MinVoiCe

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Project Overview

MinVoiCe is an MVC approach to a simple, tailored, invoicing web-app. The app allows a user to add clients and projects to a database. It simplifies time entries to a per-week/per-project basis and keeps a running list of entries to be be invoiced. A simple drop-down selection automatically generates an invoice for a given project.

Features

- Add projects, clients, and time entries to a database
- Validates new data entries, such as phone numbers and e-mails
- Single-button invoice generation

Planning - User Stories

Several stories come from my own frustrations with invoicing and time-recording software. The interface is often too granular, forcing me to make multiple entries over the course of several days. Sometimes the navigation takes too many steps for what I want to accomplish. Sometimes there are simply too many distracting features.

Planning - User Stories

"A user can view a specific project as their dashboard."

Result:

Project-based time entry.

"A user can record the number of hours worked on a project for a given date."

Result:

Project-based invoice creation.

"A user can decide to cancel an invoice."

Result:
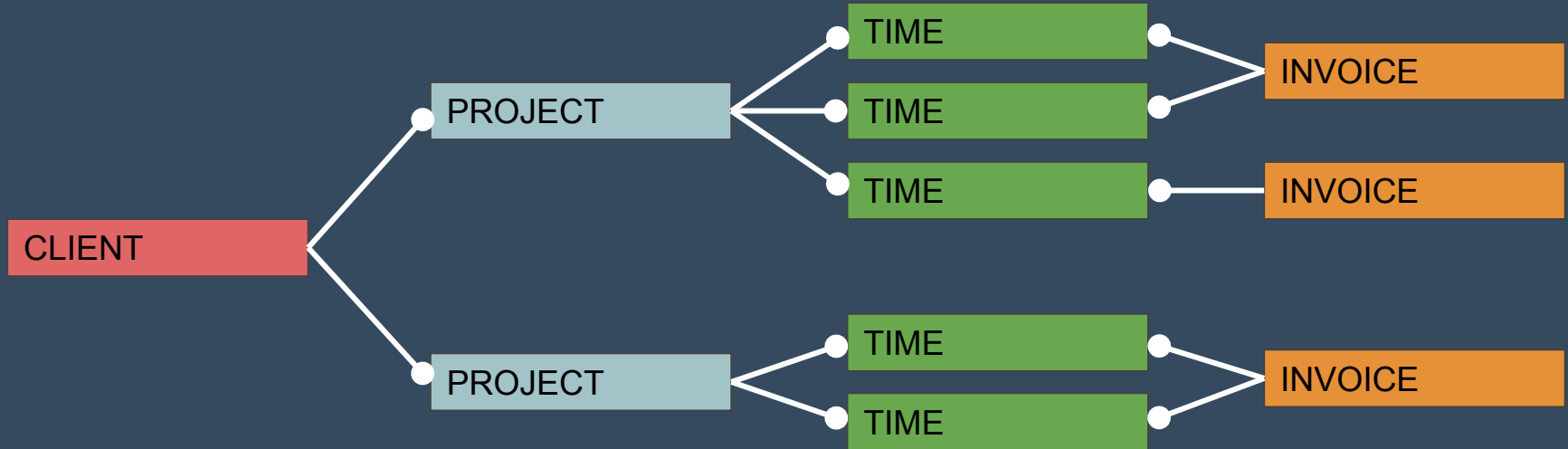
Invoices are previewed before saving/exporting.

Planning - Database

The database tables are a cascading hierarchy of many-to-one table relationships. At the top are the clients, which can have many projects, which can have many work-times. A work-time belongs to one project, which belongs to one client. On the other side are the invoices, which similarly have a many-to-one relationship to the work-time entries: a work-time may only belong to one invoice, and an invoice may have many worktimes.

Planning - Database Example

Technology Stack

- ASP .NET Core
- Entity Framework (EF Core)
- Razor Template
- SQL Server via EF Core
- Custom CSS/Stylesheet (no starter/bootstrap)

Demo
(not yet deployed)

What I Learned

- How to move data effectively between the controller and view
- Using RegularExpression techniques (e.g., for phone number validation)
- DateTime manipulation
- SQL query tools for data fetching and data arrangement
- Miscellaneous CSS tricks

What's Next

- Automatic emailing after invoice confirmation
- User accounts for personalizes project/time management
- Log payments/track overdue invoices
- Time-based reminders on dashboard if it's been too long between invoices
- Search function