## **Description**

Our ISP term project is a client management web application utilizing php and sql databases of the type InnoDB. The application allows users to keep track of projects that are being worked on and the clients that contracted them. Thus, the application has 9 database tables: attachments, clients, contacts, events, milestones, phones, projects, tasks, and users. These tables all work to help developers keep track of the development of projects, information on clients, and various other utilities. So far, the project consists of various files that can be broken into the three following categories: the database itself, the controllers, and the models. Here, the models are the various objects in the database, such as the client and project objects, and the controllers are the methods that call or change these objects. The architecture we are using for this project is the model-view-controller architecture (MVC). MVC helps to separate the application into three logical components: the model, the view, and the controller. In our application, the three components are implemented as described above, with the database being the model.

## **Implementation**

The client management project was implemented as stated previously using the model-view-controller architecture in PHP with MySQL databasing. The front end consists of one html page and loads in the different tables and information through a series of buttons that connect to javascript files for the clients, home, invoice, and projects pages. The front end also uses a login system, where a user has to be logged in in order to access the program. If the user does not have an account, a registration system can be used to make one. The project allows users to add, edit, and delete entries for the previously mentioned databases on the site through modals called by button prompts.

## **Lessons Learned**

Through this project a great deal was learned in regards to several javascript libraries, such as node.js, php systems and architecture, as well as editor and other utility programs. New techniques and functions in various languages were learned by members of the team, and each member worked together to teach the others about various aspects used in the development of the client management project. Some of the issues encountered in the development process was the installation of various tools and functions needed, such as nodejs, and technical issues resulting in getting them working on each team member's system, due to different clients or editing programs. Ultimately this was solved by coordinating together to ensure everyone had a similar system in place for editing and building the software. Possible future work that could be done on the client management program would be for potential other databases to be added and a feature for the web page to remember and keep the user logged in, possibly with the usage of cookies.

## **Screenshots**



Tasks:

SQL database code: 10% Matthew, 50% John, 40% Trevor

Back end models: 80% Matthew, 15% John, 5% Trevor

Back end controllers: 60% Matthew, 25% John, 15% Trevor

Front end: 15% Matthew, 35% John, 50% Trevor