Recurring Service Agreement (RSA)

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ABSTRACT

An RSA application is an application program that stores Dona's remote server and delivered it over the Internet through a browser interface. They hold various tools and techniques to help organizations to solve the problems faced in business and succeed. They should be kept on a separate platform and not tied to a field service software system. Recurring Service Platform where I can control our service agreements in a safe environment. Our goal is to develop a web application that can create, manage and schedule the task for the service providers based on the customer's request and also to calculate and maintain in voices for the tasks performed by service providers and provide a secure way of transferring the fee by the customers. It's easy-to-use platform allows me to input our customer's data and service contract on a secure platform and makes contract management a breeze. The concept of this application is to generate the financial status such as monthly income, business profit, and taxes of a registered client as a report. Additionally, appointments for a particular company with their customers will also be scheduled using Recurring Service Agreements application. This application will be more beneficial for the customers who are more than one business to handle the recurring revenue.

Keywords - RSA Application, Service Platform, Service Agreements, Secure, Dona's remote server.

1. INTRODUCTION

In our world, Service agreents are the bread and butter of this business. They should be kept on a separate platform and not tied to field service software system. Imagine a time when the company chooses to leave their current Field Service Platform, or they go out of business, and the company is left with the nightmare of moving their service agreements to another provider. Instead, picture them self creating a sustainable, long-term business by signing client's customers up on a platform that is secure and easy to use. Once the client creates the system it is just a matter of time to build their base in come to pay their staff, overhead costs, and have enough left over for that vacation it has wanted to take. Imagine what a client's partner or friends will say when they drive in that new vehicle, and I can confidently say, "I can afford it" Let Recurring Service Agreements do all the work for our self. Recurring Service Agreements allows the client to store Customers data and Service contracts on a secure platform and makes management very easy. Set up recurring billing, sending voices, and setup recurring maintenance schedules to build company's brand loyalty and customer retention. A web service level agreement (WSLA) is a standard for tracking web services' adherence to service level agreements. Authors are able to describe performance indicators related to a web service application, desired performance goals and follow-up procedures in the event that performance goals are not fulfilled. A server running on a computer device that listens for requests at a certain port over a network and serves online content, or a service provided by one electronic device to another via the World Wide Web. In reality, a web service frequently gives a database server an object-oriented web-based interface that is used, for instance, by another web server or a mobile app that gives the user a user interface. Several businesses that offer data via HTML-formatted pages also offer that data on their server.

2. PROPOSED RECURRING SERVICE AGREEMENT

The proposed system has a super admin role, where the super admin (service provider) logs in to access the application. Mainly the super admin provides various subscription plans to the client's company. The company can buy services from the super admin to handle their financial records and the company's client can make service appointments based on service plans provided by the company admin. The Super admin provides admin access to only a particular individual in the client's company as shown in Fig.1. She/he can make more admin from their company employees to run the business smoothly. These admins can assign service duty to the employees based on the customer's request. Customers can buy the services from the service plans offered by the client company. The finance transaction between the customer and the Client Company can be done using stripe technology which makes it more secure. The project is developed with authorization and authentication, which makes the application more secure.
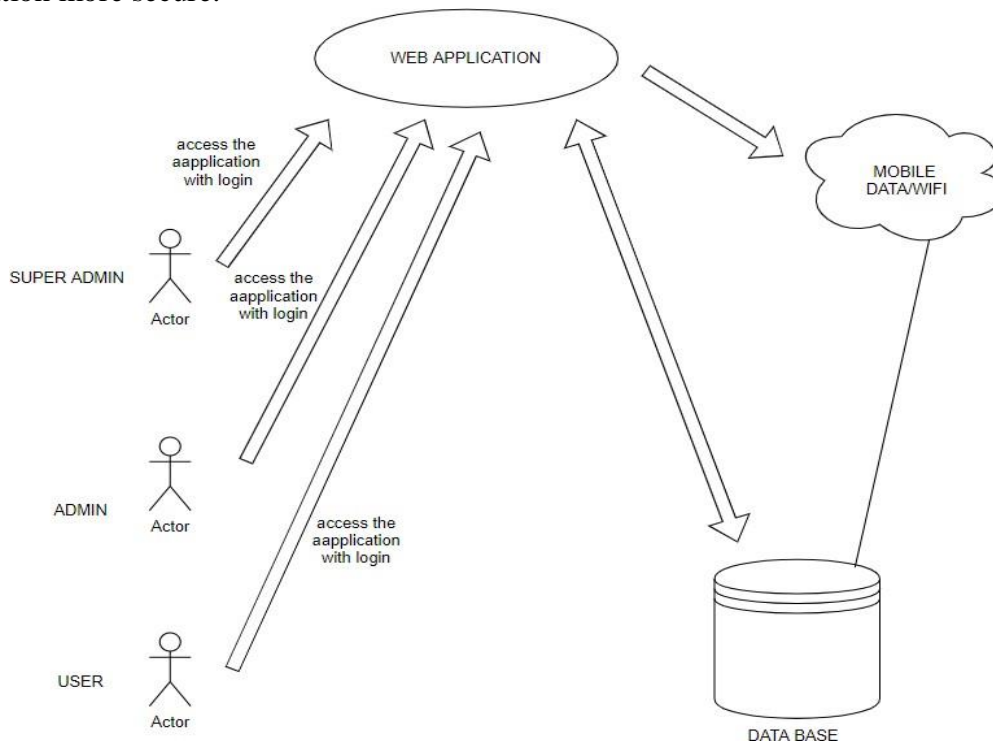

