Project Setup

This document details the steps required to set up this project on your machine. It starts with downloading the code and setting up the database, then moves on to set up the web and run the project.

Downloading the project

Clone the github repository from here.

The repository contains a folder called **DatabaseScripts** and it contains the script to create the database and stored procedures. The other folder is called **NelnetProject** and it contains the C# and javascript codebase for the project.

Setting up the database

If you don't already have it, download SQL Server Management Studio from here. This will allow you to create the database and insert dummy data and stored procedures.

Once SSMS is installed, create a local SQL database named ***NelnetPaymentProcessing***. Then, open and run the script **ClearAllDataAndInsertDummyData.sql** in the **DatabaseScripts** folder. This will create the database and insert the dummy data to be used while testing the project.

After running the database creation script, you will need to run all of the stored procedure creation files located in subfolders within the **DatabaseScripts** folder by opening them in SSMS and executing them. Once the scripts have run, you should be able to see them in the SSMS **Object Explorer** under `Databases -> NelnetPaymentProcessing -> Programmability -> Stored Procedures`. If the stored procedures are not immediately visible here, you may have to refresh your **Object Explorer** to see newly created Stored Procedures.

Setting up your node.js environment

Before running the steps in this section, be sure to install node.js on your machine. To set up node.js, open **Windows Powershell** or the terminal of your choice and navigate to your project directory, then to **NelnetProject\Web**. First run `npm install` to set up node in that directory. Then run `npm run watch` to compile the UI for the project.

Running the project

Now open the solution in **Visual Studio**, right click the **Web** project, and select it as the startup project. Now you can run the project, which takes a few seconds to start.

Once the project has started you will be on the login page. From here, you can log in using the following data that was added through the database creation script.

```
----- General User 1 -----
Email: billy@microsoft.com
Password: ImBill1997$

------ Admin User 1 ------
Email: sean@weebnation.com
Password: Sean2010!
```

Logging in as a general user will allow you to view and edit their information from their account dashboard. Logging in as an admin will allow you to view all generated reports as well as generate your own custom reports and view those.

If you would like to create an account, you can navigate to the account creation page where you will be prompted to enter the necessary information. Since the payment information must be valid, you can use the following test cards provided by *PaymentSpring* to simulate a real card.

Card Type	Card Number	CSC	Expiration Date
Visa	4111111111111111	999	08/2018
Amex	345829002709133	9997	08/2018
Discover	6011010948700474	999	08/2018
Mastercard	5499740000000057	999	08/2018