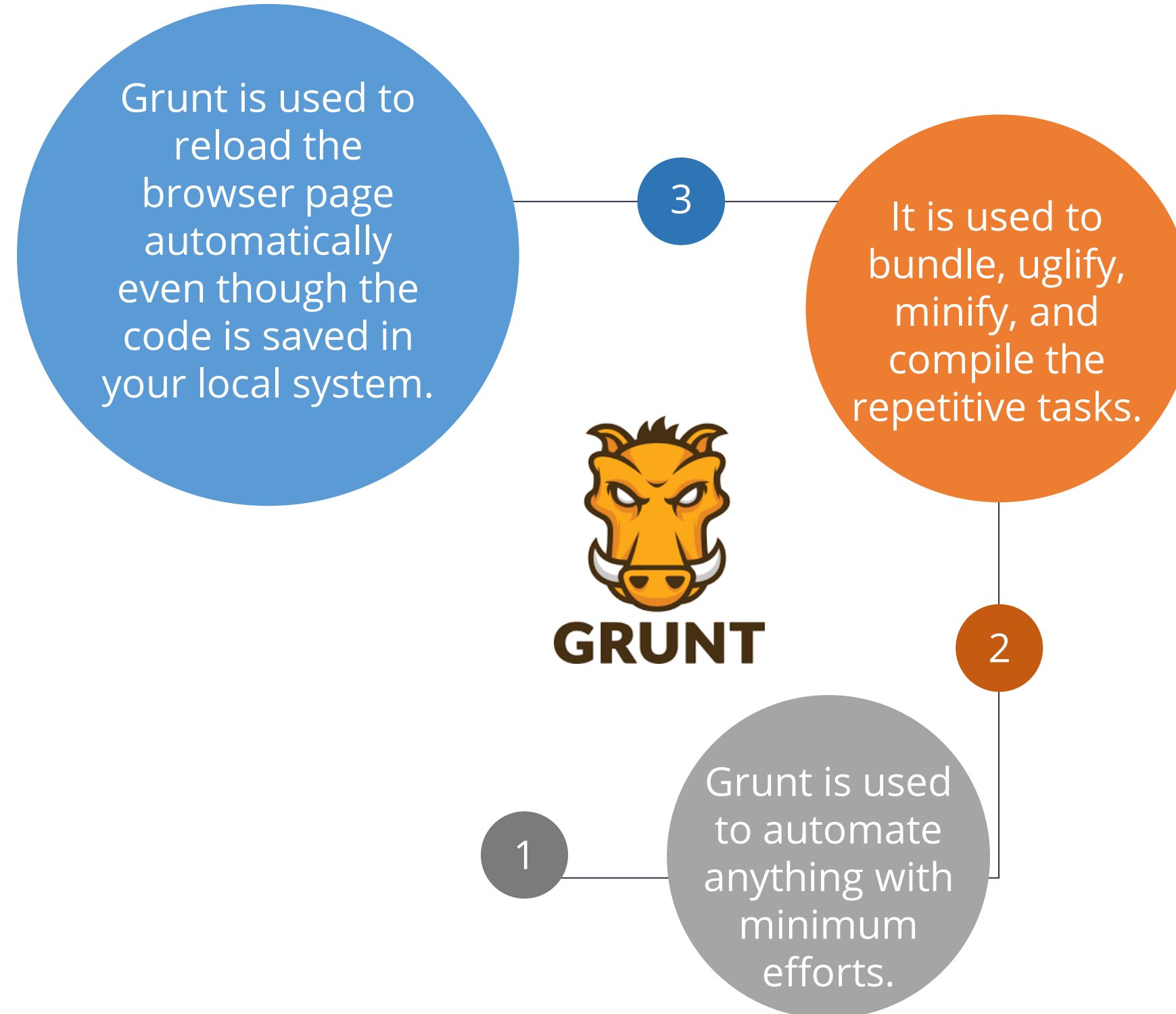
It uses command line to execute custom tasks predefined in a file.



It allows a user to customize the tasks using predefined plugins.



Uses of Grunt



Grunt Installation and Configuration



Duration: 45 min.

Problem Statement:

You are given a project to install and configure Grunt on your system.

ASSISTED PRACTICE

Assisted Practice: Guidelines

Steps to perform installation and configuration of Grunt:

1. Download and install NetBeans IDE
2. Install grunt-cli
3. Configure Gruntfile.js and package.json
4. Push the code to GitHub repositories



Installing Grunt Plugins



Duration: 15 min.

Problem Statement:

You are given a project to install Grunt plugins.

ASSISTED PRACTICE

Assisted Practice: Guidelines

Steps to setup installation of Grunt plugins:

1. Install required plugins
2. Push the code to your GitHub repositories



Testing



Duration: 30 min.

Problem Statement:

You are given a project to write a simple test.

ASSISTED PRACTICE

Assisted Practice: Guidelines

Steps to demonstrate test and configure:

1. Run the base installed against JS file
2. Configure the options
3. Test the gruntfile
4. Configure a Qunit
5. Write a basic test
6. Configure the Behat task
7. Add to test task
8. Push the code to your GitHub repositories



Deployment



Duration: 20 min.

Problem Statement:

You are given a project to deploy a project.

ASSISTED PRACTICE

Assisted Practice: Guidelines

Steps to deploy the project:

1. Create deployment packages
2. Integrate the project with Git
3. Move file to production
4. Push the code to GitHub repositories



Key Takeaways

- Grunt is a JavaScript Task Runner.
- Grunt is used to automate the repetitive tasks.
- Companies like Adobe, Bocoup, JQuery, and Twitter are using Grunt.



Building an Application Using Grunt Build Tool

Problem Statement:

Duration: 40 min.

As a developer, you need to use the Grunt task runner to automate certain tasks in your application development phase.



Before the Next Class

Course(s):

1. Docker Basics and Jenkins integration with Docker
2. Develop and Deploy Modern Web Applications with Docker

You should be able to:

- Explain Docker
- Implement basic docker commands
- Deploy your application on docker containers