Figure 1. The overall proposed Recurring Service Agreement Architecture

3. MODULES OF RECURRING SERVICE AGREEMENT

3.1 SERVICE PLAN

This module used to display the list of service plans that are provided by the client's company admin to the customers. From the list select the desired plan. These service plans contain information like the service period, time interval between service and the free trial period. The client's company admin can add a new service plan based on their company and customers' requirements. This module also used to edit or update the existing service plan based on the company's requirements.

3.2 SUBSCRIPTION PLAN

This module used to display the list of subscription plans that are provided by the super admin to the company admin. From the list of subscription plans, the company admin can select their desired plan. The company admin should consider the total number of customers. Once the company admin buys the subscription plan from the super admin, the company admin can appoint more admin from the company to make sure the business flows without any hindrance.

3.3 INVOICE MANAGEMENT

This module allows the user to export the financial report of the individual for a particular time interval and allows the user to download A1099 form for the revenue of the year from Recurring Service

Agreement to pay tax returns. This module also allows the user to link their RSA account with their QBO Online account and Stripe Account.

3.4   ACCOUNT MANAGEMENT

This module is used to display the list of company admin those bought the subscription plans for the super admin and the list of customers who bought the service from the client's company for the company's admin. This module used to add new client details manually to the list and also used to edit or update the existing account details of the customer or the client admin incase of any request.

4. SOFTWARE ELEMENTS

4.1   ANGULAR

Angular is an operation design frame and development platform for creating effective and sophisticated single- runner apps. These Angular croakers help me learn and use the Angular frame and development platform, from the first operation to optimizing complex single - runner apps for enterprises. Tutorials and attendants include downloadable exemplifications to accelerate my systems. Angular is a development platform, erected on Typescript. Angular is designed to make updating as straightforward as possible as shown in Fig.2, so take advantage of the rearmost developments with a minimum of trouble.
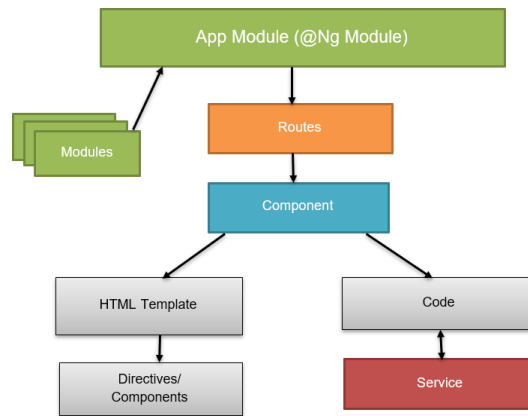

Figure 2. Flowchart of Angular flow in software

4.2   NODE.JS

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser. Node.js lets developers use JavaScript to write command line tools and for server-side scripting - running scripts server-side to produce dynamic webpage content before the page is sent to the user's web browser in Fig.3. Consequently, Node.js represents a "JavaScript everywhere" paradigm, unifying web - application development around a single programming language, rather than different languages for server-side and client-side scripts.
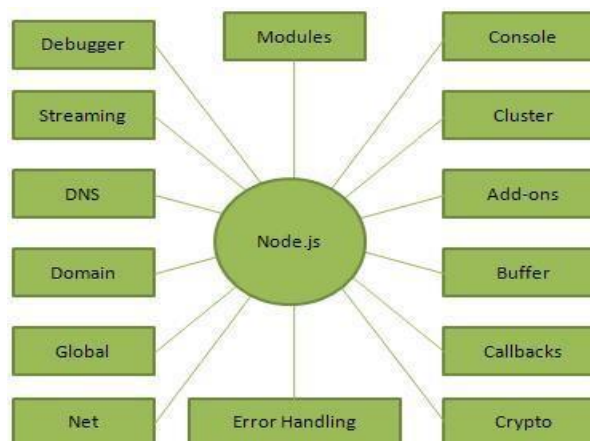

