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# Gulp

## Overview

Gulp is a tool developed by NodeJS that helps you automate tasks such as compiling different languages, minifying code, auto-refreshing the browser when you modify your code, validating syntax, compressing files, creating custom automations and much more!

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## Project Requirements

- You must create a git repository that ignores the production version of the generated assets.
- Create a clear and orderly directory structure
- Both the code and the comments must be written in English
- Use the camelCase code style for defining variables and functions
- Remember that it is important to divide the tasks into several sub-tasks so that in this way you can associate each particular step of the construction with a specific commit
- You should try as much as possible that the commits and the planned tasks are the same
- Delete files that are not used or are not necessary to evaluate the project

## Risk Management Plan

Every project has risks. These risks must be taken into account to improve the workflow of the project. I've listed the risks for the project, along with the impact they might have, and the priority of them.

iD	Risk	Consequence	Prob. (1-5)	imp. (1-5)	Pri. (1-25)	Mitigation approach
1	Breaking my computer	Can't do anything	1	5	5	Keep my repo work to date, look for other computers
2	Getting sick	Wouldn't be as productive	2	3	6	Eat and sleep well
3	Not concentrating enough	Difficulty concentrating	2	5	10	Focus on the Minimum Viable Product.
4	Unrealistic deadlines	Deadlines wouldn't be	2	3	6	Be more organized with the

		met + development shortcuts would have been taken affecting the robustness of the code				tasks, set new deadlines.
5	Being unfocused	Loss of control over the development flow of the project	4	5	20	Focus on finishing the most important tasks only.

## Project Tasks

Defining this part is crucial to the development of the project. It is important to make a good analysis of the situation to organize the project in a good way:

#	Task	Priority (1-5)	Description	Difficulty (1-5)	Estimation
1	Reading the description	4	Reading the description of the project	1	30 min
2	Create Repo	3	Creating git repo for the project	1	2 min
3	Installing Gulp	5	Installing Gulp to do the project	1	30 min
4	Creating the main Gulp File	5	Creating the main gulpfile for the project	1	30 min
5	Create a message	4	Create a message using gulp	3	1 hr
6	Compile typescript	4	Compile a typescript file	3	1 hr
7	Compile SASS file	4	Compile a sass file to	3	1 hr

			get .scss		
8	Minifying css	4	Apply css compression	3	1 hr
9	Gulp task	5	Create a task that is invoked by default when executing Gulp	4	1 hr
10	Browser-sync	4	Create a task that uses "browser-sync" observing the change in sass files	3	1 hr
11	Use globbing	4	Create a task that uses "Globbing"	3	30 min
12	Understanding .pipe	5	Understand how .pipe works in Gulp	4	1 hr
13	Orderly structure	3	Have an orderly structure for the files	3	30 min
14	Review	2	Review Project	2	30 min

## Git Workflow

For this project, all commits we'll be pushed directly to the Master branch. All commits will use a descriptive message, so that myself or other users can easily go to the Git version that they need to. This is very important for working in teams as it increases communication and efficiency between all members.

## Technologies used

- Gulp
- Visual Studio Code
- Autoprefixer
- Sass
- Css

- Browser-sync
- Typescript

## Lessons learned

- Gulp is an open-source JavaScript toolkit created used as a streaming build system (similar to a more package-focussed Make) in front-end web development.
- Build automation is the process of automating the creation of a software build and the associated processes including: compiling computer source code into binary code, packaging binary code, and running automated tests.
- Gulp is a task runner built on Node.js and npm, used for automation of time-consuming and repetitive tasks involved in web development like minification, concatenation, cache busting, unit testing, linting, optimization, etc.
- A gulp task is defined by `gulp.task` and takes the name of the task as the first parameter and a function as the second parameter.

## Incidents

- Some difficulty understanding how `.pipe` works
- Some difficulty understanding how to use Autoprefixer.
- Some difficulty understanding how to use Sass.