PROJECT PROPOSAL

WORK LOGGER/INVOICE GENERATOR

1. **What goal will your website be designed to achieve?**

The work logger is a tool for contractors to **better track time** they spend working for clients. In addition to streamlining timekeeping, it will offer functionality to invoice clients in a foreign currency at a fair, average exchange rate. This means the exchange rate will not only be applied once, at the end of the invoice period, but rather applied to each individual day the contractor worked. The final invoice amount will therefore **take into account currency fluctuations** and as such embody the true value of the contractor’s time.

I want to design this tool because I am an international contractor myself. A similar tool would make my own life considerably easier. For one, I wouldn’t need to use a spreadsheet to manually type the time into whenever I begin or stop working. As for the currency exchange feature: one of the companies I work for promise me an hourly rate in USD, but I get paid in my EUR account. Instead of invoicing them in USD and hoping they apply a fair exchange rate at the end of the month that reflects when and how much I worked over the last 4 weeks, it was agreed I invoice them in EUR. But to find a fair way to invoice in EUR for both parties means I need to manually calculate the average exchange rate over the specific days I spent working. Small currency exchange fluctuations make a big difference to how much I get paid in EUR.

1. **What kind of users will visit your site? In other words, what is the demographic of your users?**

Self-employed contractors working internationally, for multiple clients, issuing invoices in multiple currencies.

1. **What data do you plan on using? You may have not picked your actual API yet, which is fine, just outline what kind of data you would like it to contain.**

I want to use 2 APIs: one of them a foreign currency converter with historical data. The 2nd API will help me convert an HTML invoice into a pdf (although I might find a better way to let users export invoices in pdf format).

1. **In brief, outline your approach to creating your project (knowing that you may not know everything in advance and that these details might change later).**

* Create models & seed DB
* Create timekeeping functionality (click to start, click to end)
* Convert time to money (in original currency) at hourly rate (also enable flat rate)
* Integrate foreign currency API
* Create feature to convert money into currencies of choice
* Create invoice generator
* Handle user authentication
* Enable users to edit & update existing log entries
* Enable users to delete log entries

1. **What does your database schema look like?**

A very rough outline:

* **User** (id, username, password, first name(s), last name)
* **Client** (id, name, address, hourly\_rate, flat\_rate, currency)
* **Log\_entry** (id, time\_started, time\_stopped)
* **Invoice** (id, contractor/company\_name, billing\_address, client (FK), hours, amount, second\_currency(optional))
* **Relationships:** User has many clients, User has many Invoices. User will be backref for invoice and client. Invoice has many Log\_entries.

1. **Is there any sensitive information you need to secure?**

Yes. Sensitive information is password and maybe address. I will use bcrypt to handle user authentication. Not sure what to do about address.

1. **What will the user flow be?**

Roughly:

* Register
* Login
* Create Client(s)
* Redirected to Dashboard where User can select Client
* Click start and stop, receive time worked in minutes/hours and display how much this is as per hourly rate, optionally also in foreign currency, display sum in current invoice cycle
* User able to view and edit log entries
* User able to issue invoice and download as pdf