Figure 3. Flowchart of Objects in Node.Js

4.3 TYPESCRIPT

Typescript is a programming language developed and maintained by Microsoft. It's a strict syntactical superset of JavaScript and adds voluntary static codifying to the language. It's designed for the development of large operations and occurred to JavaScript. The Typescript compiler is itself written in Typescript and collected to JavaScript. It's certified under the Apache License2.0. A sanctioned extension also allows Visual Studio 2012 to support Typescript. Challenges with dealing with complex JavaScript law led to demand for custom tooling to ease developing of factors in the language.
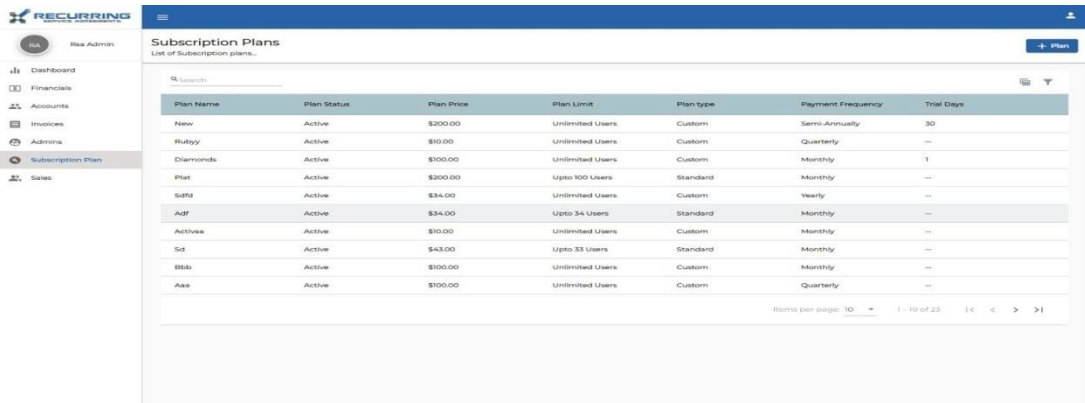
4.4 VISUAL STUDIO CODE

Visual Studio Code, also commonly referred to as VS Code, is a source - code editor made by Microsoft for Windows, Linux and Mac OS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Gitup. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality. Visual Studio Code is a source - code editor that can be used with a variety of programming languages, including Java, JavaScript, Node.js, Python, C++ and FORTRAN. It is based on the Electron framework, which is used to develop Node.js Web applications that run on the Blink layout engine. Visual Studio Code employs the same editor component used in Azure DevOps.

5. EXPERIMENTAL RESULTS

5.1 SUBSCRIPTION PLAN

As shown in Figure 4, In RSA it shows the Plan Name, Plan Status, Plan Price, Plan Limit & Plan type and Trial days.
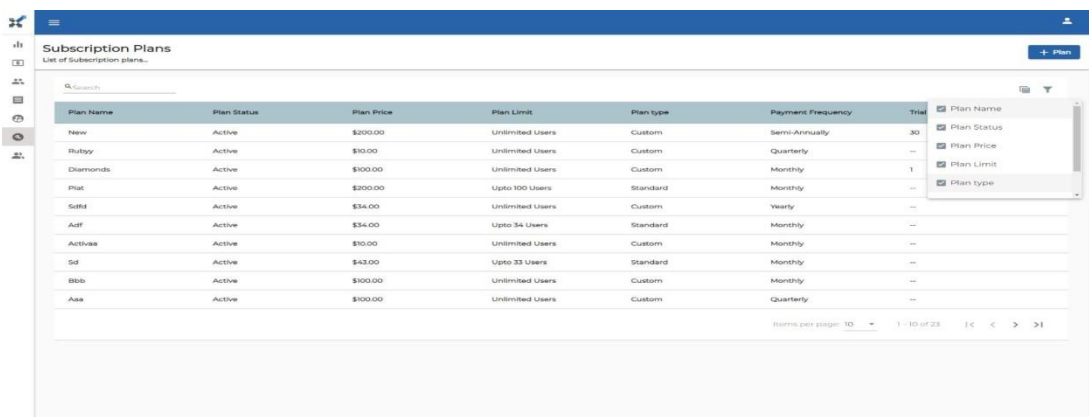

Figure 4. Subscription Plan & list of Subscription Plan

5.2 Subscription Plan & Filter Subscription Plan

As shown in Figure 5, In RSA there is the filter icon to filter the column name shown in dashboard.

