

Full-stack developer

Technical Challenge

Before you start;

- The expected duration is 2-3 hours, but please send as soon as you're finished so we can time your response.
- The technical challenge consists of two parts - they are not connected and you can do them in any order.
- You are allowed to use online resources, however you should not copy/paste an entire solution

Part 1 - Relational Database (MySql/PostgreSql)

Based on the following stories, build an SQL schema with the relevant CREATE table statements:

a) As a person I want to be able to store my personal details such as:

- First name
- Last name
- Date of birth
- Country of birth
- Country of residence
- Email
- Phone number
- Addresses
 - Type (residential, postal, work)
 - Street info
 - Suburb
 - State
 - Country

b) As a person I want to be able to store my hobbies

Part 1 Notes:

- A person can own multiple addresses.
- Hobbies aren't owned by a person, but a person can have multiple hobbies.
- Tables should be normalized.
- Add indexes for searching for people by first name, last name or date of birth.
- For the DB schema feel free to use any GUI tool such as SequelPro or DataGrip to generate.

Part 2 - Backend / Frontend

Build a photo gallery using the images found here:

<https://bitbucket.org/digistorm/fullstack-test1/src/master/>

Backend (PHP);

- Create a gallery class that
 - Takes a directory path and returns an array of images with their attributes (width, height, size and type)
 - Groups images by subdirectory
 - Can filter images by its type. By default returns all types

Frontend (HTML, CSS, JS);

- Using the output of the PHP class, build a gallery of images
 - Clicking on the image will preview the image on a bigger size and show its details
- Include an option to filter images by a type (should call the backend and apply the filter)

Once you finish the technical challenge, please host your solution in an online version control system such as Github or bitbucket and give us access to it.

Part 2 Notes:

- We will be paying attention to the way you write your code so make sure you stick to a code style convention, the code is readable and documented were needed.
- For the front-end feel free to use any JavaScript and CSS third party libraries.