



Globant Piscine
Project 1

Summary: Image Gallery

Version: 1

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Chapter I

A word about this Project

Create an interactive web application that allows users to view and search for high-quality photos using the Unsplash public API. Users will be able to authenticate via OAuth to access additional features, such as marking photos as favorites.

Chapter II

Introduction

What this Project will show you:

- **HTML5, CSS3, and JavaScript ES6 (Vanilla):** Learn the fundamentals of building web pages, styling them with CSS, and adding interactivity using modern JavaScript without relying on frameworks or libraries.
- **TypeScript (Recommended):** Gain an understanding of how to improve code quality and maintainability by using TypeScript's static typing features.
- **OAuth 2.0 Authentication:** Learn how to implement secure user authentication using the OAuth 2.0 protocol, allowing users to log in to the app with third-party accounts.
- **Unsplash API Integration:** Learn how to interact with external APIs by making HTTP requests to retrieve and display data, such as high-quality photos from Unsplash.
- **Managing State and User Actions:** Understand how to manage user interactions, such as searching for photos and marking them as favorites, with the use of tokens and local storage for persistent data.
- **Building Responsive and Accessible Web Applications:** Master techniques for creating mobile-first, responsive designs that meet WCAG accessibility standards, ensuring the app is usable across devices and by all users.

Chapter III


General instructions

Unless explicitly specified, the following rules will apply for every project of this Piscine.

- This subject is the one and only trustable source. Don't trust any rumor.
- This subject can be updated up to one hour before the turn-in deadline.
- The assignments in a subject must be done in the given order. Later assignments won't be rated unless all the previous ones are perfectly executed.
- Be careful about the access rights of your files and folders.
- Your assignments WON'T be evaluated by your Piscine peers.
- You must not leave in your turn-in your workspace any file other than the ones explicitly requested By the assignments. If the assignment don't precise them, put only the necessary ones to run your Project.
- Using some API Key or Token? Keep them for you! Do not push them on your repository.
- You have a question? Ask your left neighbor. Otherwise, try your luck with your right neighbor.
- Every technical answer you might need is available in the **man** or on the Internet.
- You must read the examples thoroughly. They can reveal requirements that are not obvious in the assignment's description.
- By Thor, by Odin! Use your brain!!!

Chapter IV

Mandatory part

	Exercise 00
Image Gallery	
Turn-in directory : <i>ex00/</i>	
Files to turn in : All needed files to run your Project and nothing else	
Allowed functions : None	

- **Technologies to Use**

- HTML5
- CSS3
- JavaScript ES6 (Vanilla, without libraries or frameworks), TypeScript recommended.
- Docker is mandatory to deliver the project. Please provide a Dockerfile and a docker-compose.yml file to run the project.

- **Main Functions**

- OAuth Authentication: Implement the authentication process using OAuth 2.0 so users can log in with their Unsplash account.
- Photo Display: Show a gallery of photos obtained from the Unsplash API.
- Photo Search: Allow users to search for photos by keywords.
- Favorites: Once authenticated, users can mark photos as favorites.

- **API to Use**

- Unsplash API: Provides access to a wide collection of high-quality photos.

- **Suggested Steps**

- Register with Unsplash API: Create a developer account on Unsplash and obtain your API credentials.
 - Basic Structure: Set up the basic structure of your project with HTML, CSS, and JavaScript files.
 - API Consumption: Make GET requests to fetch photos and display them in the gallery. Implement search functionality by sending queries to the API.
 - OAuth Implementation: Configure OAuth 2.0 authentication flow with Unsplash and manage access tokens for authenticated actions.
 - Favorites Functionality: Allow users to mark and unmark photos as favorites, storing this information locally in the browser (e.g., using localStorage).
 - Responsive Design: Ensure that the application is usable on both mobile and desktop devices.
- **Best Practices**
 - Write clean, well-commented code.
 - Properly handle errors and input validation.



You may want to take a look at every technologies referenced in the project description before starting.



A little list of additional resources to help you get started:
[Unsplash API Documentation](#), [OAuth 2.0 Documentation](#), [Passport.js OAuth Documentation](#), [Google OAuth 2.0 Documentation](#).