Figure 5. Subscription Plan & Filter Subscription Plan

5.3 Subscription Plan & Alter Subscription Plan

As shown by the image in Figure 6, In RSA there is the filter icon to filter the column name you want to show in the dashboard.
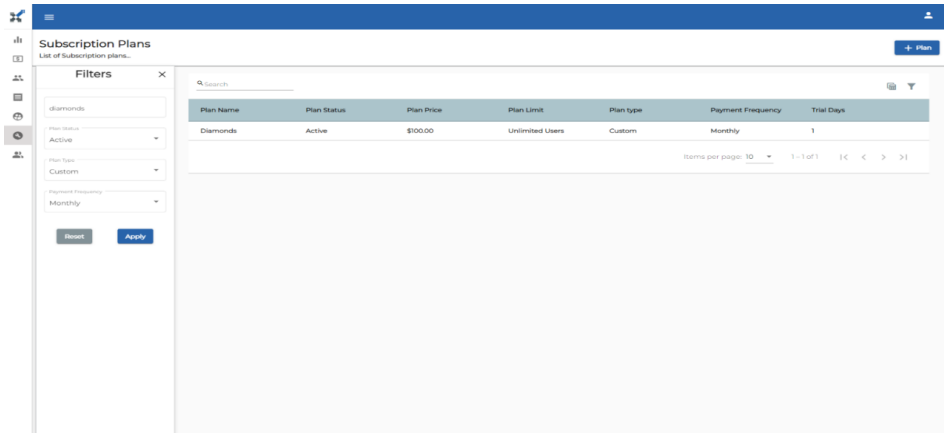

Figure 6. Subscription Plan & Alter Subscription Plan

5.4 Subscription Plan & Add of Subscription Plan

As shown by the image in Figure 7, In RSA that has a new Subscription Plan by entering the requiting field.
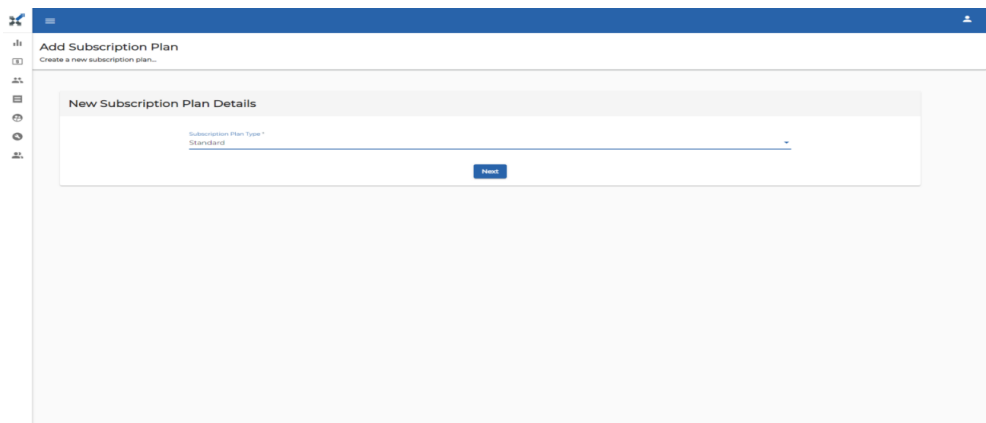

Figure 7. Subscription Plan & Add of Subscription Plan

5.5 New Subscription plan Details

As shown in Figure 8, In RSA we have adds a new Subscription Plan by entering the requiting field.

Figure 8. Subscription plan Details added successfully

5.6 Subscription plan Details added successfully

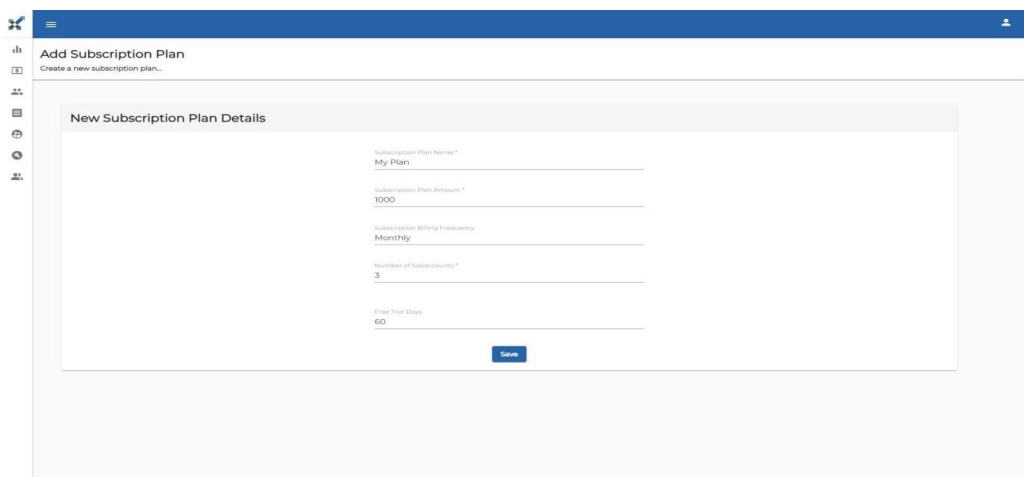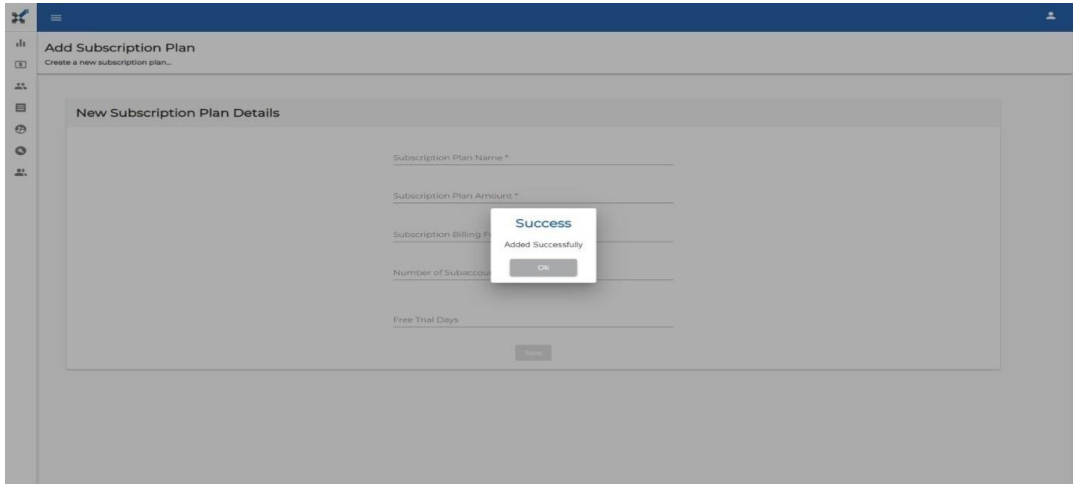As shown in Figure 9, In RSA we have added a new Subscription Plan added successfully.

