## Introduction

The projects are designed to have progressive development, starting with a simple backend to let the student be focused on user interface design (UI), these interfaces can be as complex as the student wants to develop using skills learned in the bootcamp.

Once basic requirements have been completed and user interface has been developed for applications, the student has the option to create new endpoints to add new features to the application.

## Development

#### Stage 1 (base development)

**Backend:**

1. Read endpoint: To get data from database it will be returned on JSON format to the client.

**Frontend**:

1. UI is open design development. Design and implementation depends on the students.
2. Create API calls needed to get all data from the server.

#### Stage 2 (New features)

**Backend**:

Possible endpoints to develop:

1. Endpoint to insert new entries to the DB.
2. Endpoint to update items on the DB.
3. Endpoint to delete an entry on the DB.

**Frontend:**

1. Get every together, use the new endpoints developed and add the new features to the IU.

#### Stage 3 (Optional)

1. Add a search function on your application.
2. Add sort functionality to the lists on your application.

## Project

### CRM

The main functionality of a CRM is to have a list of clients, for this project build an awesome list to visualize your clients, on version two, add a feature to add and remove a client.

**Database:**

Table: clients

Fields: id, avatar\_url, firs\_name, last\_name, email, phone, created\_at

**Stage 1:**

*Backend*

Endpoint: GET /clients

Description: Endpoint to get *n* clients from your database.

Suggested response

*HTTP 200*

{

id: int,

first\_name: string,

last\_name: string,

email: string,

phone: string,

avatar\_url: string

}

*FrontEnd*

UI: Develop your own client listing for your CRM, be creative using all tools that you learned at the bootcamp.

Data source: Use endpoints developed by you to get data needed.

**Stage 2:**

Feature: Clients.

Description: Enable your application to add and remove a client.

*Backend*

Endpoint: POST /client

Description: Add a new client.

Suggested response: *HTTP 201*

Endpoint: DELETE /client/:client\_id

Description: Remove a client, consider a soft delete option.

Suggested response: *HTTP 204*

*FrontEnd*

UI: Add the new functionality to you UI.