## Take home test

This should take between 2 and 4 hours to complete.

Using **MVC**, create a small portal where clients' investments can be managed. There should be two resources:

- 1. Clients
  - a. I should be able to see and search my client list
  - b. Clicking on the user should show me the client details, a list of their investments and a forecast of the earnings.

For the forecast, pick a future date (i.e. define a financial year end) and calculate the impact of interest on the investments.

## 2. Investments

- a. I should be able to see the investments and search by the client name and surname
- b. Clicking on the investment will show me the investment details as well as the abovementioned forecast for the investment.

Clients to Investments should be a one to many relationship. Clients should consist of **First** name, **Surname** and **ID** number.

For investments assume one capital investment amount (i.e. a single **lump sum**), include a **start date**, an **annual interest rate** and an **interest type** (simple, compounded monthly, compounded annually).

## **Constraints**

- 1. Do not worry about hosting the site just make sure that the web app and API run locally and communicate with each other.
- 2. Include a README.md file with instructions on how to run both the web app and API. Assume a junior will be testing the code.
- 3. Submission should be in one ZIP file.
- 4. Focus on the R in CRUD. The portal should be read-only.
- 5. Don't spend too much time styling.
- 6. I don't specify a database as that's not the point of the exercise an in-memory DAL is actually preferred.