Figure 9. Subscription plan Details added successfully

5.7 Subscription plan Details updated successfully

As shown in Figure. 10, In RSA we have edit a Subscription Plan successfully.
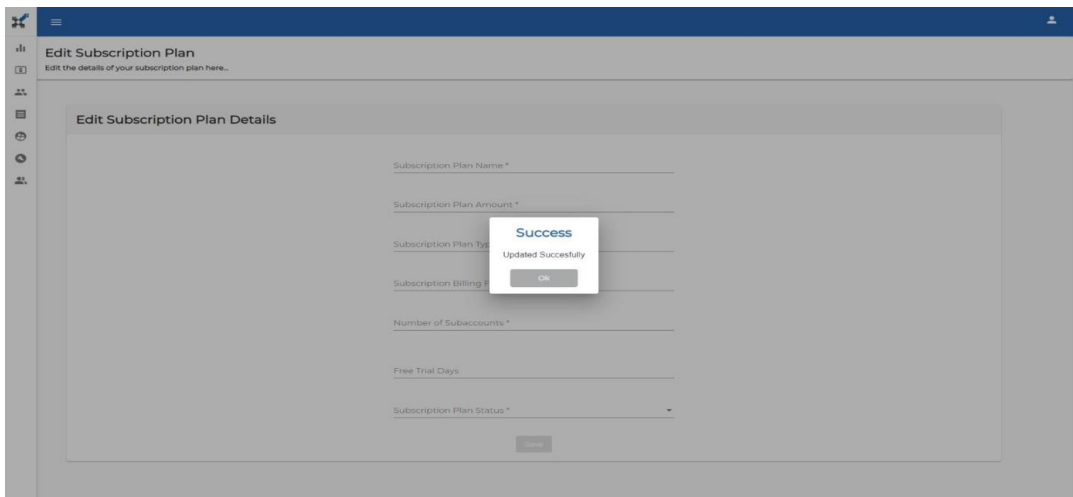
Figure 10. Subscription plan Details updated successfully

5.8 Account Management
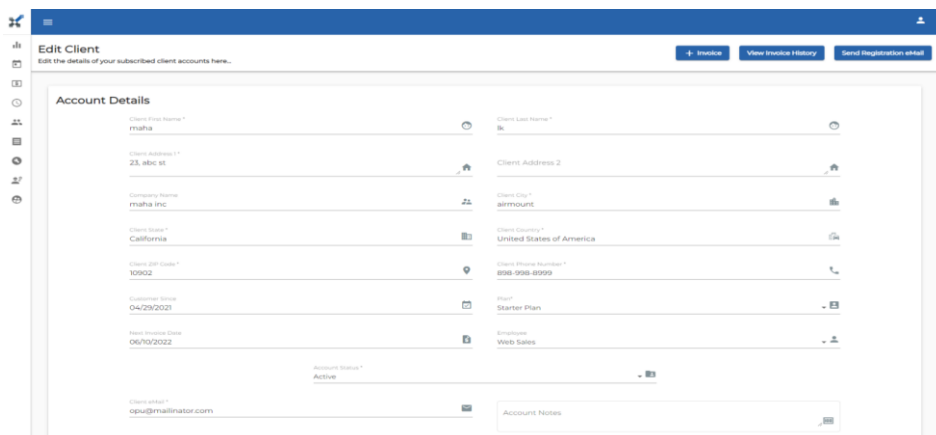
Figure 11. Account Management

As shown in Figure. 11, In RSA we have managed all details in account management.