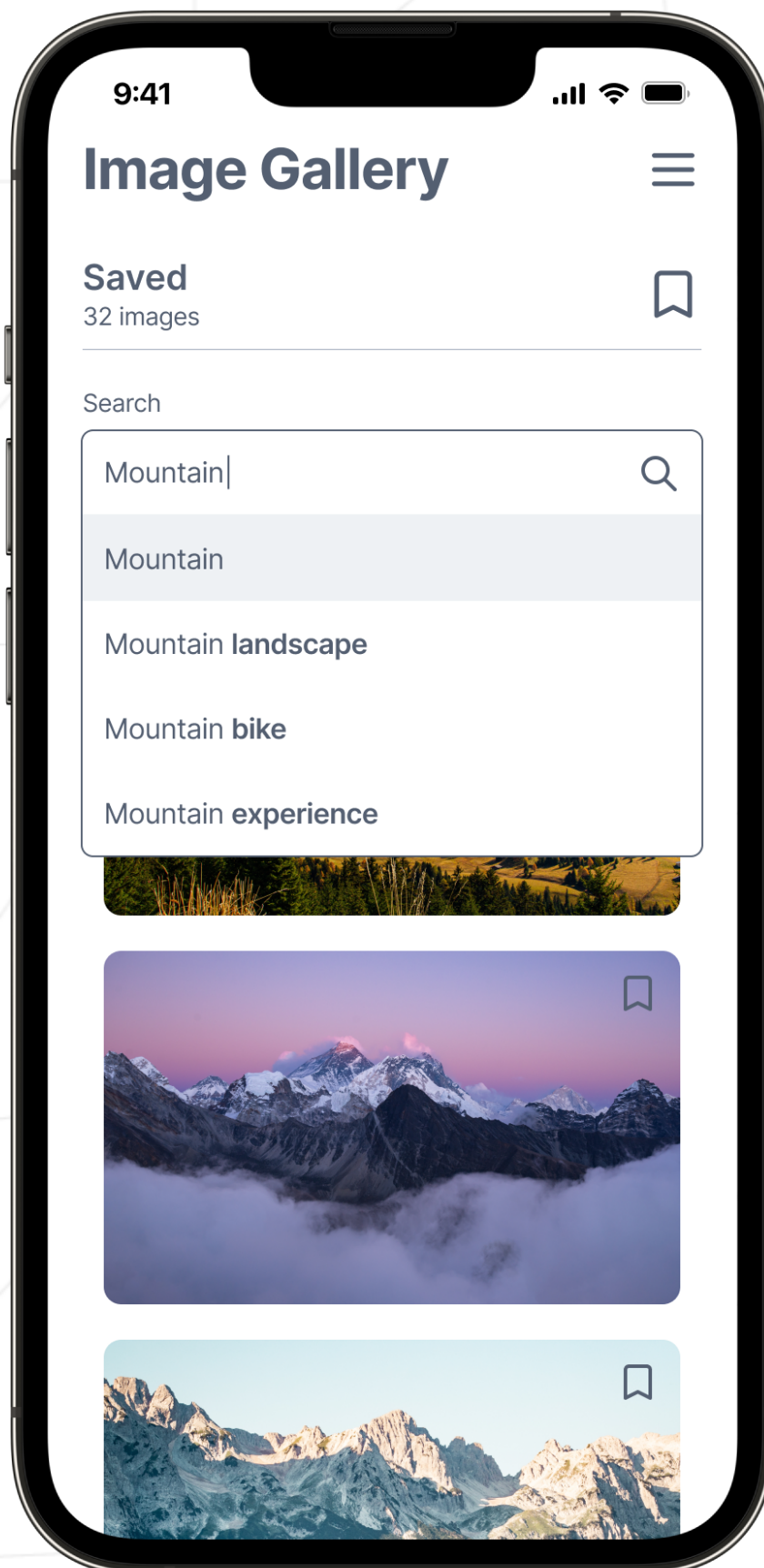


Figure IV.1: Image Gallery

Chapter V

Submission

- Create a git repo (Github, Gitlab, Bitbucket, etc) and add your project files to it.
- Copy the link to your repository and paste it in the project submission form.
- Project submission form: [TYPEFORM](#)



Please note, no modifications made on the repo after the form is sent will be taken into account for the evaluation.



No Peer evaluation for this Piscine, but feel free to share your project with your peers and get feedback.