

Full Stack Developer - Assignment

Music Store

The motivation of the assignment is to get a better insight on the candidates programming skills and learning capabilities. The project will be evaluated during a follow up interview together with one of Simac's Full Stack Developers.

The objective of the project is to design an online music store, which allows music-fans to login and buy and download their favourite music. The project doesn't have to be a full production ready application, striving towards a prototype / MVP will be the goal.

Tooling

To develop the prototype the following technology stack will have to be used.

- Laravel (PHP)
- VueJS (JavaScript)
- TailwindCSS



Make sure to use the Laravel build in functionality, for example for user management scaffolding, migrations, data seeders, storage driver etc.

Use Git to keep track of the progress made with the code, if possible in small steps so the development process can be reviewed in the developer interview.

Requirements

The following list of requirements indicates the features that the prototype must at least meet.

- Guests must be able to register and log in.
- Users can search through the entire music library after logging in.
- Users can view all associated songs from albums.
- Users can purchase a complete album.
- Users can view an overview of all purchased music.
 - o There is a search function to filter the overview.
 - The overview can be sorted in different ways (eg artist, album).
- Users can download purchased music.
- Administrators can add new artists.
- Administrators can add new albums.
 - The artwork is uploaded and stored.
- Administrators can add new numbers.
 - o The audio file is uploaded and stored.



The following is a list of 'nice-to-haves'

- Write tests for the prototype.
- Users can purchase a single number.
- Guests can listen to a 10-second preview.
- Users can listen to a 30 second preview.

The following features are out-of-scope for the prototype.

- Integration with a payment provider
- Shopping cart functionality
 - o Clicking the buy button means the song is bought by the user.

Database

A draft database diagram has been drawn below as a starter for the project. Make sure Laravel Migrations and Seeders are used to created the database. For users use Laravel default migrations to get the user registration process setup.



Other

When developing this prototype, don't forget that it is actually a prototype. Not everything has to be 100% perfect. The goal is to implement the different components and from there to gain knowledge and insight in developing with Laravel, VueJS and TailwindCSS.