5.9 Payment details in Account Management

As shown in Figure. 12, In RSA we have known who is all made a payment that shown in my dashboard. Account history also shown here whenever he/she logged in & out. Appointment history also shown here for the status of service plan.
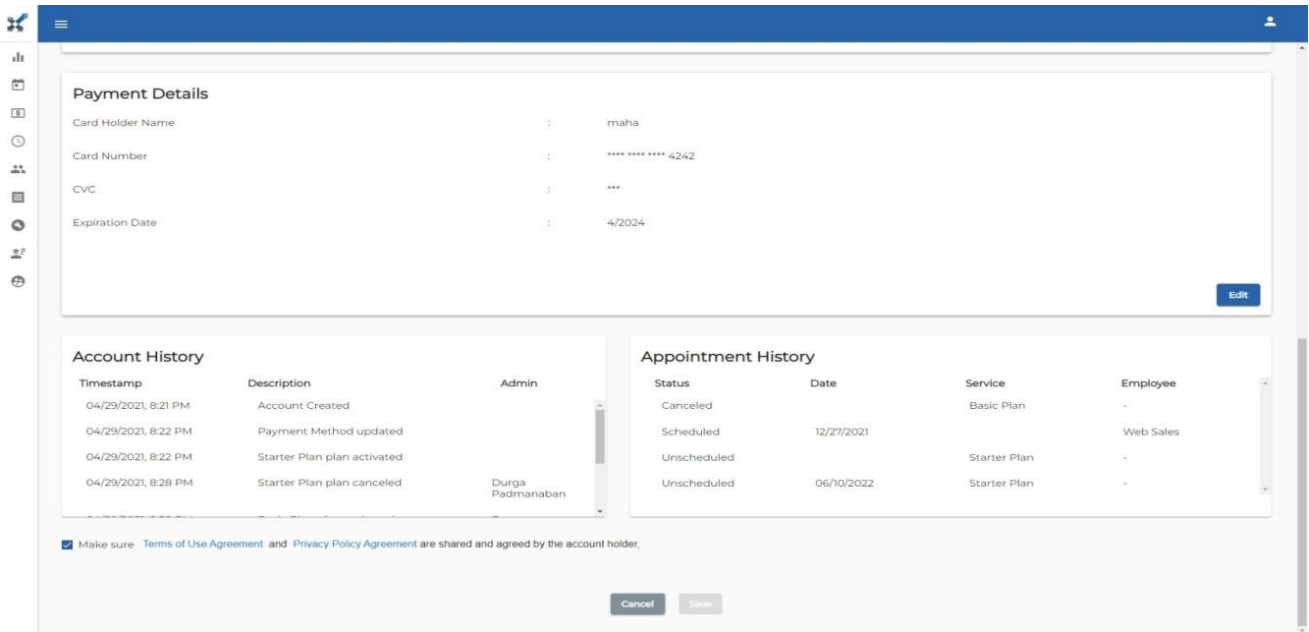
Figure 12. Payment details in Account Management

5.10 Payment method in Account Management

As shown in Figure. 13, in RSA we have known the payment method of the customer through online or card transaction.
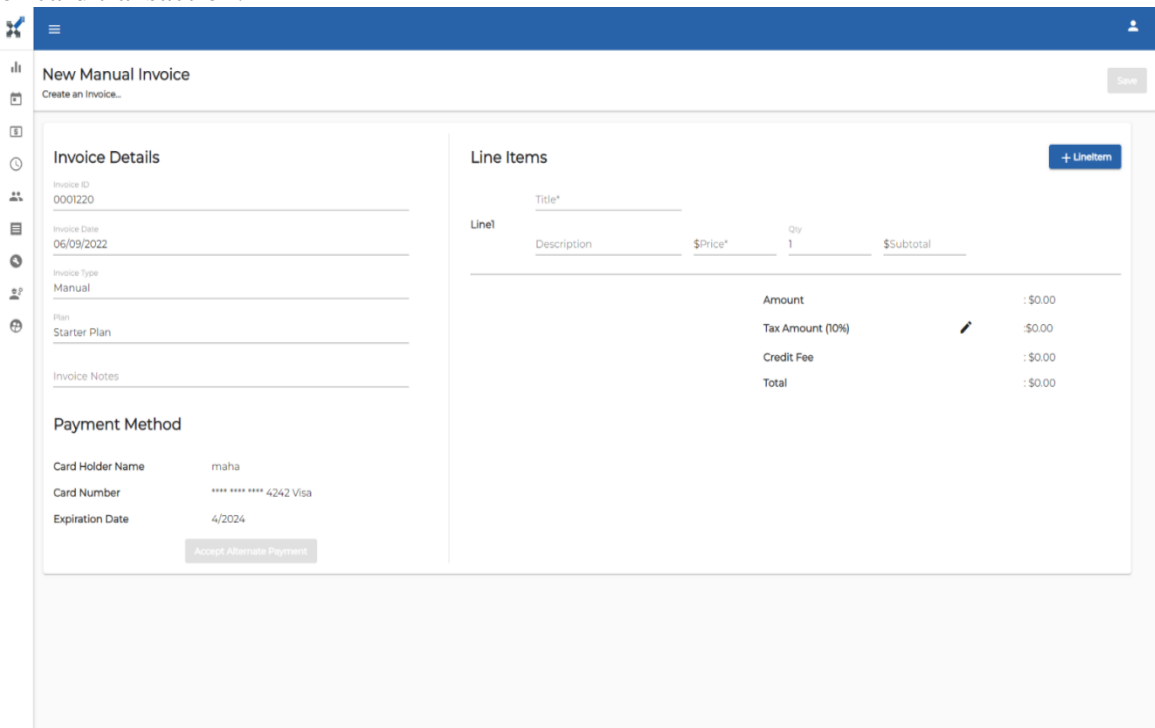
Figure 13. Payment method in Account Management

