

# FULL STACK

## Introduction to Grunt



# You Already Know

## Course(s):

1. 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 MEAN 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.

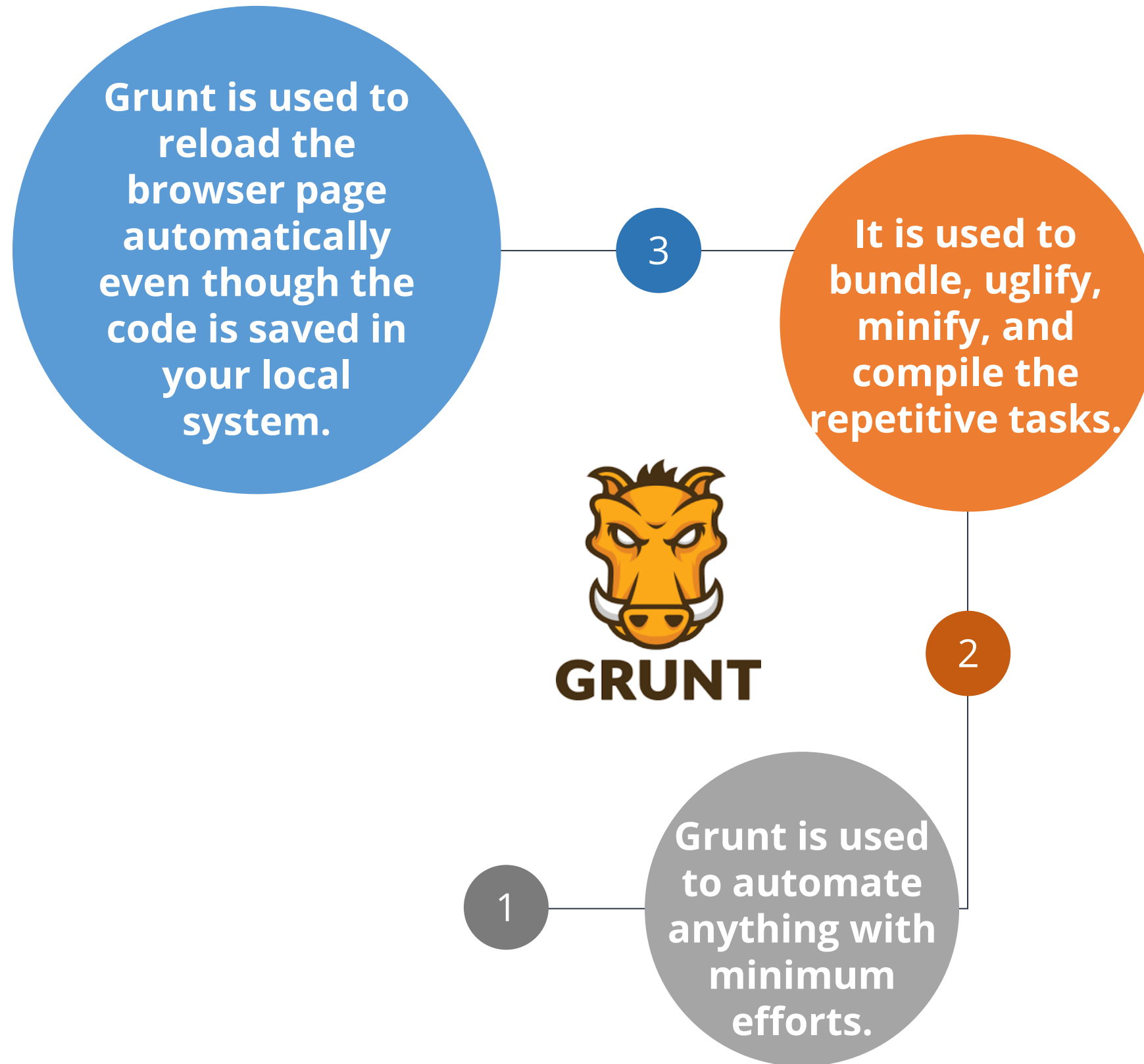


It is used to automate the most frequently done tasks by the web developers.

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 to Install and Configure Grunt

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1. Download and install NetBeans IDE.
2. Install grunt-cli.
3. Configure Gruntfile.js and package.json.



# Installing Grunt Plugins



**Duration: 90 min.**

## **Problem Statement:**

You are given a project to install Grunt plugins.

ASSISTED PRACTICE

# Assisted Practice: Guidelines to Install Grunt Plugins

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1. Install and execute tasks using Autoprefixer.
2. Configure tasks using Autoprefixer.



# Testing



**Duration: 30 min.**

## **Problem Statement:**

You are given a project to write a simple test.

ASSISTED PRACTICE



# Assisted Practice: Guidelines to Test an Application using Qunit and Behat

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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.



# Deployment



**Duration: 40 min.**

## **Problem Statement:**

You are given a project to deploy a project.

ASSISTED PRACTICE

# Assisted Practice: Guidelines to Deploy a Project

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1. Create deployment packages.
2. Integrate the project with Git.
3. Move file to production.



## Key Takeaways

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



# Building an Application Using Grunt

## Problem Statement:

Duration: 30 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.