5.11 Invoice Details in Account Management

As shown in Figure. 14, in RSA we have known the invoice status of the customer and invoice history.

Figure 14. Invoice Details in Account Management

5.12 Downloading Invoice in Account Management

As shown in Figure. 15, in RSA we have also downloaded the Invoice status of the customer.

Figure 15. Downloading Invoice in Account Management
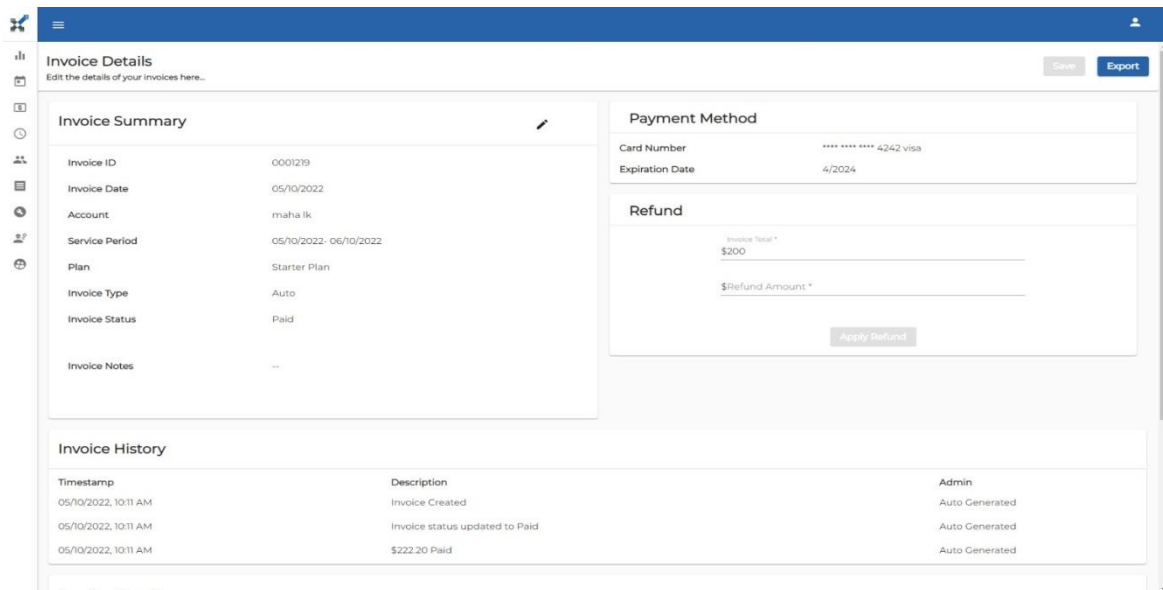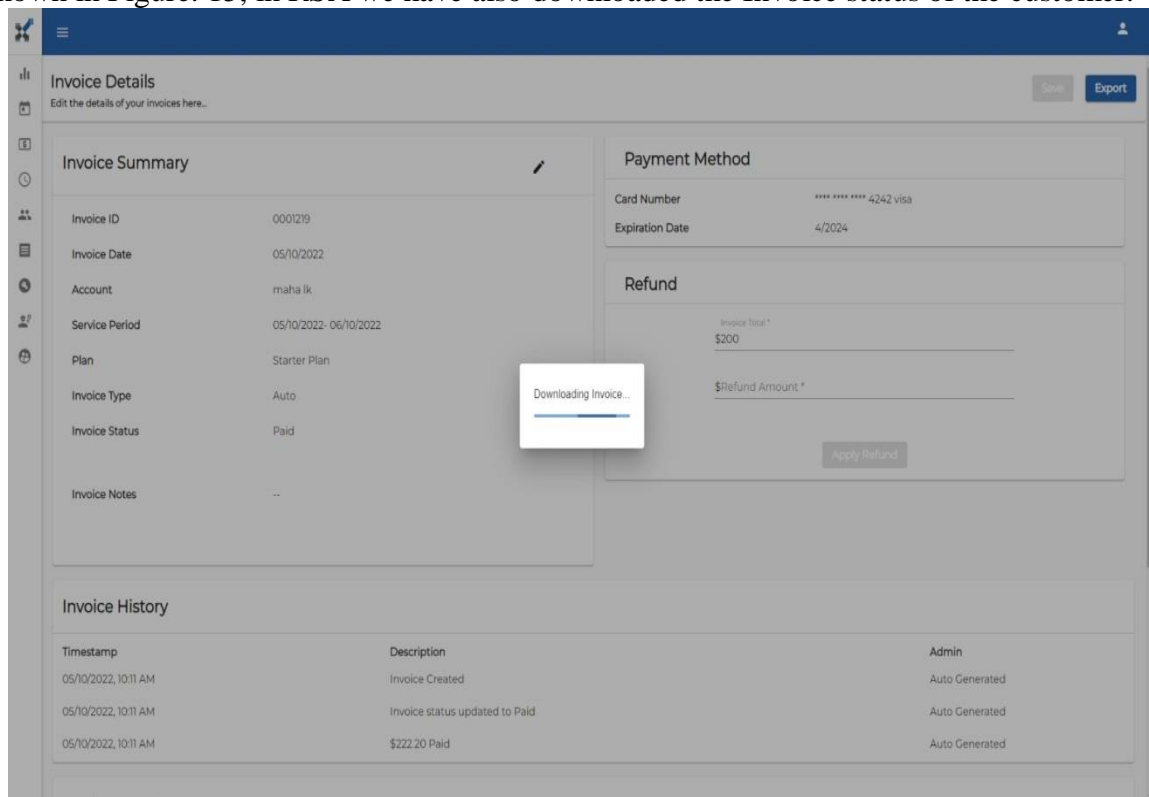
5.13 Success status of Invoice in Account Management

As shown in Figure. 16, in RSA we can also download the invoice status of the customer and downloaded.
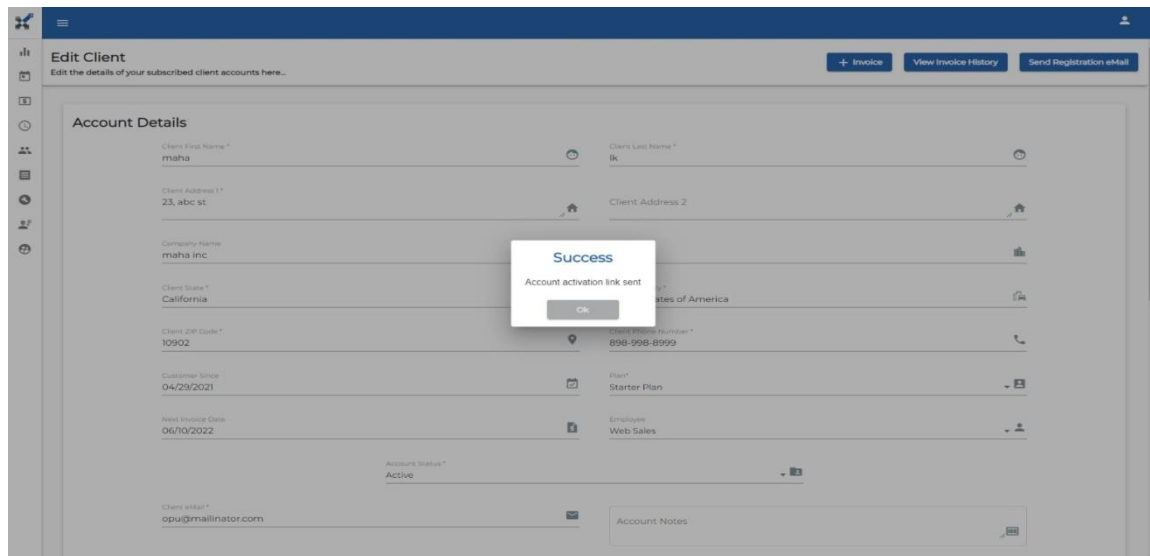
Figure 16. Success status of Invoice in Account Management

6. CONCLUSION AND FUTURE WORK

Thus, the implementation of a secure platform which allows the client to control and manage their service agreements and customers data in a safer environment and to develop a web application that's able to create, manage and schedule task to the service providers based on the customer's request. The outcome of our Recurring Service Agreements Application was implemented and currently in use for benefices likes clients, customers who are having more than one business to handle the recurring revenue etc. The Application can manage their appointments, customer details and also can maintain their financial records. In Future, we plan to add more features based on clients' requirements. Improve overall performance and add a customer module to managing the customer data.

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